

1. THE EARLY POST-HIGH-SCHOOL YEARS FOR YOUTH WITH DISABILITIES

By Mary Wagner

Leaving high school is an exciting threshold for many youth in this country, both those with and those without disabilities. They and their families celebrate the accomplishments entailed in high school graduation, and many look forward to continuing their educations or to expanding their employment horizons when they leave high school. However, despite a gradual increase in graduation rates over time, in 2000, 3.8 million American youth ages 16 to 24 were not in high school and had not graduated (Kaufman, Alt, & Chapman, 2001), more than 1 in 10 youth in that age range.

Regardless of how youth leave high school, doing so can occasion many changes, which, taken together, can alter their daily lives dramatically. The end of high school brings the end of a familiar school-driven schedule that has most students up early in the morning, occupied in classroom instruction until midafternoon, often involved in school-sponsored extracurricular activities after school, and engaged in homework in the evenings. This structure is replaced by the often more flexible schedules of college for youth who pursue postsecondary education or the structure of a full- or part-time job for those who work. Youth who pursue neither of those activities after high school can find themselves searching for productive activities to fill their days.

The social lives of adolescent students also often revolve around school. They see their friends every day in and between classes, extracurricular activities provide opportunities to hone skills and engage in enjoyable pastimes with students who share similar interests, and activities such as prom and homecoming can be social highlights of the school year. Without these school-provided opportunities, the pattern of youth's social interactions can change markedly when they leave high school.

Perhaps the most dramatic changes following high school occur for youth whose plans entail leaving home. Entering college or the military can take youth away from their home communities, perhaps for the first time, and plunge them into environments that are fundamentally different from their earlier experiences on many dimensions. These changes can require youth quickly to "step up" to increased expectations for maturity and independence and, for college students, academic performance.

These transitions can be difficult for any youth; in fact, the early years after high school have been dubbed a "floundering period" (Halpern, 1992). They can be particularly difficult for youth with disabilities, who may encounter additional challenges to negotiating the transition to young adulthood successfully. For example, youth whose disabilities significantly affect social adjustment or interaction, such as emotional disturbances or autism, can find themselves left out of the kinds of interpersonal relationships that are common for most teens and that are a crucial foundation for successful employment, healthy friendships, and romantic relationships in young adulthood. With proper supports and accommodations, visual impairments often do not hamper the academic performance of youth during high school and into college, but those impairments can severely limit some kinds of employment options, even among college-educated youth.

Despite potential limitations associated with disability, research has demonstrated a wide range of achievements among youth with disabilities in the early years after high school (for example, Gill, 1999; Wagner, Newman, D'Amico, Jay, Butler-Nalin, et al., 1991). Although most become productively engaged in school or work within 2 years of leaving high school (78% according to Jay, 1991), many others struggle in the employment and education domains. Research has pointed to a variety of factors, including aspects of students' school programs, that are associated with more positive postschool outcomes for youth with disabilities (Benz, Yovanoff, & Doren, 1997; Wagner, Blackorby, Cameto, & Newman, 1993). Recognizing the key role that schools can play in supporting a successful transition, the recent reauthorization of the Individuals with Disabilities Education Improvement Act of 2004 (IDEA 2004) affirms that the primary purpose of the free appropriate public education guaranteed to children and youth with disabilities is to "prepare them for further education, employment, and independent living" [IDEA 2004 Sec. 601(d)(1)(A)]. The 1997 amendments to IDEA (IDEA '97) added requirements to include transition planning in the individualized education programs (IEPs) of all secondary school students with disabilities in an effort to prepare them for the challenges of adulthood. IDEA 2004 goes on to describe transition services as:

"designed to be within a results-oriented process, that is focused on improving the academic and functional achievement of the child with a disability to facilitate the child's movement from school to post-school activities, including post-secondary education, vocational education, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation" [Sec. 602(34)(A)].

Given the results orientation of transition planning and its focus on the movement from school to postschool activities, it is fair to ask, "How do young people with disabilities fare in their early transition years in achieving the variety of positive forms of participation for which their education is intended to prepare them?"

Research Questions

The recent focus of the American education system on increased accountability for improved results for all students, embodied in both IDEA 2004 and the No Child Left Behind Act of 2001 (NCLB), points up the increasing importance of having accurate, nationwide data on student outcomes. This need for data includes information on the postschool experiences of youth with disabilities, for which IDEA 2004 holds the education system accountable. Yet not since 1993, when the National Longitudinal Transition Study of Special Education Students (NLTS) completed the reporting of its results, has there been an up-to-date national picture of the postschool experiences of youth with disabilities. This shortcoming is being addressed through the National Longitudinal Transition Study-2 (NLTS2), a 10-year study funded by the Office of Special Education Programs (OSEP) of the U.S. Department of Education, which is generating information on the experiences and achievements of youth with disabilities in multiple domains during their secondary school years and in the transition to young adulthood.

NLTS2 addresses questions about youth with disabilities in transition by providing information about a nationally representative sample of more than 11,000 youth who were ages 13 through 16 and receiving special education services in grade 7 or above on December 1, 2000. NLTS2 findings generalize to youth with disabilities nationally and to youth in each of the

12 federal special education disability categories in use for students in the NLTS2 age range. (Details of the NLTS2 design, sample, and analysis procedures are presented in Appendix A.¹) This report focuses on the subset of youth with disabilities who were out of secondary school and ages 15 through 19 when telephone interviews were conducted with their parents and, whenever possible, with youth themselves in 2003 and for whom interviews also were conducted in 2001.² NLTS2 findings reported in this document use information about these youth to address two questions that are central to the study:

- What are the experiences of youth with disabilities in the postsecondary education, employment, independence, and social domains in their first 2 years out of high school?
- Which youth do well and which struggle—i.e., what individual and household characteristics and youth experiences are associated with variations in the achievements of youth with disabilities in their early years after high school?

As noted previously, NLTS2 is the second longitudinal study of the transition of youth with disabilities that OSEP has funded. From the mid-1980s through 1993, NLTS provided the first national information on the crucial transition years ever available. A comparison of the early postschool outcomes of youth with disabilities represented in the two studies can begin to illuminate ways in which changes in special education policy and practice since NLTS have helped shape youth's transitions to early adulthood. However, important differences in the age groups in the two studies make a straightforward comparison of their findings misleading. Therefore, such comparisons are not included in this report. Instead, separate analyses that make the analytic adjustments necessary for valid comparisons will be conducted in early 2005 and reported in *Changes over Time in Early Postschool Results for Youth with Disabilities: A Report of Findings from the National Longitudinal Transition Study (NLTS) and the National Longitudinal Transition Study-2 (NLTS2)*.

Analysis Methods

A two-part analysis approach has been used to address the research questions related to youth's early post-high-school experiences. The first step is to present descriptive findings for multiple indicators within the postsecondary education, employment, independence, and social arenas for youth with disabilities as a whole. For experiences that were measured in both Wave 1 (2001, when the large majority of youth represented in this report were still in high school) and Wave 2 (2003, when they were out of high school), findings are presented for both waves, and the change between them is calculated (e.g., on average, there has been a 19-percentage-point decrease in a 2-year period in youth with disabilities' taking part in organized group activities in their community). The report also describes a variety of experiences that were measured only in Wave 2 because they are appropriate only for out-of-school youth (e.g., participation in postsecondary education). When possible, findings for youth with disabilities are compared with those for the general population of youth. The descriptive analyses also examine differences in experiences among youth who differ in their primary disability classification and selected demographic characteristics, when significant.

¹ Additional information about NLTS2 is available at www.nlts2.org.

² These two data collection time points are referred to as Wave 1 (2001 interviews) and Wave 2 (2003 interviews) throughout this report.

In the second step, multivariate analyses address factors that are related to differences in key measures that are important outcomes for youth, with or without disabilities, in their early postschool years. These measures are: (1) having been enrolled in two specific kinds of postsecondary education institutions since high school—college (2- or 4-year) and/or a vocational, business, or technical school, (2) currently holding paid employment, and (3) having a social life that involves seeing friends outside of school or organized group activities at least weekly. In addition, one indicator that is a critical negative social outcome for youth is considered: (4) the likelihood that youth with disabilities ever have been arrested. Logistic regression analyses identify the independent relationships of various individual and household factors to these outcomes. Such analyses estimate the magnitude and direction of relationships for each factor, statistically holding constant the other factors in the analysis. The following factors are included in these multivariate analyses³:

- **Disability and functioning**—primary disability category; having ADHD; the number of functional domains affected by disability; and scores on scales measuring self-care, functional cognitive, and social skills.
- **Individual and household demographics**—age, gender, race/ethnicity, household income, and head of household’s educational attainment.
- **Youth’s attitudes, behaviors, and prior experiences**—high school completion, length of time since leaving high school, ever retained at grade level, paid employment during high school (in the analysis of postschool employment), ever suspended or expelled from school (in the analysis of arrests), postsecondary school enrollment (in analyses of employment and social outcomes), and current paid employment (in analyses of postsecondary education and social outcomes).

These factors are included in the analyses simultaneously, to identify the independent relationship each has to the postschool experiences of youth with disabilities, controlling for all others.

The multivariate analyses reported here intentionally do not explore the relationships between aspects of students’ high school programs and their early postschool outcomes, for several reasons. First, only 28% of youth with disabilities represented in NLTS2 had left high school at the time the data reported here were collected. Further, their postschool experiences span from only a few days up to about 2 years after high school. Finally, NLTS2 has yet to complete collection of students’ school transcripts, the source of information about important aspects of students’ school programs, including their full programs of courses and their grades over their entire high school careers. Answers to the crucial question of how school programs and services affect later outcomes will be much more informative if they reflect the experiences of a greater proportion of youth, span a longer time period after high school, and include the most comprehensive data available in NLTS2 regarding students’ school programs. Thus, the analyses reported here focus on a descriptive look at outcomes and on findings that associate variations in outcomes with students’ disability and functioning; demographic characteristics; and attitudes, behaviors, and prior experiences. Analyses in subsequent years of NLTS2 will

³ Details on the measurement of these factors and the rationale for including them in the analyses are presented in Appendix B.

expand these analyses to explore the relationships of school programs to postschool outcomes when more youth are out of high school.

Readers should remember the following issues when interpreting the findings in this report:

- **Weighting of descriptive results.** All descriptive statistics presented in this report are weighted estimates of the national population of students receiving special education in the NLTS2 age group, as well as each disability category individually.
- **Standard errors.** For each mean and percentage in this report, a standard error is presented (usually in parentheses) that indicates the precision of the estimate. For example, a weighted estimated value of 50% and a standard error of 2 means that the value of the variable for the total population, if it had been measured, would, with 95% confidence, lie between 48% and 52% (i.e., within plus or minus 2 percentage points of 50%). Thus, smaller standard errors allow for greater confidence to be placed in the estimate, whereas larger ones require caution.
- **Small samples.** Although NLTS2 data are weighted to represent the population, the size of standard errors is influenced heavily by the actual number of youth in a given group (e.g., a disability category; Appendix C reports group sizes). Groups with very small samples have comparatively large standard errors. For example, because there are relatively few youth with deaf-blindness, estimates for that group have relatively large standard errors. Therefore, readers should be cautious in interpreting results for this group and others with small sample sizes.
- **Significant differences.** In discussions of the descriptive statistics, only differences among groups that reach a level of statistical significance of $p < .05$ are mentioned in the text, with significance levels generally noted. Appendix A outlines a method for using standard errors to calculate the significance of differences among groups of interest. Calculations of changes over time and multivariate analysis results indicate statistically significant results with the use of asterisks.

Organization of the Report

This report is organized to provide background information on out-of-school youth with disabilities and to address the key results of transition planning specified in IDEA 2004: postsecondary education, employment, independence, and community participation. Chapter 2 describes the youth with disabilities represented in this report—those who have been out of secondary school up to about 2 years—including when and how they left high school and key disability and demographic characteristics. This information provides a context for interpreting results regarding their early postschool experiences, presented in the remaining chapters. Chapter 3 provides a broad overview of those experiences by addressing the extent to which youth with disabilities are engaged in school, work, or preparation for work after they leave high school.

Chapters 4 and 5 consider two primary aspects of engagement outside the home— participation in postsecondary education and paid employment—including multivariate analyses identifying individual and household characteristics that distinguish youth with disabilities who are engaged in these activities from those who are not. Chapter 4 describes the extent to which youth with disabilities have enrolled in any postsecondary education and their participation in

2- and 4-year colleges and vocational or trade schools specifically. For youth with disabilities who have not finished high school, participation in General Educational Development (GED) or similar programs and receipt of a GED or high school diploma also are discussed. Chapter 5 considers the current employment status of out-of-school youth with disabilities and how their employment experiences have changed over a 2-year period.

The increasing independence of youth with disabilities is considered in Chapter 6, including the extent to which youth are living away from home, the prevalence of marriage and parenting, youth's household responsibilities, and aspects of their financial independence. Chapter 7 focuses on the social lives of youth with disabilities, including how their uses of leisure time, participation in organized group and volunteer activities, and social interactions have changed in a 2-year period. Factors associated with social involvement with friends and with having been arrested also are presented. The final chapter identifies key lessons learned about the experiences of out-of-school youth with disabilities and the factors that are associated with more positive outcomes in their early post-high-school years.

Appendix A provides details of the NLTS2 design, sample, measures, and analysis approaches. Appendix B presents factors that are hypothesized to relate to the outcomes of youth with disabilities and, therefore, that are included in multivariate analyses reported in Chapters 4, 5, and 7. Appendix C provides unweighted group sizes for the analyses reported in the descriptive data tables.

The following chapters provide the most recent national picture of multiple dimensions of the experiences of youth with disabilities who have been out of secondary school up to about 2 years and of factors that are associated with selected experiences. These findings will be augmented in the next few years of NLTS2 as more youth transition to early adulthood and have increasing exposure to opportunities for postsecondary education, employment, and independent living.