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U.S. Department of Education
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NCES 2005-152

Waiting to Attend College

Undergraduates Who Delay Their Postsecondary Enrollment

Postsecondary Education Descriptive Analysis Report

Executive Summary

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June 2005

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June 2005

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Suggested Citation

Horn, L., Cataldi, E.F., and Sikora, A. (2005). *Waiting to Attend College: Undergraduates Who Delay Their Postsecondary Enrollment* (NCES 2005-152). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.

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Executive Summary

Among students who enrolled in postsecondary education for the first time in 1995–96, about one-third had waited a year or more after graduating from high school to attend.¹ Students who delay their postsecondary enrollment may do so for numerous reasons. Some may not be academically prepared to attend or have the financial resources necessary to enroll. Others may serve in the military first, find employment, or start a family before enrolling. Students who delay enrollment for a long period of time are likely to enroll to advance in or change their careers. For whatever reasons students wait to enroll in college, those who do delay are at considerable risk of not completing a postsecondary credential when compared with their peers who enroll immediately after high school graduation (Carroll 1989; Tuma and Geis 1995; Berkner, Cuccaro-Alamin, and McCormick 1996; Horn 1996; Berkner, He, and Forrest Cataldi 2002). However, it may not be entirely appropriate to compare the outcomes of delayed entrants with those who attend college right after high school. This study shows that the two groups differ in many respects, especially in their academic preparation for college and their educational objectives. Furthermore, delayed entrants are not a homogeneous group. Students who delay postsecondary enrollment may range in age from 18 to 80,² and those who delay a short amount of time may have very different reasons for enrolling than those who delay a decade or more.

¹ Beginning Postsecondary Students Longitudinal Study (BPS:96/01)

² 1999–2000 National Postsecondary Student Aid Study (NPSAS:2000)

The purpose of this report is to provide a profile of students who delay their postsecondary enrollment and then to distinguish among students who delay their postsecondary enrollment with respect to how long they wait to enroll. In particular, it addresses the ways in which those who delay a shorter amount of time differ from those who delay longer in terms of their demographic characteristics, why they enroll, where they enroll, the types of programs or degrees they pursue, and their likelihood of earning a credential.

The data used for this study come from three sources. The 1999–2000 National Postsecondary Student Aid Study (NPSAS:2000) is used to provide a snapshot of the demographic and postsecondary enrollment characteristics of all undergraduates who delay enrollment. The National Education Longitudinal Study of 1988 (NELS:88/2000) is used to examine the high school academic preparation of 1992 high school graduates who delayed postsecondary enrollment, and the 1996/01 Beginning Postsecondary Students Longitudinal Study (BPS:96/01) is used to analyze the experiences of delayed entrants in their first postsecondary enrollment with respect to how long they waited to enroll and how likely they were to complete their postsecondary education.

The key variable in this study is an indicator of whether students delayed their postsecondary enrollment. The variable was computed by subtracting the calendar year of high school graduation from the calendar year of

postsecondary enrollment.³ Students who do not delay their enrollment are typically those who graduate from high school in June and enroll in postsecondary education the following September. However, because the delayed enrollment variable is derived only from the calendar years of the two points in time, a small percentage of cases (about 2 percent) are coded as having delayed 1 year when the length of delay is actually less than a year, typically a semester.

The analysis uses standard *t* tests to determine statistical significance of differences between estimates, one-way Analysis of Variance (ANOVA) to detect trends and to control for multiple paired comparisons, and a multivariate analysis to control for the common variation of related independent variables. All differences noted in the text are statistically significant at the $p < .05$ level. (See appendix B for more information about data and methods.) The analysis presented in this report is entirely descriptive in nature. While associations are noted and discussed, no causal inferences should be made.

An Overview of Delayed Entrants

Delayed entrants are by definition older than students who enroll in postsecondary education immediately after graduating from high school. Therefore, delayed entrants would be expected to have gained life experiences related to age such as family formation. Yet in addition to these experiences, the findings from the NPSAS data illustrate sharp contrasts between delayed and immediate entrants in terms of other demographic characteristics. Compared with students who

enrolled in postsecondary education immediately after high school graduation, delayed entrants were more likely to come from low-income families,⁴ to be single parents, to be Black and were less likely to be White (figure A). Delayed entrants also were more likely than immediate entrants to be Hispanic, American Indian, to have parents who never attended postsecondary education, and to speak a language other than English as their primary language (table 1).

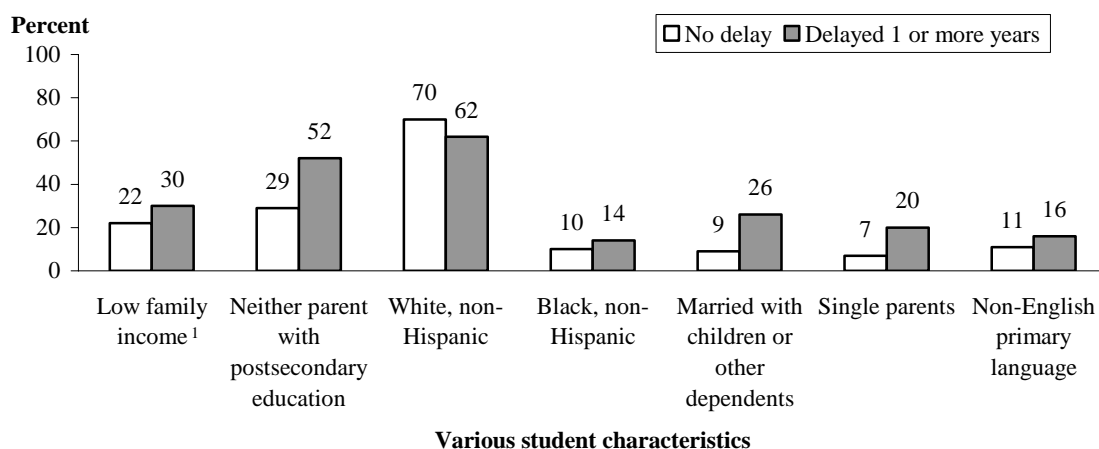
Students who delay their postsecondary enrollment are more likely than those who do not delay to follow a postsecondary enrollment path focused on vocational training and short-term programs. For example, in 1999–2000, compared with undergraduates who enrolled immediately after high school, delayed entrants were more likely to attend public 2-year colleges and private for-profit institutions (figure B). Similarly, delayed entrants were more likely than immediate entrants to be enrolled in programs leading to vocational certificates and associate’s degrees and less likely to be in bachelor’s degree programs (figure C). Postsecondary attendance and work patterns also differed between the two groups. Delayed entrants were less likely (or able) to attend classes on a full-time basis (figure D) and were more likely than immediate entrants to work more than 30 hours a week while enrolled in school (figure E).

Taken together, these findings from the NPSAS data, which provide a snapshot of all undergraduates in 1999–2000, indicate that delayed entrants begin their postsecondary education at a relative disadvantage compared with their peers who enroll in postsecondary education immediately after high school

³ The actual dates of high school graduation and postsecondary enrollment, which include months and years, were missing in too many cases to provide reliable estimates; however, it was possible to impute the year if it was missing based on the students’ age and other timing information.

⁴ The income finding is based on family income for students who are considered dependents (typically those under age 24).

Figure A. Percentage of 1999–2000 undergraduates with various student characteristics, by timing of postsecondary enrollment

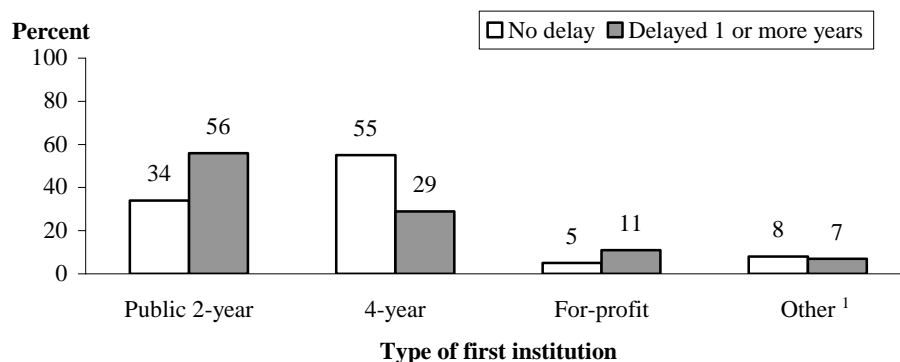


¹ Based only on dependent students' (typically age 24 or younger) family income.

NOTE: Standard error tables are available at <http://nces.ed.gov/das/library/reports.asp>.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS:2000).

Figure B. Percentage distribution of 1999–2000 undergraduates' type of first institution, by timing of postsecondary enrollment

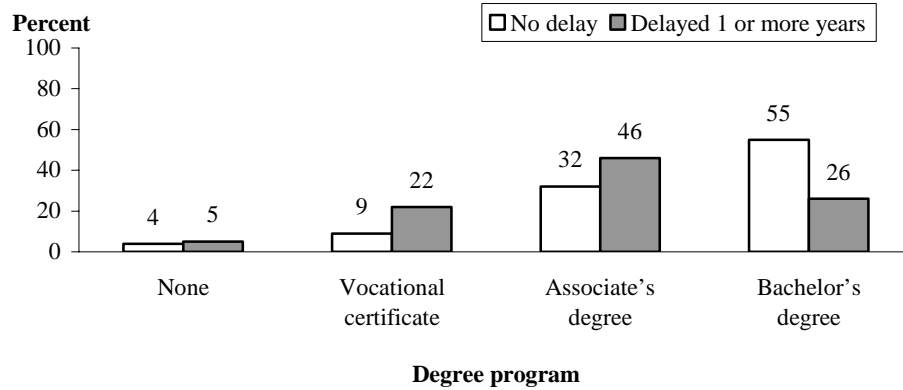


¹ All other types of institutions including public less-than-2-year and private not-for-profit less-than-4-year institutions.

NOTE: Detail may not sum to totals because of rounding. Standard error tables are available at <http://nces.ed.gov/das/library/reports.asp>.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS:2000).

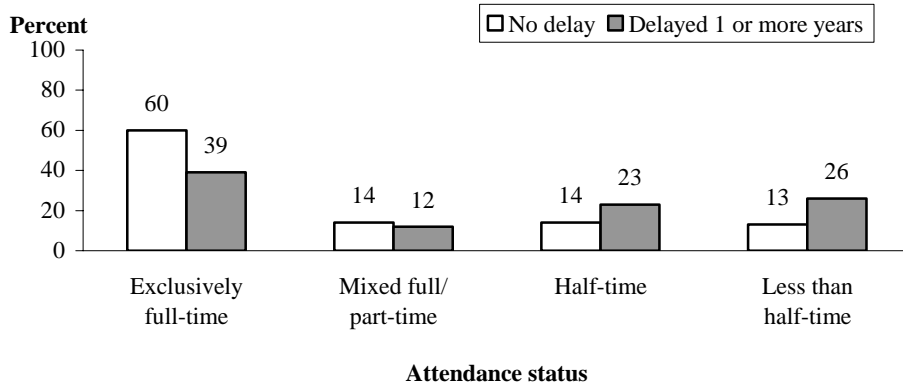
Figure C. Percentage distribution of 1999–2000 undergraduates’ degree program, by timing of postsecondary enrollment



NOTE: Detail may not sum to totals because of rounding. Standard error tables are available at <http://nces.ed.gov/das/library/reports.asp>.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS:2000).

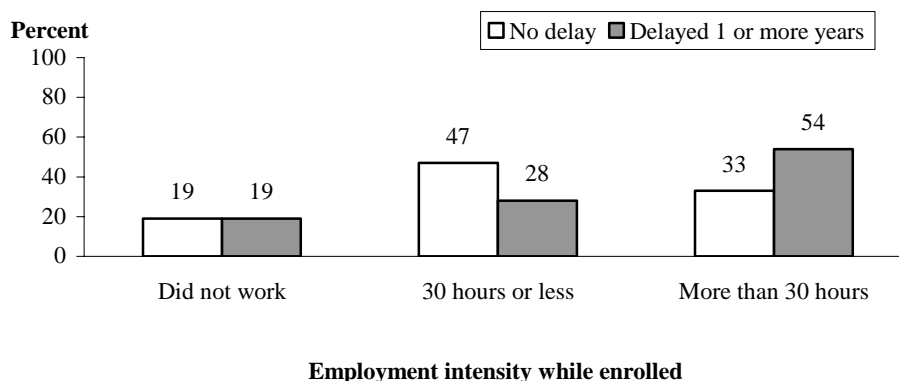
Figure D. Percentage distribution of 1999–2000 undergraduates’ attendance status, by timing of postsecondary enrollment



NOTE: Detail may not sum to totals because of rounding. Standard error tables are available at <http://nces.ed.gov/das/library/reports.asp>.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS:2000).

Figure E. Percentage distribution of 1999–2000 undergraduates’ employment intensity while enrolled, by timing of postsecondary enrollment



NOTE: Detail may not sum to totals because of rounding. Standard error tables are available at <http://nces.ed.gov/das/library/reports.asp>.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS:2000).

graduation. They are more likely to come from low-income families, their parents are less likely to have attended postsecondary education, and they are more likely to have family responsibilities of their own. Once they enroll in postsecondary education, delayed entrants spend less time attending classes and more time working while enrolled and are more likely to pursue vocational training and short-term credentials.

High School Dropout Risk Factors and Academic Preparation

The NELS data provide evidence of notable differences between delayed and immediate entrants with respect to their high school academic experiences. The analysis examined 1992 high school graduates who enrolled in postsecondary education by 2000, the time of the last NELS follow-up, and focused on three measures of academic preparation—highest mathematics

course completed,⁵ the overall academic intensity of students’ high school curriculum,⁶ and their college readiness.⁷ In all three measures delayed entrants trailed their counterparts who did not delay.

In mathematics coursetaking, one-quarter of delayed entrants completed courses no higher than those identified as nonacademic (such as remedial or business mathematics), compared with 7 percent of immediate entrants (figure F). Conversely, nearly half of immediate entrants (49 percent) completed an advanced mathematics course (i.e., beyond algebra 2), compared with 15 percent of delayed entrants.

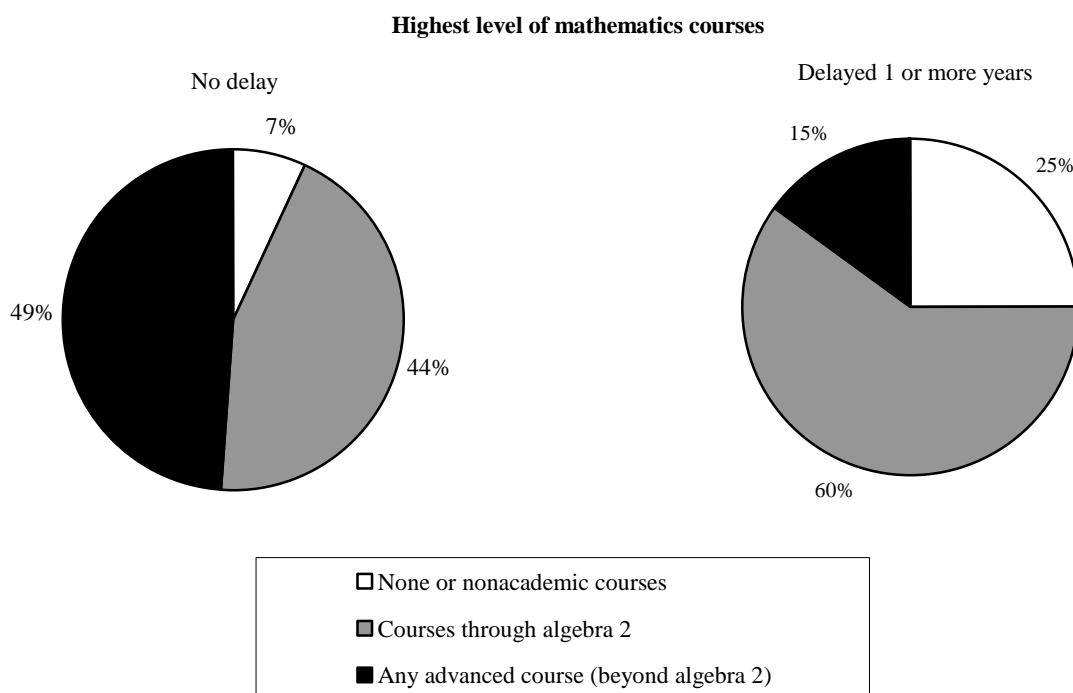
Substantial differences between the two groups were also evident when examining the overall intensity or rigor of students’ high school

⁵ Developed by Burkam and Lee (2003).

⁶ Developed by Adelman (1999).

⁷ Developed by Berkner and Chavez (1998).

Figure F. Among 1992 high school graduates who enrolled in postsecondary education by 2000, the percentage distribution of highest level of mathematics courses completed, by timing of postsecondary enrollment



NOTE: Standard error tables are available at <http://nces.ed.gov/das/library/reports.asp>.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988 (NELS:88/2000).

curriculum. One-quarter of delayed entrants scored in the bottom 20 percent of the academic intensity measure, compared with 8 percent of immediate entrants (figure G). Conversely, 29 percent of immediate entrants scored in the top 20 percent, compared with 7 percent of delayed entrants.

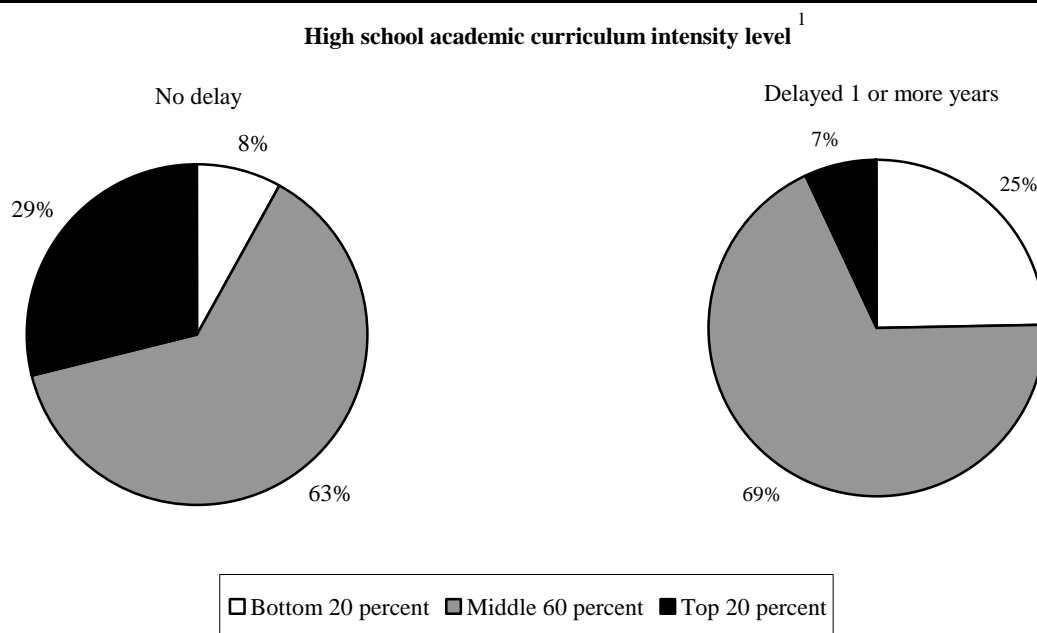
Consistent with their lower levels of academic preparation, nearly 6 in 10 delayed entrants (59 percent) were not academically prepared to undertake 4-year college-level work (figure H). The same was found for one-quarter of immediate entrants. Moreover, for those students who were

qualified, 1 in 10 delayed entrants were in the top 25 percent, compared with just over 4 in 10 (44 percent) of immediate entrants.

Duration of Delay

Figure I displays the timing of enrollment and median ages for students who first enrolled in postsecondary education in 1995–96. Delayed entrants were relatively evenly distributed across the four time periods: 9 percent delayed no more than 1 year, 8 percent delayed 2–4 years, 7 percent delayed 5–9 years, and 12 percent waited 10 or

Figure G. Among 1992 high school graduates who enrolled in postsecondary education by 2000, the percentage distribution of academic curriculum intensity level, by timing of postsecondary enrollment



¹ High school academic curriculum intensity level is a composite measure of students' highest level of mathematics, total mathematics credits, total Advanced Placement courses, total English credits, total foreign language credits, total science credits, total core laboratory science credits, total social science credits, and total computer science credits. For more information, see Adelman, Daniel, and Berkovits (2003).

NOTE: Detail may not sum to totals because of rounding. Standard error tables are available at <http://nces.ed.gov/das/library/reports.asp>.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988 (NELS:88/2000).

more years after high school graduation to enroll in postsecondary education.⁸ How long delayed

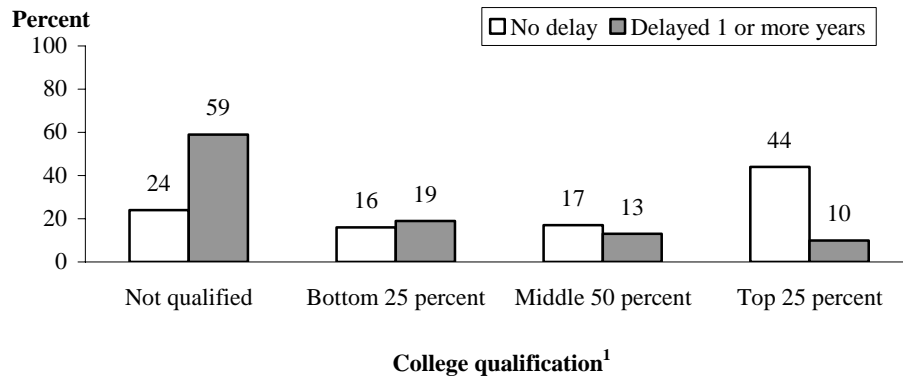
⁸ For the remainder of the analysis, the results presented are based entirely on data from the BPS longitudinal study of students who first began their postsecondary studies in the 1995–96 academic year. Unlike the NPSAS sample, BPS does not include students who had enrolled in postsecondary education before their current enrollment (i.e., excludes returning students). And unlike NELs, the BPS cohort represents all beginning postsecondary students regardless of how long they waited to enroll. The postsecondary experiences captured by the BPS survey, therefore, represent the very first postsecondary enrollment after graduating from high school, regardless of how many years elapsed between high school graduation and postsecondary enrollment.

entrants waited to enroll in postsecondary education varied with demographic characteristics, enrollment status, reasons for enrolling, and the likelihood of finishing a credential.

Student Characteristics

Because of their age differences, one expects delayed entrants as a whole to differ from immediate entrants in terms of family formation and the likelihood of having children. Yet even

Figure H. Among 1992 high school graduates who enrolled in postsecondary education by 2000, the percentage distribution of a measure of 4-year college qualification, by timing of postsecondary enrollment

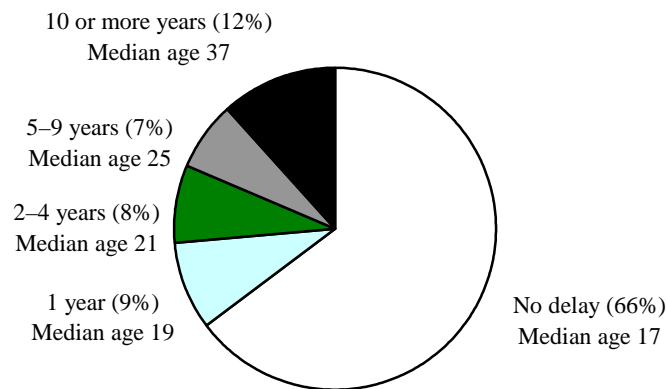


¹ College qualification is a composite index of 4-year college readiness or qualification based on five possible measures of academic performance: cumulative academic coursework GPAs, senior class rank, the NELS 1992 test scores, and the SAT and ACT college entrance examination scores.

NOTE: Detail may not sum to totals because of rounding. Standard error tables are available at <http://nces.ed.gov/das/library/reports.asp>.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988 (NELS:88/2000).

Figure I. Percentage distribution of 1995–96 beginning postsecondary students, by number of years between high school graduation and first postsecondary enrollment, and median age



NOTE: Detail may not sum to totals because of rounding. Standard error tables are available at <http://nces.ed.gov/das/library/reports.asp>.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1996/01 Beginning Postsecondary Students Longitudinal Study (BPS:96/01).

when comparing delayed entrants who are relatively young (i.e., those who delayed less than 5 years) to immediate entrants, marked differences were apparent. For example, about one-fifth of the youngest delayed entrants—those who delayed no more than 1 year (median age 19)—and nearly one-third of those who delayed 2–4 years (median age 21) had children or were responsible for other dependents, compared with 2 percent of immediate entrants.⁹ These findings indicate that even relatively young delayed entrants have considerable family responsibilities.

The length of time students delayed postsecondary enrollment also varied by income level (table 5).¹⁰ Based on their age and length of time in the labor market, one would expect those who delayed 5 or more years to have higher incomes than those who delayed a shorter period of time. This was clearly observed: 42 percent and 38 percent, respectively, of those who delayed 1 year or 2–4 years were in the lowest income group, compared with 26 percent and 17 percent, respectively, of those who delayed 5–9 years or 10 or more years. Thus, even though delayed entrants as a whole were generally more likely than those who did not delay to be in the lowest income level, as the duration of delay increased, the likelihood of being in the lowest income level declined.

In addition to income group differences, the proportion of White students increased with the duration of delay, from 62 percent of those who delayed no more than 1 year to 78 percent of those

who delayed 10 or more years. So as the time between high school graduation and postsecondary enrollment went up, the likelihood of being in the lowest income level declined while the likelihood of being White increased. These patterns suggest that younger delayed entrants (i.e., those who delayed less than 5 years) tend to be at a greater socioeconomic disadvantage than those who delayed longer.

Enrollment Characteristics

When examining programs of postsecondary study among delayed entrants in relation to the length of time they waited to enroll, clear patterns emerged. For example, the likelihood of being enrolled in a bachelor's degree program declined with each successive delay group from 30 percent among those who delayed a year to 8 percent of those who delayed 10 or more years (table 6). Conversely, the longer students delayed enrollment, the more likely they were to be pursuing a program leading to a vocational certificate, from about one-quarter (23 percent) of those who delayed a year to nearly one-half (45 percent) of those who delayed 10 or more years. Delayed entrants reported relatively high educational expectations, but they also varied by length of delay. When asked to report the highest level of education they ever expected to complete, nearly 6 in 10 delayed entrants reported aspirations for a bachelor's degree (28 percent) or an advanced degree (29 percent). Aspirations for advanced degrees, however, declined with the length of time between high school graduation and postsecondary enrollment—from 42 percent of those who delayed 1 year to 13 percent of those who delayed a decade or more—while aspirations for credentials below a bachelor's degree increased proportionately from 13 percent to 48 percent as delay increased. The results indicate that as delayed entrants age, they tend to look to

⁹ See bottom of table 4 (“Independent with dependents”) for proportion of students with children or dependents.

¹⁰ In this analysis, the income distribution is based on family income for dependent students (i.e., those students who are considered financially dependent on their parents for financial aid purposes) and student income for those who are independent. As discussed above, about three-quarters of those who delayed enrollment by 1 year were dependent, as were about one-half of those who delayed 2–4 years, while students who delayed 5 or more years were nearly all independent.

postsecondary education for vocational training, while those who delay shorter periods of time continue to report aspirations for bachelor's or even advanced degrees.

Why They Enrolled

When asked why they decided to enroll in postsecondary education, students who delayed enrollment reported various reasons as important, most of which were related to job training and career advancement. Reasons varied with how long delayed entrants waited to enroll. For example, reporting the need for training to enter the workforce declined as the duration of time between high school graduation and postsecondary enrollment increased (table 8). Conversely, students who reported enrolling in postsecondary education to change careers or improve job skills were more likely to do so as the duration of time between high school graduation and postsecondary enrollment increased.

Overall Persistence and Attainment

As was found in earlier research, the results from this study confirmed that students who delay their postsecondary enrollment earn postsecondary credentials at lower rates than their peers who enroll immediately after high school. Among 1995–96 beginning postsecondary students, 40 percent of delayed entrants had earned some kind of postsecondary credential within 6 years, compared with 58 percent of immediate entrants (table 9). In contrast, 47 percent of delayed entrants were not enrolled in 2001 and had not earned a credential, compared with 27 percent of immediate entrants. However, this study was more concerned with the association between length of delay and educational outcomes among delayed

entrants. For example, as the length of delay between high school graduation and college enrollment increased, the likelihood of attaining a bachelor's degree within 6 years declined. However, degree goals differed among groups who delayed shorter and longer periods of time. Therefore, it was necessary to conduct a multivariate analysis in order to control for differing degree goals and other factors related to the duration of delay.

When taking into account length of delay as well as the common variation of variables related to both delayed enrollment and degree completion (including gender, race/ethnicity, institution attended, attendance status, degree program, educational expectations, and remedial coursetaking), the likelihood of delayed entrants completing a postsecondary credential or still being enrolled was significantly lower than immediate entrants only for those who delayed no more than 1 year, while the results for students who delayed longer periods of time were not statistically significant (table 11).

Conclusions

The results of this study demonstrate that students who delay their postsecondary enrollment a year or more after high school graduation differ fundamentally from those who enroll immediately. Early on, delayed entrants are more likely to have family and educational experiences that place them at greater risk of not completing their postsecondary education. When delayed entrants enroll in postsecondary education, they do so primarily to gain or enhance their work skills and tend to enroll in shorter term vocational programs rather than in bachelor's degree programs.

Yet delayed entrants are not a homogenous group. Who they are and what kinds of postsecondary programs they pursue varied with how long they waited to enroll. In general, the findings from this study indicated that as the length of delay increased, students were more likely to be White, less likely to be in the lowest income group, and more likely to enroll in programs leading to vocational certificates.

While delayed entrants as a whole were much less likely than immediate entrants to complete a postsecondary degree or to remain enrolled for 6 years, results of the multivariate analysis indicate

that students who delayed the shortest amount of time—no more than 1 year after high school graduation—remained significantly less likely than immediate entrants to complete a degree, while the results for those who delayed longer were not significant. Students who delay no more than a year are typically 19 years old when they enroll in college and about 1 in 5 already have children. Nevertheless, despite their relative disadvantages, 43 percent of students who delayed their enrollment no more than 1 year had successfully completed a postsecondary credential, including one-fifth who earned a bachelor's degree in 6 years.
