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# CHANGES OVER TIME IN THE EARLY POSTSCHOOL OUTCOMES OF YOUTH WITH DISABILITIES

# A Report of Findings from the National Longitudinal Transition Study (NLTS) and the National Longitudinal Transition Study-2 (NLTS2)

# **Executive Summary**

Prepared for: Office of Special Education Programs U.S. Department of Education

Prepared by: Mary Wagner Lynn Newman Renée Cameto Phyllis Levine

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SRI International 333 Ravenswood Avenue Menio Park, CA 94025



#### **EXECUTIVE SUMMARY**

Since the early 1980s, when *A Nation at Risk* sounded a clear warning about the condition of American education, there have been extensive federal, state, and local efforts to improve schools for all students. At the federal level, these have most recently been codified in The No Child Left Behind Act (NCLB) of 2001, which emphasizes the need for accountability, flexibility, parent involvement, and evidence-based instruction in the education of all students. Such efforts on behalf of all students parallel compatible initiatives that focused explicitly on improving the education and outcomes of students who receive special education services, leading to the Individuals with Disabilities Education Act (IDEA) Amendments of 2004. These most recent amendments demonstrate legislative commitment to improving access to the general education curriculum, high academic standards, goal-oriented transition planning, and accountability for results for students with disabilities. These broad policy initiatives are intended to change the school experiences of students with disabilities and improve their outcomes both during school and in their postschool years.

Two studies by the Office of Special Education Programs (OSEP) of the U.S. Department of Education provide documentation of changes experienced since the mid-1980s by secondary school students with disabilities as they transition to young adulthood. The National Longitudinal Transition Study (NLTS) generated nationally representative information about secondary-school-age youth who were receiving special education services in 1985. To assess the status of youth with disabilities in the early 21st century, OSEP commissioned the National Longitudinal Transition Study-2 (NLTS2). To identify changes among youth with disabilities in their early post-high-school years, this report focuses on the subset of youth represented in NLTS and NLTS2 who had been out of high school up to 2 years. Information reported here is drawn from the first wave of parent interviews conducted for NLTS youth in 1987 (referred to as cohort 1) and the second wave of parent/youth interviews conducted for NLTS2 youth in 2003 (referred to as cohort 2). Analyses include the age group of out-of-school youth that was common to the studies at those time points: youth ages 15 through 19.

Comparisons of data from NLTS and NLTS2 document changes in the following aspects of the early postschool experiences of youth with disabilities who had been out of secondary school up to 2 years:

- Secondary school completion status and timing.
- Living arrangements and social involvement.
- Education after high school, including enrollment in high school degree-completion programs by dropouts and participation in 2-year or 4-year colleges or postsecondary vocational, business, or technical schools.
- Employment rates and job characteristics.
- Overall engagement in the community through participation in school, work, or preparation for work.

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The report documents the extent and direction of change for out-of-school youth with disabilities as a whole and for youth in the nine disability categories that were in use in both 1987 and 2001.<sup>1</sup> Changes also are described for youth with disabilities who differed in their school-exit status, age, gender, household income, and race/ethnicity, when significant.

#### **School Completion**

The school completion rate of youth with disabilities increased and the dropout rate decreased by 17 percentage points between 1987 and 2003. With these changes, 70% of cohort 2 youth with disabilities had completed high school. A sizable increase also was noted in the percentage of youth who had left school at least a year before the interview, suggesting that youth were increasingly leaving high school with their same-age peers in the general population.

#### Household Arrangements and Social Activities

The living arrangements of youth with disabilities were stable over time: about three-fourths of youth in both cohorts 1 and 2 lived with parents, about one in eight lived independently (alone, with a roommate, in a college dormitory, or in military housing as a service member), and 3% of youth in cohort 1 and 1% in cohort 2 lived in a facility or institution. Nine in 10 out-of-school youth with disabilities in each cohort were single. However, some aspects of youth's involvement in social activities changed.

- Membership in organized community groups (e.g., a community sports team, hobby club, or performing group) more than doubled, so that 28% of cohort 2 youth were group members. In contrast, the involvement of out-of-school youth with disabilities in volunteer or community service activities (e.g., working in a soup kitchen, volunteering in a nursing home or child care center) did not change significantly; one in five cohort 2 youth were involved in their communities in this way.
- There was a large increase in youth with disabilities ever having been subject to disciplinary action at school, fired from a job, or arrested. More than half of cohort 2 youth had had such negative consequences for their behavior, compared with about one-third of cohort 1 youth.

#### **Postsecondary Education**

- The rate of postsecondary education participation by youth with disabilities more than doubled over time, increasing to 32% the share of cohort 2 youth who had been out of high school up to 2 years and who had enrolled in a 2- or 4-year college or a postsecondary vocational, technical, or business school.
- The greatest growth in postsecondary enrollment (17 percentage points) was apparent for 2-year colleges; 21% of cohort 2 youth had attended one since high school.

<sup>&</sup>lt;sup>1</sup> Analytic adjustments, described in Appendix A of the report, were made to account for the differences between 1987 and 2003 in disability categories and their composition (e.g., combining the 1987 categories of deaf and hard of hearing into a single category to correspond to the 2003 category of hearing impairment; combining the 2003 category of autism with other health impairment, the category that included most youth with autism in 1987).

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- Attendance at 4-year institutions also increased significantly (8 percentage points), so that 10% of youth with disabilities had been students in such schools since high school.
- Enrollment at postsecondary vocational, technical, or business schools was static; 6% of cohort 2 youth had enrolled in these kinds of schools.
- Despite these changes, youth in the general population were more than twice as likely as those with disabilities to be attending a postsecondary school in 2003.

#### Employment

- In 2003, 70% of youth with disabilities who had been out of school up to 2 years had worked for pay at some time since leaving high school; 55% had done so in 1987. However, there was no change over time in youth with disabilities working at the time of the interview; almost half were doing so.
- Employed cohort 2 youth were 18 percentage points less likely than cohort 1 peers to work full-time at their current or most recent job; 39% were full-time workers.
- Over time, considerably more out-of-school youth with disabilities earned above the federal minimum wage (70% vs. 85% of cohorts 1 and 2, respectively). Yet, the average hourly wage did not increase when adjusted for inflation; earnings averaged \$7.30 per hour in 2003.
- Fewer cohort 2 than cohort 1 youth held maintenance or clerical jobs and more worked in retail at their current or most recent job.

#### Engagement in School, Work, or Preparation for Work

In their early post-high-school years, 70% and 75% of youth in cohorts 1 and 2, respectively, had engaged in school, work, or job training, either alone or in combination. Although their overall rate of engagement in these activities did not increase markedly over time, their modes of engagement did change.

- Engagement in the combination of postsecondary education and paid employment since high school almost quadrupled, to 22% in cohort 2.
- An increase in youth pursuing employment alone was apparent (11 percentage points), so that 44% of cohort 2 youth had been engaged since high school in this way.
- These increases were accompanied by declines in engagement in job training programs as a sole activity or in combination with other activities.
- There was no increase in pursuing postsecondary education alone—3% of cohort 2 youth had done so.

## Differential Changes in Outcomes across Disability Categories

As is true with most aspects of their lives, youth who differed in the nature of their disabilities experienced change over time in their early postschool outcomes in markedly different ways. The patterns of change for the following groups stand out.

#### Youth with Hearing or Visual Impairments

- Youth with hearing or visual impairments had among the highest rates of school completion in cohort 2; 82% and 94% of the two groups, respectively, had finished high school.
- Youth with visual impairments had the largest increase in participation in postsecondary education overall, and both they and youth with learning impairments surpassed other disability categories in the size of increase in participation in 2-year and 4-year colleges, giving them the highest rates of enrollment in those institutions of any category of youth.
- Youth with visual impairments had the largest increase in paid employment since high school; they joined cohort 2 youth with hearing impairments in having a 62% employment rate, similar to the rate for youth with disabilities as a whole.
- Youth in these categories experienced large increases in engagement in their communities via the dual roles of employee and college student; more than one-third in each category had both worked and gone to school since high school.
- Out-of-school youth with hearing or visual impairments had among the highest rates of participation in organized community groups, and they experienced the only significant increases among the disability categories in their participation in volunteer or community service activities.

# Youth with Emotional Disturbances

Youth in this category demonstrated complex patterns of change over time relative to many other categories.

- These youth demonstrated a substantial improvement (16 percentage points) in their school completion rate. Nonetheless, their 56% cohort 2 school completion rate remained among the lowest of any disability category.
- Their improved school completion rate did not translate into a higher rate of postsecondary education participation overall; about one in five youth in this category had pursued some kind of postsecondary education since high school, among the lowest rates of any disability category. However, a significant, 10-percentage-point increase in 2-year college enrollment was seen for this group.
- Youth in this category did not share in the increase in employment that occurred for youth with disabilities as a whole. Yet, working youth in this category showed the only significant increase in earnings relative to the federal minimum wage.
- Youth with emotional disturbances had a dramatic increase over time (33 percentage points) in ever having been in disciplinary trouble at school, fired from a job, or arrested. Almost 9 in 10 youth with emotional disturbances had had one or more of these experiences by the time they had been out of secondary school up to 2 years, the highest rate of any disability category.
- Affiliation with what are typically prosocial organized community group activities also was weaker in the postschool years for youth with emotional disturbances than for youth in other categories.

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#### Youth with Other Health Impairments

- These youth did not share in the improved school completion rate that was evident for youth with disabilities overall; more than 40% dropped out of high school. They also did not share in the increased participation in postsecondary education.
- Cohort 2 youth with other health impairments lagged significantly behind youth with disabilities overall in the percentage who had worked since leaving high school, having experienced no improvement in their employment rate since cohort 1.
- Given their lower rate of employment, youth with other health impairments were less likely than youth with disabilities overall to have been engaged in school, work, or preparation for work since leaving high school.
- The rate at which out-of-school youth with other health impairments experienced negative consequences for their behavior more than quadrupled over time, so that two-thirds of cohort 2 youth in this category had been subject to disciplinary action at school, fired from a job, or arrested at some point, a rate exceeded only by youth with emotional disturbances.

## Youth with Multiple Disabilities or Deaf-Blindness

Comparisons of youth represented in NLTS and NLTS2 document the social and educational implications of the significant disabilities within the category of multiple disabilities, including deaf-blindness.

- Over time, out-of-school youth with these disabilities remained among the least likely to have finished high school; about half of cohort 2 youth had done so. Although this is almost a doubling of the rate since cohort 1, the change did not attain statistical significance for this small group.
- Despite lower school completion rates than many other categories, cohort 2 youth with these disabilities were as likely as youth with disabilities as a whole to have been enrolled in a postsecondary school since leaving high school. Postsecondary vocational, technical, or business schools dominated their choices of postsecondary institutions.
- Youth with multiple disabilities did not show an increase in the likelihood of having worked for pay since leaving high school; about one-third had done so, the lowest rate across the disability categories.
- They also had among the lowest rates of participation in school, work, or preparation for work since leaving high school (59%), with no notable increase over time.
- A 25-percentage-point decrease in youth in this category living in an institution did not attain statistical significance for this small group but may suggest a trend toward greater community inclusion if it is sustained as more youth leave secondary school.

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# The Challenging Consequences of Dropping Out

Differences between youth with disabilities who did and did not complete high school underscore the challenges dropouts face.

- Without a high school diploma, dropouts did not share in the significant increase in postsecondary education enrollment that occurred among youth with disabilities who completed high school; fewer than 1 in 10 had enrolled in any postsecondary education since leaving high school, primarily vocational, technical, or business schools.
- Only about one-fourth of dropouts had enrolled in a high school completion program, suggesting that their postsecondary education options may remain limited.
- Dropouts did not share in the improvements in earnings relative to the federal minimum wage and the shifts in the types of jobs held (i.e., declines in maintenance and clerical jobs and an increase in retail jobs) by youth with disabilities who completed high school.
- In both cohorts, dropouts were less likely than school completers to have the support and stability of living with parents, and they were less likely to be single.
- Despite showing a smaller increase in having negative consequences for their behavior, dropouts in both cohorts were more likely than school completers to have those experiences; 6 in 10 had done so in cohort 1, a rate that increased to 8 in 10 in cohort 2.

However, other changes that occurred differentially between dropouts and completers are less worrisome.

- The increase in the rate at which youth with disabilities had worked for pay since leaving high school occurred largely among dropouts, which brought parity with school completers in this outcome.
- Differences in the participation of cohort 1 dropouts and completers in organized community groups or volunteer or community service activities moderated over time, so that more dropouts were experiencing the benefits of these forms of community participation.

# Changes in Postschool Outcomes Associated with Gender

Some of the changes experienced by boys and girls with disabilities resulted in fewer gaps between genders in cohort 2 than in cohort 1.

- Whereas cohort 1 boys were almost twice as likely as girls to have worked for pay since leaving high school, the employment rates of the two groups were similar in cohort 2.
- By cohort 2, the 19-percentage-point difference between cohort 1 boys and girls in their overall engagement in school, work, or preparation for work was virtually eliminated.
- Unfortunately, a narrowing of differences between genders also was apparent in their tendency toward negative social adjustment. Both boys and girls with disabilities had large increases in the receipt of negative consequences for their behavior such that by cohort 2, the significantly higher rate of these negative consequences among boys had been reduced and was no longer significantly different from that among girls.

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The two genders also experienced other changes in different ways:

- Only boys experienced a significant improvement in their high school completion rate.
- Girls demonstrated larger increases than boys in postsecondary school enrollment, with most of their gains in enrollment being at 2-year colleges. In contrast, boys showed a significant increase in attending 4-year colleges that was not seen among girls, such that at cohort 2, they were almost twice as likely as girls to have attended such a school.
- A significant increase in earnings relative to the minimum wage and shifts in the kinds of jobs held were apparent only among boys.
- In both cohorts, girls were less likely than boys to be single.

# Continued Limitations for Lower-Income Households

The changes that occurred over time for youth with disabilities were experienced differently by youth in the bottom, middle, and upper thirds of the household income distribution.

- Youth with disabilities from households in the lowest income group shared with those in the middle group a large increase in their rate of high school completion. Yet, youth from the lowest-income households in both cohorts lagged behind those from the highest income group in completing high school.
- Youth from households in the lowest income group did not have a significant improvement in postsecondary education participation, continuing the gap between income groups that existed in cohort 1.
- Youth from the lowest-income households did not share with their highest-income peers an increase in having been employed at some time since leaving high school, so that they lagged significantly behind that group on that measure, as well as on their rate of current employment. However, a large increase in the average hourly wage of the lowest-income group resulted in a similar earnings picture across income groups.

## Decreasing but Persistent Racial/Ethnic Differences

Over time, African-American and Hispanic youth with disabilities increasingly had experiences that were similar to those of their white peers in multiple domains. For example:

- Only 2% of cohort 1 Hispanic youth had participated in organized groups or volunteer or community service activities, but large increases over time resulted in quite similar levels of participation across racial/ethnic groups in cohort 2.
- Cohort 1 African-American youth with disabilities lagged significantly behind white youth in having worked for pay since high school, a gap that did not exist in cohort 2.

Yet, some racial/ethnic differences remained:

- Changes over time left white youth exceeding their African-American peers in independent living during the early years after high school.
- Only white youth with disabilities experienced a significant increase in postsecondary education enrollment overall and in the pursuit of both employment and postsecondary education since high school. However, African-American youth demonstrated a significant gain in 4-year college attendance.

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- Only white youth with disabilities showed an earnings increase relative to the federal minimum wage and an increase in volunteer or community service activities.
- No changes in the employment profile of Hispanic youth with disabilities were noted.

The age groups included in NLTS and NLTS2 and the timing of data collection in the two studies permit one more comparison between youth with disabilities represented in the two studies—when youth were ages 18 through 21 and had been out of high school up to 4 years. Analyses of those cohorts, to be presented in future reports, will reveal the ways in which the changes in the early postschool outcomes of youth with disabilities documented in this report evolve as youth continue into early adulthood.

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