

April 2004



NATIONAL LONGITUDINAL TRANSITION STUDY **2**

CHANGES OVER TIME IN THE SECONDARY SCHOOL EXPERIENCES OF STUDENTS 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, and Renée Cameto

SRI Project P11182

NLTS2 has been funded with Federal funds from the U.S. Department of Education, Office of Special Education Programs, under contract number ED-01-CO-0003. The content of this publication does not necessarily reflect the views or policies of the U.S. Department of Education nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. government.



SRI International
333 Ravenswood Avenue Menlo Park, CA 94025



U.S. Office of Special
Education Programs

EXECUTIVE SUMMARY

The Individuals with Disabilities Education Act Amendments of 1997 (IDEA '97), the No Child Left Behind Act of 2001 (NCLB), and scores of state and local initiatives culminate nearly two decades of increasing emphasis on the improvement of American education centered on accountability, flexibility, and improved outcomes for students. Those efforts have had significant impacts on policy and practice at all levels of the education system, including a renewed focus on academics, evidence-based interventions, and achievement testing. This report explores how the school experiences of students who receive special education services in middle and high school may have evolved in response to these changes in policy and practice.

Two research projects sponsored by the Office of Special Education Programs (OSEP) of the U. S. Department of Education help address that topic by documenting changes in several key aspects of the secondary school experiences of students with disabilities over the period of about a decade and a half since the mid-1980s. 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), which addresses many of the same issues as NLTS but extends its scope with additional data items and instruments.

Comparisons of findings for youth who were represented in NLTS with those for youth represented in NLTS2 illuminate changes in the following aspects of the school experiences of secondary students with disabilities:

- Characteristics of their schools, including the types of schools attended and the composition of their student bodies, selected school programs, the kinds of communities in which the schools were located, and the resources in them.
- Characteristics of their school programs, including courses taken, instructional settings, and related services provided to students with disabilities.
- School participation, including school attendance, academic performance (grades), and suspensions from school.

These aspects of students' secondary school experiences are addressed for NLTS students (cohort 1) with information from the first wave of school surveys and school record abstracts conducted for each student's most recent year in school, either the 1985-86 or 1986-87 school year. A mail survey of principals of the schools students with disabilities attended most recently asked respondents to report on the characteristics of their school and their student bodies, policies relevant to students with disabilities, staff and programmatic resources available in the school, and other resources available in the community surrounding the school. In addition, a school staff member was recruited to abstract information from each student's school record on courses taken in the school year and their instructional settings, related services received, and several measures of the student's school participation and performance.

This is an executive summary of Wagner, M., Newman, L., & Cameto, R. (2004). *Changes over time in the secondary school programs of students with disabilities. A report of findings from the National Longitudinal Transition Study and the National Longitudinal Transition Study-2 (NLTS2)*. Menlo Park, CA: SRI International.

For NLTS2 students (cohort 2), data for this report are drawn from two mail surveys that were conducted with school staff in the spring of the 2001-02 school year. A school staff person who could report on the characteristics and policies of each school attended by an NLTS2 study member was asked to complete the school characteristics survey to provide information similar to that collected in NLTS. In addition, the staff person most knowledgeable about the overall school program of each individual student was surveyed to obtain information similar to that abstracted from the school records of cohort 1 students.

Comparative analyses include the age group of students for which school data were collected in Wave 1 of both studies: 14- through 18-year-olds.¹ This report highlights the extent and direction of change for this age group of youth with disabilities as a whole and for youth in the nine disability categories that were in use in both 1987 and 2001. Changes also are described for youth with disabilities who differed in their gender and grade level, the income of their households, and their racial/ethnic background, where significant.

The Changing School Environments of Students with Disabilities

The changes in the characteristics of schools attended by students with disabilities that are noted in this report reflect a variety of changes in special and general education policy and practice and in the demographics of the general school population.

- Over time, there was a significant, almost 4-percentage-point decrease in students with disabilities attending special schools that serve only students with disabilities. This drop from more than 6% to about 2.5% more than cut in half the percentage of students with disabilities who were attending special schools. There was a corresponding 3-percentage-point increase in their attending regular secondary schools.
- At the same time, schools attended by cohort 2 students with disabilities were much more likely to have self-contained special education classrooms as a placement option than had been true for cohort 1 students. The decision to create self-contained classrooms in regular secondary schools may have been in response to an influx of students with disabilities who would otherwise have gone to special schools and who were determined to need the kinds of instruction and supports that were possible in self-contained special education classrooms.
- The growth in Hispanic and Asian/Pacific Islander students in the national student population is borne out in similar changes in the student bodies of schools attended by secondary school students with disabilities. A substantial increase in students attending schools that provided ESL programs was one response to the burgeoning population of students both with and without disabilities who speak a language other than English.
- In contrast, there was an increase in students with disabilities attending schools with higher concentrations of students in poverty, but a substantial reduction in their schools' participation in the Title I compensatory education program.

¹ The samples are weighted to have the same distribution of these age groups: 21% are 14, 22% are 15, 23% are 16, 32% are 17, and 2% are 18.

This is an executive summary of Wagner, M., Newman, L., & Cameto, R. (2004). *Changes over time in the secondary school programs of students with disabilities. A report of findings from the National Longitudinal Transition Study and the National Longitudinal Transition Study-2 (NLTS2)*. Menlo Park, CA: SRI International.

- An increase in the suburban population nationally is reflected in a 21-percentage-point increase in students with disabilities attending schools in suburban communities.
- The average size of the schools students with disabilities attended increased, reflecting the move away from smaller, rural schools as well as the move away from smaller special schools that served only students with disabilities.
- The sizable shift to suburban communities may help explain a marked increase in the resources that reportedly were available in the communities surrounding those schools. There were significant increases in students attending schools in communities that had a variety of secondary and postsecondary education options (e.g., vocational-technical schools, alternative or continuation schools), supports for adult independence (e.g., group homes, centers for independent living, supported work facilities), and advocacy and support groups for persons with disabilities.

Changes in Students' School Programs

Students with disabilities have shown important changes in their school programs since the mid-1980s that may bode well for their future.

- Cohort 2 high school students with disabilities were much more likely than their cohort 1 counterparts to be taking core academic courses, including mathematics, science, social studies, and a foreign language.
- Increasingly, students with disabilities who were taking academic courses were doing so in general education classes. In the spring semester of the 2001-02 school year, seven in ten secondary school students with disabilities were taking at least one academic course in a general education class.
- Students with disabilities were increasingly likely to be attending schools that had policies of providing general education teachers who had students with disabilities in their classes in-service training on the needs of such students, a classroom aide for the teacher or for an individual student with a disability, a smaller class size, or special equipment or materials to use with students, in efforts to increase the chances students with disabilities would succeed in those classes.
- Thirty percent of cohort 2 students with disabilities were taking no special education classes at all in the spring of 2002, whereas only 9% of cohort 1 students with disabilities were not taking any special education courses in the 1985-85 or 1986-87 school years.
- This decline in overall special education course taking masks an increase in the likelihood that students with disabilities who were taking nonacademic courses were doing so in special education classes, largely as a result of life skills or study skills instruction increasingly being the purview of special education.

One apparent trade-off resulting from an increased emphasis on more rigorous academic course taking is that nonacademic courses, particularly vocational education, may be getting pushed out of the course schedules of many students with disabilities. Vocational course taking declined overall by 7 percentage points, so that only about six in ten cohort 2 students with disabilities were taking it in spring 2002. Also, cohort 2 students with disabilities who were

This is an executive summary of Wagner, M., Newman, L., & Cameto, R. (2004). *Changes over time in the secondary school programs of students with disabilities. A report of findings from the National Longitudinal Transition Study and the National Longitudinal Transition Study-2 (NLTS2)*. Menlo Park, CA: SRI International.

taking vocational education were more likely than cohort 1 students to be doing so in a special education class. Students with learning disabilities or speech impairments had among the largest declines in vocational course taking (11 and 10 percentage points), yet these are the categories of youth for whom the benefits of vocational education were shown to be strongest in NLTS in terms of postsecondary vocational training and competitive employment (Wagner et al, 1993) At the same time, these are the students who showed substantial increases in enrollment in academic courses, which may prepare them to enroll in postsecondary education at higher rates than were apparent at the time of NLTS.

In addition to courses and instructional settings, related services can be an important part of the educational programs of many students with disabilities. Several kinds of related services were more likely to be provided to cohort 2 than cohort 1 students, including mental health, social work, and health services; assistive devices and adaptations; and orientation and mobility training.

- Each of the 11 kinds of related services investigated in both NLTS and NLTS2 was provided significantly more often to cohort 2 students in at least one disability category than to cohort 1 students.
- For the most part, increases in receipt of particular services were largest among students in categories for which they were most directly applicable (e.g., orientation and mobility training increased largely among students with visual impairments), although increases in some kinds of services were more widespread.

Changes in Students' School Participation

Changes in the schools attended by secondary school students with disabilities and in their educational programs raise the question of whether they are accompanied by changes in the successful participation of students with disabilities in these programs. Three dimensions of the school participation of students with disabilities are addressed in both NLTS and NLTS2: school attendance, academic performance (i.e., grades reported by teachers), and school suspensions.

- There was an increase in the average number of days absent for students with disabilities of about 8 days in the school year, which brings the total days absent in a year to an average of more than 4 weeks. Yet cohort 2 students with disabilities were not more likely than students in the general population to be absent, although higher absenteeism was noted for cohort 1 students with disabilities than the general population of students at that time (Wagner, 1991). Nonetheless, missing an average of 23 days of school in a given year may pose a significant obstacle to academic success for students who already experience learning challenges due to disability.
- Regarding academic performance, a shift from students receiving mostly Cs to more students receiving mostly As or Bs resulted in more than half of cohort 2 students with disabilities receiving above-average grades, as reported by teachers. However, the grades earned by 19% of cohort 2 students were mostly Ds or Fs, not a significant improvement over the 24% of cohort 1 students with those low grades.
- Cohort 2 students with disabilities were 8 percentage points more likely than those in cohort 1 to have been suspended during the year. This increase brings the suspension rate

This is an executive summary of Wagner, M., Newman, L., & Cameto, R. (2004). *Changes over time in the secondary school programs of students with disabilities. A report of findings from the National Longitudinal Transition Study and the National Longitudinal Transition Study-2 (NLTS2)*. Menlo Park, CA: SRI International.

for cohort 2 students to 20%, a 67% increase over the 12% of cohort 1 students with disabilities who had been suspended during the year.

- Increases in absenteeism and suspensions were particularly large among youth with emotional disturbances; one-fourth of these youth in cohort 2 missed an average of more than 7 weeks of school per year and their suspension rate was twice to four times as high as that of youth in other disability categories.
- Nearly all cohort 2 students with disabilities went to schools that were reported to arrange for alternative placements and continuation of services for students with disabilities who were suspended or expelled from school.

Unequal Benefits

Neither the benefits to students with disabilities nor the potential challenges described above accrued to all groups of youth equally. Students who differed in their primary disability category, grade level, gender, household income, and race/ethnicity showed at least some of these changes to different degrees.

Disability Variations in Changes Over Time

As with so many other aspects of their lives, students with different primary disability classifications experienced some changes in their schools, school programs, and school participation quite differently. Students in most disability categories stand out in some way from their peers, although not in the several ways identified for students with multiple disabilities, mental retardation, or other health impairments, described below.

Students with Multiple Disabilities or Mental Retardation

- Students with multiple disabilities, including deaf-blindness, and to a lesser extent, those with mental retardation experienced wider-ranging changes in their school experiences than most other groups of students. Most of the changes served to align their school experiences more closely with those of their peers, although cohort 2 students with multiple disabilities generally still differed markedly from students in other disability categories in many aspects of their school programs.
- Students with multiple disabilities or mental retardation are two of only three categories of students to have a significant increase in attendance at regular secondary schools and a corresponding decline in attendance at special schools that served only students with disabilities.
- Students with multiple disabilities also are the only group to have significant increases in academic course taking, registering increases in taking every kind of academic course except a foreign language.
- Consistent with these changes, students with multiple disabilities are the only category to demonstrate a significant increase in participation in general education classes overall. However, with the exception of language arts classes, most of their increase in general education course taking involved nonacademic courses.

This is an executive summary of Wagner, M., Newman, L., & Cameto, R. (2004). *Changes over time in the secondary school programs of students with disabilities. A report of findings from the National Longitudinal Transition Study and the National Longitudinal Transition Study-2 (NLTS2)*. Menlo Park, CA: SRI International.

- These changes in school programs closed some of the gap between students with multiple disabilities and other students in taking academic and general education classes, but they continued to be less likely to do so than others.
- Students with multiple disabilities or mental retardation are the only two categories to show increases in vocational education course taking, and they account almost entirely for the increase in students with disabilities taking courses in vocational centers. They also are two of only three groups to show increases in life skills instruction, entirely within special education classes.
- Changes in school participation were somewhat more positive for students with multiple disabilities than for those with mental retardation. Students with multiple disabilities showed some improvements in grades over time, but that improvement was not shared by students with mental retardation. In contrast, students with mental retardation showed an increase in their overall absenteeism that did not accrue to students with multiple disabilities.

Students with Other Health Impairments

Students with other health impairments stand out in sharp contrast to the students described above and, indeed, to students in most other categories.

- As noted previously, students with disabilities as a whole showed an increase in the average size of the schools they attended, as well as increases in the percentage of the student body who were students of color and living in poverty. In contrast, cohort 2 students with other health impairments attended smaller schools that had a larger percentage of white students and a smaller percentage of low-income students than did their cohort 1 counterparts in that disability category.
- Students with other health impairments showed the largest suburbanization of their schools, but are the only ones to have that increased suburbanization come from a decline in urban school attendance as well as rural school attendance. However, this group did not show the increases in community resources that were common for students in most other categories.
- Changes in the schools attended by students with other health impairments and in the communities surrounding them are consistent with changes in the characteristics of those students themselves; they were one of only two disability groups to have an increased probability of being white, and they had the largest decrease in the probability that students in that category were living in poverty (Wagner, Cameto et al., 2003).
- Students with other health impairments, along with students with learning disabilities, are the only ones to record no increase in receipt of related services.
- Students with other health impairments showed no improvements in grades over time, and they had the largest increase of any group in school suspensions and the only increase in the average number of days suspended. This may reflect the sizable increase in the prevalence of students with attention deficit/attention deficit-hyperactive disorder (ADHD) in that category. Multivariate analyses of the social adjustment of youth represented in NLTS2 show that having ADHD is associated with a much higher

This is an executive summary of Wagner, M., Newman, L., & Cameto, R. (2004). *Changes over time in the secondary school programs of students with disabilities. A report of findings from the National Longitudinal Transition Study and the National Longitudinal Transition Study-2 (NLTS2)*. Menlo Park, CA: SRI International.

likelihood of being subject to disciplinary actions at school, independent of other differences between youth in their disabilities, functioning, demographics, and schools programs (Marder et al., 2003).

Grade-Level Variations in Changes Over Time

Comparisons between students with disabilities represented in NLTS and NLTS2 at different grade levels suggest that the transition from middle to high school increasingly has entailed potential challenges.

- The significant increase in the average size of schools attended by students with disabilities occurred entirely among high schools. Cohort 2 students with disabilities transitioned from middle schools with enrollments of about 750 students to high schools that averaged more than 1,300 students. The environments of very large schools can pose impediments to establishing positive relationships and attracting the individual attention of school staff that students with disabilities may need to succeed.
- Among cohort 1 students with disabilities, transitioning to high school was accompanied by a decrease in academic course taking relative to middle school and a growing emphasis on vocational education. Changes over time resulted in academic course taking increasing and vocational education course taking decreasing in the early years of high school for cohort 2 students with disabilities such that no overall decline in academic course taking occurred until students' senior year.
- Ninth grade is the year in which the greatest shift to general education classes for academic courses is noted, increasing the likelihood that students with disabilities would take general education academic classes in their first year in high school. Thus, some 9th graders not only attended larger schools but took primarily general education classes as well.
- High school seniors showed an uneven pattern of school participation. They showed the greatest increase in absenteeism of students at any grade level, yet also showed the largest improvements in grades.

Socioeconomic Variations in Changes Over Time

Students with disabilities who differed in their household incomes and in their racial/ethnic backgrounds also differed in the ways and degrees to which they showed changes in schools, school programs, and school participation. For example:

- Cohort 2 white students and those in the highest income group accrued the greatest changes in factors that may contribute to better odds of participating in postsecondary education. For example, the movement away from special schools and toward regular secondary schools occurred largely among white students and those in the highest income group, as did increases in participation in general education classes and decreases in participation in special education courses.

This is an executive summary of Wagner, M., Newman, L., & Cameto, R. (2004). *Changes over time in the secondary school programs of students with disabilities. A report of findings from the National Longitudinal Transition Study and the National Longitudinal Transition Study-2 (NLTS2)*. Menlo Park, CA: SRI International.

- White students with disabilities recorded the most widespread increases in academic course taking, and upper-income students registered the largest increase in taking a foreign language, often a required course for college admission.
- Consistent with an increased academic focus in their course schedules, white and higher-income students were the only groups to show a significant decline in vocational course taking.
- The largest improvement in grades occurred among white students with disabilities and among upper-income students.
- Moreover, increases in community resources were most pronounced among students in these two groups.

Patterns of changes over time were quite different from low-income students and students with disabilities of color, with different groups appearing to benefit:

- Although students with disabilities in all income and racial/ethnic groups experienced the suburbanization of their schools, the increases were largest for the lowest and middle income groups and for African-American and Hispanic students.
- Despite having much greater suburbanization of the communities in which they attended school, African-American and Hispanic students with disabilities, as well as those from the lowest-income households, had very few increases in resources in their communities.
- Students with disabilities from low-income households were the only income group with a significant increase in enrollment in general education academic classes overall and in general education mathematics, science, and social studies classes in particular.
- However, low-income students recorded the smallest improvements in grades and the largest increase in the likelihood of being suspended from school.
- Although African-American students with disabilities registered increases in their rates of taking some kinds of academic courses, none of the increases in taking academic courses in general education classes that are noted among students with disabilities as a whole were shared by African-American students. African-American students with disabilities who were taking life skills courses also had the largest decline in the likelihood that they would be in general education classes and the largest increase in the likelihood that they would be in special education classes.
- Hispanic students with disabilities had the largest gain in enrollment in general education academic courses of any racial/ethnic group.
- Hispanic students with disabilities were the only group not to experience an improvement in their grades. However, neither did they show the increase in absenteeism or suspensions that occurred among white and African-American students with disabilities.

Summing Up: Clear, but Uneven Progress for Students with Disabilities

Youth with Disabilities: A Changing Population, an earlier comparison of information reported by parents of NLTS and NLTS2 students (Wagner et al., 2003), documented many

This is an executive summary of Wagner, M., Newman, L., & Cameto, R. (2004). *Changes over time in the secondary school programs of students with disabilities. A report of findings from the National Longitudinal Transition Study and the National Longitudinal Transition Study-2 (NLTS2)*. Menlo Park, CA: SRI International.

changes over a period of about a decade and a half in the characteristics of youth with disabilities, their households, and some aspects of their experiences. Summarizing those changes, that report raised the question, “have they been for the better?”, and concluded that “in many respects, the answer to that question is ‘yes,’ but that answer applies to some youth more than to others. Findings also point to several challenges remaining for youth with disabilities, their families, and the schools that serve them” (Wagner et al., 2003, p. 6-1). The same question can be raised in response to the changes in the schools, school programs, and school participation of secondary school students with disabilities that have been reported by school staff and described in this document. And in many respects, the answer to the question is the same. Many of the changes identified are good news indeed for students with disabilities, their families, and their schools. However, not all students with disabilities shared equally in those positive changes, and that is cause for concern.

The differences over time between groups of students with disabilities in their school experiences raise the question of whether there may be related differences in postschool outcomes. Comparisons of findings from the second wave of data collection of NLTS and NLTS2 will examine the course-taking pattern of students with disabilities over their full high school careers and their achievements in the early years after high school.

References

- Marder, C., Wagner, M., & Sumi, C. (2003). The social adjustment of youth with disabilities. In M. Wagner, C. Marder, J. Blackorby, R. Cameto, L. Newman, P. Levine, & E. Davies-Mercier (with M. Chorost, N. Garza, A. Guzman, & C. Sumi), *The achievements of youth with disabilities during secondary school. A report from the National Longitudinal Transition Study-2 (NLTS2)*. Menlo Park, CA: SRI International. Available at www.nlts2.org.
- Wagner, M. (1991). Secondary school performance. In M. Wagner, L. Newman, R. D’Amico, E. D. Jay, P. Butler-Nalin, C. Marder, et al., *Youth with disabilities: How are they doing? The first comprehensive report from the National Longitudinal Transition Study*. Menlo Park, CA: SRI International.
- Wagner, M., Cameto, R., & Newman, L. (2003). *Youth with disabilities: A changing population. A report from the National Longitudinal Transition Study-2 (NLTS2)*. Menlo Park, CA: SRI International. Available at http://www.nlts2.org/reports/changepop_report.html

This is an executive summary of Wagner, M., Newman, L., & Cameto, R. (2004). *Changes over time in the secondary school programs of students with disabilities. A report of findings from the National Longitudinal Transition Study and the National Longitudinal Transition Study-2 (NLTS2)*. Menlo Park, CA: SRI International.