National Longitudinal Transition Study-2:
A Synthesis of Three NLTS2 Reports on
Going to School, Youth Achievements
and Services and Supports

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Introduction

The Individuals with Disabilities Education Act Amendments of 2004, the No Child Left Behind Act of 2001 and scores of state and local initiatives are arguably the zenith of nearly two decades of major efforts to improve American education. The successes of these ambitious initiatives will depend on changes in many areas, including teacher preparation and training, assessment policies, standards and expectations and funding. However, the classroom is where “the rubber meets the road.” What happens in classrooms every day is what students experience directly and it is the mechanism through which educational interventions are most likely to produce the desired changes in improved student achievements. To meet the needs of this diverse population of students, appropriate educational program options and services and supports are necessary. At the same time, a balance between appropriateness, individualization, high standards and access to general education curricula is a challenge for all schools to meet.

The U.S. Department of Education is working to provide the information needed to improve the education and outcomes of secondary school students with disabilities through the National Longitudinal Transition Study-2 (NLTS2). NLTS2 is a 10-year study that is documenting the characteristics, experiences and outcomes of a nationally representative sample of more than 11,000 youth who were ages 13 through 16 and were receiving special education services in grade 7 or above when the study began in 2001. NLTS2 findings generalize to youth with disabilities nationally and to youth in each of the 12 federal special education disability categories.\(^1\)\(^2\)

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\(^1\) Additional information about NLTS2 is available at www.nlts2.org.
\(^2\) NLTS2 data are weighted. The study was designed to provide a national picture of the characteristics, experiences and achievements of youth with disabilities in their respective age ranges. Therefore, all the statistics from the studies are weighted estimates of the national population of youth receiving special education in the studies’ age ranges at the time the studies began, as well as of each disability category individually. Each response for each sample member is weighted to represent the number of youth nationally that were in his or her disability category in
This document synthesizes information from three NLTS2 reports: *Going to School: Instructional Context, Programs, and Participation of Secondary Students with Disabilities; The Achievements of Youth with Disabilities During Secondary School;* and *Services and Supports for Secondary School Students with Disabilities.*

- The first section of this document briefly describes students with disabilities’ school and classroom contexts, patterns of course taking and characteristics of classroom instruction from *Going to School: Instructional Context, Programs, and Participation of Secondary Students with Disabilities.*
- The second section highlights student outcomes related to school programs and experiences and parent expectations from *The Achievements of Youth with Disabilities During Secondary School.*
- The third section focuses on information from the *Services and Supports for Secondary School Students with Disabilities* report that discusses the importance and challenges of providing services and supports for youth with disabilities.
- Lastly, a discussion of possible policy implications derived from the current NTLS2 data and an explanation of the next steps for future analyses of NLTS2 is given.

Project Forum at the National Association of State Directors of Special Education (NASDSE) produced this synthesis as part of its cooperative agreement with the U.S. Department of Education’s Office of Special Education Programs (OSEP).

**NLTS2 Data Sources**

Several sources of information have been used to generate these reports. The data to be discussed were collected during Wave 1 data collection activities from the following sources:

- **Parents.** Parents and guardians of NLTS2 study members are a key source of information on the characteristics of students, their educational histories and their lives outside of school. Telephone interviews conducted with parents in the spring and summer of 2001 addressed these important topics.

- **School staff knowledgeable about students’ overall school programs and performance.** School staff were asked to provide a snapshot of each student’s school program in terms of the range of courses taken at the time and the setting for each of those courses. Information also was obtained on related and support services and programs provided to students and some aspects of their school performance.
• **Teachers of general education academic classes.** The survey respondents were asked to report background information on the class, the instructional practices used with the specific individual and how they worked with the class as a whole.

• **School staff able to describe students’ schools.** A school staff person who could report on the characteristics and policies of schools attended by NLTS2 study members was surveyed to provide a school-level context for the classroom-level information collected on other surveys.

What Do School Experiences Look Like for Students with Disabilities?

As a group, secondary school students with disabilities participate in the full range of courses. All but 1% take academic courses, which include language arts, mathematics, social studies or science. Their participation in such courses has increased significantly in the last decade and half (Wagner, Newman, & Cameto, 2004) since the original National Longitudinal Transition Study. This increase suggests real progress in giving students with disabilities access to the kinds of courses that will prepare them for postsecondary education.

In addition, two-thirds of students with disabilities experience both general and special education settings as part of their school day, but this finding varies widely depending on the nature of the disability. Students with learning disabilities or speech impairments spend most of their time in the general education setting, whereas students with mental retardation, autism, multiple disabilities or deaf-blindness spend more time taking part in vocational education classes in a special education setting. On average, general education courses constitute 60% of the courses students with disabilities take; about 35% of courses are taken in special education classrooms; and the remainder are in other settings. Overall, about 25% of students with disabilities take all their courses in general education classrooms. Another 10% take all their courses in special education classrooms or individual settings.

**General Education Setting**

For the most part, delivery of instruction to students with disabilities mirrors the instruction to the class as a whole in general education settings. Given that the needs of students with disabilities and their nondisabled peers are often drastically different, this finding questions whether students with disabilities are accessing the general curriculum if what they are receiving is delivered in a manner designed for their nondisabled peers. On the other hand, curricular content for many students with disabilities differs from the class as a whole. The majority of students with disabilities in a general education academic class receive some kind of modified curriculum to fit their specific learning needs.

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4 NLTS was designed and conducted by the Office of Special Education Programs between 1984 and 1993. It included a nationally representative sample of students who were ages 15 through 23 when the first parent interview data were collected in 1987. Many of its design features are mirrored in NLTS2 to permit comparisons between them for students in the same ages in both studies.
Most students with disabilities have teachers who report that their placement in the class is “very appropriate.” Further, almost all students with disabilities are expected to keep up academically with the rest of the class, and three out of four students actually do so. However, almost 20% of students with disabilities in general education academic classes are not meeting the performance expectations of their teachers. When examining the findings for various disabilities, approximately one out of seven students with emotional disturbance have teachers who feel their placement in the class is not appropriate, yet 98% are expected to keep up with the rest of the class. These students are not likely to be provided accommodations or supports to help them meet those expectations, except behavior management and modified discipline standards, and they are least likely of all youth with disabilities to succeed in keeping up with the class academically; only two-thirds do so.

When it comes to teachers, the vast majority of general education academic classroom teachers receive some support for having students with disabilities in their classes. However, only 60% of students with disabilities have general education academic teachers who receive any information about the needs of those students, and only about half have teachers who receive any input or consultation from special educators or other staff about how to meet those needs. From NLTS2 findings, it appears that some kind of teacher preparation and/or support is needed for general education academic teachers.

**Special Education Setting**

As one might expect, the special education setting is quite different from general education classroom settings in that more individual focus takes place in terms of tailoring the instruction, individualizing the curriculum and providing smaller class size. This type of environment appears to encourage students’ direct participation more than general education classes do and suggests that teachers are able to provide wider opportunities for learning and applying academic subject matter in real-world settings.

**Vocational Education Setting**

Students are less likely to take vocational education now than in the past, a trend that is most likely offset by an increase in academic course taking (Wagner, Newman, & Cameto, 2004). Nonetheless, the school programs of a majority of the students with disabilities still include vocational education courses, most of which are taken in general education classrooms. The prevalence of vocational course-taking may reflect in part the fact that the primary transition goal of more than one-half of students with disabilities is to gain competitive employment and 40% have a goal related to postsecondary vocational training.

**What Factors Affect Students’ Academic Achievement?**

Students’ individual characteristics including disability category, functional skills, demographics and income all affect their academic achievement to some degree as reported in The Achievements of Youth with Disabilities in Secondary School. But school programs and
experiences are extremely important to examine because of their possible positive contributions to academic performance. What schools do can make a difference in the academic performance of students with disabilities. Schools have the ability to modify and monitor student programs, instructional placements, and services and supports to fit the individual needs of these students.

According to NLTS2 findings, 30% of students with disabilities receive As and Bs and 8% receive Ds and Fs. In addition, 97% of students with disabilities are expected to keep up with their peers in a general education academic class, whereas 74% actually do keep up. However, the average gap of more than three grade levels between students’ tested reading and math abilities and their actual grade levels has not declined over time.

As stated earlier, participation in general academic education classes by students with disabilities has increased over the past decades, but research conclusions regarding the instructional efficacy of the participation are mixed. Although participation in general academic classes can increase learning through access to the general education curriculum, it also has been shown to carry with it a greater risk for course failure. NLTS2 analyses suggest that tension exists between learning and grades. Students with disabilities who take more of their classes in general academic education settings receive somewhat lower grades overall, but also are closer to grade level in both reading and mathematics than peers who take few classes in those settings.

Other NLTS2 findings illustrate the challenge of identifying the impact of services, accommodations and supports for students with disabilities by using data gathered at a single point in time. Students who receive some kind of instructional accommodations often do so because they have lower levels of achievement. Therefore, although the accommodation may assist a student in raising performance over time, it may not lift his or her performance in a given year to the level of a student who did not need it. This situation would result in analyses showing a negative relationship between receiving accommodations and academic performance, as is found in NLTS2 analyses.

In addition to school program experiences, parent expectations for postsecondary education are consistently related to academic performance. Students with disabilities whose parents have higher expectations for their children’s postsecondary education receive higher grades and score one year closer to grade level on reading and mathematics tests than youth whose parents have lower postsecondary education expectations.

What Challenges and Barriers Do Students with Disabilities Face When Receiving Services and Supports?

Schools play an important role in providing appropriate services and supports to students with disabilities and often play the primary role. Parents depend on their children’s school to provide information and service coordination and ultimately to arrange services and supports. Parents of 81% of youth with disabilities report learning about services from their children’s school. Most services are provided through the school, whereas some are provided by outside agencies or individuals especially psychological or mental health services, social work services, physical
therapy, diagnostic medical services and respite care. Overall, 72% of secondary school students with disabilities receive at least one of the related services investigated in NLTS2. As expected, youth with disabilities tend to receive services and supports relevant to the functional limitations and academic challenges associated with the impairments that define their disability category.

Related Services and Supports

Obtaining services for their children is not particularly difficult for some parents; parents of 41% of students with disabilities report they were able to obtain services with “almost no effort.” For other parents it has been quite challenging; 40% report going to “a great deal of effort” or “some effort” to obtain services. Parents report encountering a variety of barriers in their efforts to obtain services. Parents most commonly cited lack of information and unavailability of services (24% and 23%, respectively). Parents of 20% of students cited “poor quality service” as a problem, and more than 10% of students have parents who cite problems related to scheduling, cost eligibility requirements, location, lack of time and transportation. Parents of students with emotional disturbance and autism expend the most effort in obtaining services. In addition, parents of students with autism and deaf-blindness report encountering the most barriers in obtaining appropriate services.

Despite the fact that 72% of youth with disabilities are reported to have received at least one related service in the preceding year, some apparently are not receiving all the services their parents believe are needed. Parents’ perception of whether their children are getting enough services is strongly related to the effort they reportexpending to obtain those services. Those who expend the greatest effort to obtain the services their children receive also are the most likely to express unmet needs for additional services. Fewer than half of students with disabilities (45%) whose parents report that it took “a great deal of effort” to obtain services for them report that those services are enough to meet students’ needs. In contrast, almost twice as many students (87%) whose parents report expending “almost no effort” to obtain services indicate that those services are sufficient for their children.

These struggles appear to be most challenging for students with autism, whose parents are more likely to report investing more effort to obtain services, including almost one-third who report needing to spend “a lot of effort” on behalf of their children to obtain services for them. Parents of youth with autism also are more likely than those in other disability categories to cite greater barriers to obtaining services for their sons or daughters. Fifty percent of parents of students with autism say the services they need for their sons or daughters are not available, and they are the most likely to report that their children are ineligible for services that are available or that those services are of poor quality. Parents of youth with autism also report more often than other parents that they seek information or help outside the school, and they rely more on family members, other parents or parent groups to learn about services. They also are more likely to rely on non-school professionals. With this pattern of experience, it is not surprising that secondary school students with autism are least likely to be reported by their parents as having sufficient services. The recent rapid growth in the prevalence and identification of children and youth with
autism suggests the importance of developing a greater understanding of, and paying closer attention, to both the academic and related service needs of these students.

In addition, NLTS2 findings underscore the fact that poverty poses obstacles to accessing related services for youth with disabilities and their families. Lower income families are almost twice as likely to report expending effort obtaining services than higher income families (26% compared to 14%). Transportation and language barriers pose additional problems in obtaining services. African Americans report expending more effort in obtaining these services than white families (32% compared to 16%). African American students are less likely than white students to have parents report their children receive sufficient services (61% compared to 74%).

School-Based Programs Targeting Risk Behaviors

According to school staff, most youth with disabilities participate in at least one program aimed at preventing or ameliorating behaviors that place students at risk for poor outcomes, ranging from about one out of five students receiving teen parenting education or services to more than half receiving reproductive health education or services. School staff also report that approximately one-third of students with disabilities do not participate in these programs, but would benefit from them. It is noteworthy that the percentages of students reported to have unmet needs for conflict resolution/anger management/violence prevention or teen parenting programs are greater than the percentages of those participating in them.

Students in every disability category participate to some extent in these programs, although participation rates vary widely across disability categories. Unlike the greater prevalence of related-service participation among students in such categories as autism or multiple disabilities, students in higher-incidence disability categories are more likely to participate in programs that focus on risk behaviors. For example, students with learning disabilities or emotional disturbance are reported to participate in these programs at relatively higher rates than others. Nonetheless, youth with learning disabilities or emotional disturbance also are among the students reported to have relatively high levels of unmet needs. In fact, according to school staff, youth with emotional disturbance have the highest proportions of unmet needs for participating in programs (reproductive health, teen parenting, substance abuse, and conflict resolution/anger management) targeting risk behavior.

Finally, school poverty, as measured by the proportion of the student body that is eligible for free or reduced-price lunch, is associated with some unmet programmatic needs for students with disabilities. Youth with disabilities who attend schools with larger concentrations of low-income students are more likely to have perceived unmet needs for programs that target high-risk behaviors than are youth with disabilities who go to schools where low-income students are a smaller proportion of the student body. Thus, increased investments in such programs might well be targeted toward secondary students who attend high-poverty schools.

Conclusion
Students with disabilities continue to face challenges in terms of their instructional programs, achievements and services and supports. A number of policy implications may be drawn from the NLTS2 data presented. The data suggest the importance of better preparing teachers to instruct students with disabilities in the general education setting. Teacher preparation is vital to the success of students with disabilities both academically and socially. Another important issue to address is ensuring that students with disabilities receive appropriate supports and services. This is particularly important for students with autism and low income families and schools. In addition, it is important to assist families in overcoming barriers by providing adequate information to parents regarding the types of services children need and how to access these services. Another important area of focus is ensuring that parents receive accurate and timely information on assessment results and classroom performance so that parents can encourage their children to succeed throughout their school experiences. The data suggest that there is a relationship between student performance and their parents having high expectations about their children attending postsecondary school. Environments that are well equipped with informed teachers and parents help contribute to positive outcomes for all students with disabilities.

Future waves of data collection for NLTS2 will enable the value of a longitudinal design to be realized. For example, collection of transcripts as students with disabilities leave high school will enable researchers to look at the full range of courses and credits earned by students with disabilities, to address such questions as: Are students with disabilities who intend to pursue postsecondary education taking courses that will prepare them for the future? Are students whose primary transition goal is employment taking courses consistent with that vision? Further, longitudinal data will enable NLTS2 to address the critical linkages between secondary school programs and later outcomes. For example, how does a school program that emphasizes general education academic course taking relate to the academic performance and school completion of students with those programs? Do various related and support services provided to students with disabilities with similar academic or social challenges help those students to succeed? Findings related to these kinds of questions will be documented in future NLTS2 reports.
References

Primary References


Secondary Reference