5. 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, Cameto, et al., 2003[1]), documented many 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, Cameto, 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 documented in the preceding chapters are good news indeed for students with disabilities, their families, and their schools. However, not all students with disabilities have shared equally in those positive changes, and some changes suggest potential cause for concern regarding their impacts on some students with disabilities. Both the positive changes and potential concerns are summarized in the following sections.

A "Good News" Story

A variety of positive changes in the schools, school programs, and school participation of students with disabilities tell what is in many respects a "good news story" regarding the increased access of students with disabilities to general education classrooms, their increased participation in core academic courses, and their increased ability to earn grades that indicate they are meeting academic performance expectations at school.

Access to General Education Classrooms with Supports

As mentioned elsewhere in this report, a variety of changes in policy and practice regarding students with disabilities, many embedded in the Individuals with Disabilities Act Amendments of 1997 (IDEA '97), have had the overriding purpose of increasing the participation of students with disabilities in general education classrooms to the extent appropriate for their individual needs. These efforts were intended to improve access to the general education curriculum for students with disabilities, promote higher academic standards, and provide opportunities for social integration with nondisabled students. Further, supports are to be provided to students with disabilities and their teachers to enable the students to meet those higher standards and succeed in general education classrooms. This report provides evidence of progress in expanding participation in general education classrooms, with supports, for many students with disabilities.

Relative to their counterparts in the mid-1980s, cohort 2 students with disabilities demonstrate a trend away from enrollment in special schools that serve only that population and toward attendance at regular secondary schools. Over time, this shift cut in half the percentage of students

[1] The full report is available at http://www.nlts2.org/reports/changepop_report.html

with disabilities who were attending special schools. The school programs of cohort 2 students with disabilities also demonstrate less involvement in special education classes and greater participation in general education academic classes. In fact, the percentage of students with disabilities who were spending no part of their school day in special education classes tripled over time, so that 30% of cohort 2 students with disabilities were receiving instruction entirely in general education classes. And there is some evidence that students may be accessing the general education curriculum in greater numbers. General education classes taken by students with disabilities increasingly involved academic subjects, including mathematics, science, and social studies. In the spring semester of the 2001-02 school year, 7 in 10 secondary school students with disabilities were taking at least one academic course in a general education class.

This clear pattern of increasing participation by students with disabilities in general education classrooms might not be the good news it appears to be on the surface if students and their general education teachers were expected to fend for themselves in meeting the performance demands of general education classes. However, there is evidence that several kinds of support for both teachers and students with disabilities in general education classes became more common. Many more cohort 2 students with disabilities than their peers in cohort 1 were going to schools that reported a policy of providing general education teachers who had students with disabilities in their classes with in-service training on the needs of such students, a classroom aide for the teacher or for individual students with a disability, a smaller class size, or special equipment or materials to use with students. Further, a variety of related services for students also became more common, including mental health, social work, and health services; assistive devices and adaptations; and orientation and mobility training. These findings suggest that students with disabilities and their teachers are increasingly being provided the supports that may help students participate and succeed in their general education classes.

Participation in Core Academic Courses

Findings from NLTS demonstrated that few students with disabilities were attending college after high school (Blackorby & Wagner, 1996). In part, the reason was that their high school course schedules did not include the number and types of academic courses needed to prepare them for postsecondary education (Newman & Cameto, 1993). However, significant changes have occurred in the course taking of students with disabilities since that time. Cohort 2 students with disabilities were much more likely than cohort 1 students to be taking the kinds of academic courses that would prepare them for college, including substantial increases in mathematics, science, social studies, and foreign language enrollments.

As mentioned above, the academic courses of cohort 2 students with disabilities were much more likely to be in general education classes than was true for their cohort 1 counterparts. NLTS2 findings also demonstrate that the vast majority of those general education classes were performing at grade level (Wagner, Marder, Cameto, et al, 2003); 82% of students with disabilities who were taking general education academic classes in the spring of the 2001-02 school year were reported by their teachers to be in classes where the majority of students were performing at grade level, whereas only 16% were tracked into general education academic classes whose students performed primarily below grade level. In addition, differential changes in course taking among boys and girls with disabilities eliminated the differences in their high school course schedules that were evident in the mid-1980s; cohort 2 boys and girls were equally likely to enroll in the same kinds of

academic and nonacademic courses. Almost half of students with disabilities represented in NLTS2 were reported to have as their primary transition goal attending a 2- or 4-year college (Cameto, Levine, et al., 2004, and greater numbers of students with disabilities, regardless of gender, had secondary school programs that provided a foundation to achieve that goal.

Academic Performance Improvements

Comparisons between students with disabilities represented in NLTS and NLTS2 show substantial improvements in the grades they received. A shift from students' receiving mostly Cs to receiving mostly As or Bs resulted in receipt of above-average grades by more than half of cohort 2 students with disabilities. These improvements in grades are consistent with results of an earlier NLTS/NLTS2 comparison, which showed that cohort 2 students with disabilities were much more likely than those in cohort 1 to have met the academic requirements of each succeeding grade level and, therefore, to be at the appropriate grade level for their age (Wagner, Cameto, et al., 2003). Grade improvements among students with disabilities also are consistent with a trend in the general population toward higher grades (Koretz & Berends, 2001).

These grade improvements suggest that increases in the access of students with disabilities to both general education classrooms and potentially more rigorous curricula in core academic subjects apparently did not jeopardize their ability to meet the performance expectations of their teachers, as indicated by students' grades. The NLTS2 survey of teachers of students' general education academic classes shows that 97% of students with disabilities were expected to keep up in those classes, and about three-fourths of them actually did so (Newman, Marder, et al., 2003). Performance was stronger in general education vocational classes; 95% were expected to keep up with other students in those classes, and 87% did so (Cameto & Wagner, 2003).

Increased School and Community Resources

The "suburbanization" of communities all over the country, including those in which cohort 2 students with disabilities attended school, may have contributed to access for more of them to a wider array of options for success both during secondary school and in their postschool years. More cohort 2 than cohort 1 students with disabilities were going to school in communities that had choices for secondary schooling, including alternative or continuation schools, vocational or technical schools, and magnet schools. Supports for adult independence also were more common for cohort 2 students, including independent living centers, group homes, and work facilities for adults with disabilities. Advocacy and support groups for persons with disabilities, too, were more likely to be part of the mix of resources in cohort 2 students' communities. The growing ethnic and language diversity of the American student population, including students with disabilities, also resulted in an increased likelihood that the schools they attended had programs to support students whose first language was not English.

Potential Concerns

Despite this pattern of positive changes in the schools, school programs, and school participation of students with disabilities, other findings suggest areas of potential concern regarding the very issues described above, as well as others. In addition, it is clear that positive changes have not occurred equally among youth who differ in their primary disability, household income, or racial/ethnic background.

Increased Prevalence of Self-Contained Classrooms

Alongside the good news that many students with disabilities were participating more in general education classes is the knowledge that 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. This increase in self-contained settings in regular secondary schools parallels a decrease in students with disabilities attending special schools that served only that population. Thus, the decision to create self-contained classrooms in regular secondary schools may have been made in response to an influx of students with disabilities who otherwise would have gone to special schools and who were determined to need the kinds of instruction and supports that are possible in self-contained special education classrooms. Hopefully, the presence of such placements in regular secondary schools does not create an inherent demand to keep them full even when the needs of the students with disabilities in the school in any given year do not warrant self-contained placements.

Do Academics Exclude Other Course Choices?

Although many students with disabilities have a goal of college attendance after high school, and they are increasingly likely to have the academic preparation to enable them to achieve that goal, more than half of students with disabilities represented in NLTS2 had a primary transition goal of competitive employment, 40% had a primary goal of postsecondary vocational training, and the primary transition goal for one in five students with disabilities was maximizing functional independence (Cameto, Levine, et al., 2004). A school program that has a heavy emphasis on academic course taking may not be the most effective program to help students, with or without disabilities, meet these kinds of goals.

Vocational course taking, which can contribute significantly to increasing the odds of positive postsecondary outcomes (Wagner, Blackorby, et al., 1993), declined over time, even though it was more likely to be reported as a "very appropriate" placement for individual students with disabilities by general vocational education teachers than by general education academic teachers (Cameto & Wagner, 2003). When students with disabilities did take vocational education, it increasingly was the purview of special education rather than general education. Although life skills or study skills instruction increased, it too was provided primarily in special education settings. An overriding emphasis on academics, to the exclusion of vocational and other kinds of nonacademic instruction, could be mismatched to the goals of some students with disabilities.

Improved Academic Performance Still Leaves Many Behind

The improvements in academic performance noted for students with disabilities, as indicated by improved grades and students' progressing at the typical pace through the grade levels, were not experienced by all students with disabilities. The grades earned by one in five cohort 2 students were mostly Ds or Fs, and almost half were not at the typical grade level for their age. About one-fourth of students with disabilities who took general education academic classes and who were expected to keep up in them failed to do so, according to their teachers (Newman, Marder, et al., 2003). Also worrisome is the fact that, on average, students with disabilities represented in NLTS2 were reported by their teachers to be 3.6 years behind grade

level in their reading and mathematics abilities, with 26% being five or more grade levels behind (Blackorby, Chorost, et al., 2003).[2] Thus, although they may have received better grades, achievement gaps of this size raise questions about students' abilities to tackle the complex academic content called for by increasingly rigorous state standards, meet high-stakes testing requirements for graduation, and be successful in postsecondary education.

Increases in School Absenteeism and Suspension

Improvements in the academic performance of students with disabilities do not appear to extend to their engagement in school, as indicated by absenteeism, or to their social adjustment at school, as indicated by suspensions. Compared with their cohort 1 counterparts, cohort 2 students with disabilities missed more school—an average of 8 more days over the school year, bringing average absenteeism to more than 4 weeks in the school year. 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, 1991a). 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.

Further, cohort 2 students with disabilities show an 8-percentage-point increase over those in cohort 1 in having been suspended during the year, with one in five being subject to that disciplinary action. Students with emotional disturbances were particularly likely to have experienced these difficulties; they were the most likely to have high absenteeism and were more than twice as likely as any other group of students to have been suspended in the current school year. Increases in suspensions are potentially cause for concern because disciplinary actions at school have been shown to correlate highly with poor social skills, poor classroom social behaviors, a higher likelihood of students' engaging in bullying, and a higher probability of arrest among students with disabilities (Marder, Wagner, et al., 2003).

It is still unclear whether the increasing difficulties students with disabilities appeared to have with attendance and suspensions related to changes in the school environment. "Zero tolerance" policies in schools could have had particularly significant impacts on students whose disabilities have behavioral implications. In addition, cohort 2 students with disabilities were going to high schools that were larger, on average, than those attended by students in the general population, with the potential challenges inherent in those schools. Also, the stress that may have accompanied the increased academic emphasis in students' school programs noted above may have been associated with behavioral problems for some students. Whatever role the school environment may have played in students' behavior, school policies supported the continuation of services for students with disabilities who are suspended, as intended by law. Virtually all cohort 2 students with disabilities were going to schools that were reported to arrange for

[2] NLTS2 data permit the calculation of a measure of deviation between the actual grade level of students with disabilities and the grade-level equivalent of their tested performance in reading and mathematics. School staff reported students' grade-level-equivalent performance in reading and mathematics from their most recent assessment and the year of that assessment. When students' tested grade levels are compared with their actual grade levels in that same year, the difference indicates how far ahead of or behind their actual grade levels they function. This measure of reading and mathematics ability should not be confused with the measure of whether students progressed through the grade levels at a typical pace and, therefore, were at the typical grade level for their age.

alternative placements and continuation of services for students with disabilities who were suspended or expelled from school.

The Potential Challenges of Transitioning from Middle to High School

Comparisons between students with disabilities represented in NLTS and NLTS2 suggest that the transition from middle to high school increasingly entailed potential challenges. As noted previously, the environments of very large schools can pose impediments to students' finding their "niche," establishing close, positive relationships with adults and peers, and attracting the individual attention of school staff that they may need to succeed. The significant increase in the average size of schools attended by students with disabilities occurred entirely among high schools. Thus, 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. Further, 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 increased academic course taking and decreased vocational education course taking in the early years of high school so that there was no overall decline in academic course taking until students' senior year. And 9th grade is the year in which the greatest shift to general education classes for academic courses is noted, raising the likelihood that students with disabilities would take general education academic classes in their first year in high school. An awareness of the potential need for support on the part of students with disabilities in adjusting to the expectations and environment of high school could help ease the transition for some students with disabilities.

Unequal Benefits

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

Differential changes over time across disability categories. As with so many other aspects of their lives, students with different primary disability classifications show substantial differences in some changes in their schools, school programs, and school performance. Students with multiple disabilities, including deaf-blindness, and, to a lesser extent, those with mental retardation show 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 often still found themselves at the extreme end of the variation across disability categories.

For example, students with multiple disabilities or mental retardation are two of only three categories of students who show a significant increase in attendance at regular secondary schools and a corresponding decline in attendance at special schools that serve only students with disabilities, with those changes being most extreme for students with multiple disabilities. Students with multiple disabilities also are the only group to register significant increases in taking any academic courses and in taking courses in general education classes, particularly language arts, fine arts, and physical education courses. These changes 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, counter to the declines seen among some other groups. They also account almost entirely for the increase in students with disabilities taking courses in vocational centers. And they are two of only three groups to show increases in life skills instruction, entirely within special education classes.

The changes in school participation that correspond to alterations in schools and school programs are somewhat more positive for students with multiple disabilities than for those with mental retardation. Students with multiple disabilities show some improvement in grades over time, but that improvement was not shared by students with mental retardation. In contrast, students with mental retardation show an increase in their overall absenteeism that did not accrue to students with multiple disabilities.

Students with other health impairments stand out in sharp contrast to the students described above and, indeed, to students in most other categories. Students with disabilities as a whole show 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 those living in poverty. These changes may be related to a substantial shift from attending schools in rural areas to attending schools in suburban communities. In contrast, students with other health impairments show just the opposite pattern of change. 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 the schools of their cohort 1 counterparts. They also show the largest suburbanization of their schools, but they are the only ones to have that increased suburbanization come from a decline in urban school attendance as well as rural school attendance.

Changes in the schools attended by students with other health impairments and the communities surrounding them are consistent with changes in the characteristics of those students themselves; they, along with students with speech impairments, are the only disability group to have an increased probability of being white, and they show the largest decrease in the probability that students in that category were living in poverty (Wagner, Cameto, et al., 2003). These changes among students with other health impairments may have resulted to a substantial degree because of changes in the nature of the disabilities included in that category. Although autism has become a separate disability category for special education purposes, at the time of NLTS, students with autism generally were included among those with other health impairments and, therefore, are included in that category for purposes of the comparisons documented in this report. A dramatic increase in the incidence and/or diagnosis of autism changed the demographic composition of students who, in the analyses reported here, are included in the other health impairment category; autism is more likely to occur among males and those from higher-income households (Wagner, Marder, & Cardoso, 2003). Similar changes in the demographics of this category resulted from a marked increase in identifying students with attention deficit/hyperactivity disorder (ADHD), which also is more likely to occur among males and students from higher-income households (Wagner, Marder, & Cardoso, 2003). Students who receive special education and whose primary disability is ADHD generally are included in the other health impairment category.

The change in the disability composition of the other health impairment category may help explain the changes in these students' social adjustment at school. They show the largest increase in school suspensions and the only increase in the average number of days suspended. Multivariate analyses of the social adjustment of youth represented in NLTS2 show that having ADHD is associated with a much higher likelihood of being subject to disciplinary actions at school, independent of other differences between youth in their disabilities, functioning, demographics, and schools programs (Marder, Wagner, et al., 2003).

Economic and cultural variations in changes over time. Students with disabilities who differ in their household incomes and in their racial/ethnic backgrounds also differ in the ways and degrees to which they show changes in schools, school programs, and school participation. For example, cohort 2 white students and those in the highest income group show the greatest changes in factors that may contribute to better odds of participating in postsecondary education. White students with disabilities show the most widespread increases in academic course taking, and upper-income students register 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, these groups are the only ones to show a significant decline in vocational course taking. The largest improvement in grades also occurred among white and upper-income students with disabilities. Increases in participation in general education classes also occurred most noticeably among white and upper-income students with disabilities; they are the only groups to show significant declines in attendance at special schools and increases in attendance at regular secondary schools, and they also show the largest decreases in participation in special education courses. Moreover, increases in community resources are most pronounced among students in these two groups.

In contrast, students of color with disabilities show many fewer changes in their school experiences. For example, Hispanic students with disabilities are the only group not to show an improvement in their grades. However, neither do they show an increase in absenteeism or suspensions, which is evident among white and African-American students with disabilities. And despite having much greater suburbanization of the communities in which they were attending school, African-American and Hispanic students with disabilities, as well as those from the lowest-income households, show very few increases in resources in those communities.

Looking Forward

This report has examined the progress that has been achieved in several aspects of the schools, school programs, and school participation of secondary school students with disabilities and potential challenges that remain. These findings raise the question of how the postschool outcomes of students with disabilities might be affected by the evolving nature of their secondary school experiences. Comparisons of findings from the subsequent waves of data collection of NLTS2 with wave 2 of NLTS will address this question by using transcript data to examine the course-taking patterns of students with disabilities over their full high school careers and their achievements in the early years after high school.