7. THE CHANGING EXPERIENCES OF OUT-OF-SCHOOL YOUTH WITH DISABILITIES

By Mary Wagner

This report has documented changes between 1987 and 2003 in several important outcomes of youth with disabilities who had been out of high school up to 2 years, as measured in NLTS and NLTS2. But the stage was set for interpreting these findings in two earlier reports (Wagner Cameto, et al., 2003; Wagner, Newman, et al., 2004), which examined change over time in the characteristics and school experiences of youth with disabilities while they still were in secondary school. They offered clues regarding the differences that might be expected between the early postschool outcomes of youth with disabilities in the mid-1980s and their peers more than a decade and a half later.

Students' school programs changed in important ways during this time period (Wagner, Newman, et al., 2004). Evidence consistently points to students with disabilities having greater rates of participation in regular schools and general education classrooms, with greater support for both teachers and students to help them succeed. Further, students with disabilities were taking more challenging academic courses in classrooms where instruction was offered at grade level. Their own grades also improved, suggesting they were better able to meet the academic expectations of their teachers. Consistent with this, cohort 2 students with disabilities were much more likely than youth in cohort 1 to be at the appropriate grade level for their age, indicating they were better able to keep up with their peers, even as their school programs became more like those of the general education population.

These patterns of change in secondary school programs suggest that students with disabilities were being better prepared to pursue postsecondary education. In fact, their parents increasingly expected this outcome, at least with regard to enrollment in 2-year colleges (Wagner, Cameto, et al., 2003). Higher parental expectations for their children's pursuit of at least a 2-year college education may reflect the fact that the parents themselves were better educated in 2003 than were their peers in the 1980s. They also were more likely to be employed and less likely to be in poverty, suggesting they may have been more financially able to help their adolescent children with disabilities pursue the postsecondary education they expected.

Parents also were more likely to expect that their children with disabilities would achieve paid employment after high school (Wagner, Cameto, et al., 2003). And overall, the work histories of youth with disabilities in high school supported this optimism. Secondary school students with disabilities in cohort 2 were more likely than earlier peers to have worked for pay outside the home in the preceding year and to have participated in a work-study program at school, both experiences that could increase their chances for employment in their postschool years.

Other changes in the lives of students with disabilities outside the classroom also could help shape different experiences later on. While in secondary school, cohort 2 students with disabilities were more likely than cohort 1 peers to have participated in a community group, such as a sports team or church or temple youth group. Students' participation in volunteer service groups also increased over time. Unfortunately, these increases in prosocial activities were offset for some youth with disabilities by higher absenteeism from school, which might suggest a

weakening of the bonds students with disabilities had with their schools (Wagner, Newman, et al., 2004). Behaviors that resulted in youth with disabilities being subject to disciplinary actions at school, fired from a job, or arrested also were markedly higher among secondary school students with disabilities in cohort 2 than in cohort 1.

This chapter addresses the extent to which the changes over time in the early postschool experiences of youth with disabilities were consistent with the patterns of change documented in earlier reports. Those reports concluded that there was much "good news" in the changes documented for in-school youth, although several causes for concern also were apparent. The same mixed picture is apparent when early postschool experiences are the focus of attention.

Improvements in Outcomes over Time

An increase in students with disabilities being at the appropriate grade level for their age and improvement in their grades may have contributed to the significant increase in the proportion of students with disabilities who completed high school; 70% of cohort 2 youth had done so. This improvement in the school completion rate, accompanied by changes in the rigor and inclusiveness of students' school programs, in parents' expectations, and in parents' own circumstances, may have worked alone or in combination to increase the odds of youth with disabilities pursuing postsecondary education. In fact, by 2003, there were significant increases in their postsecondary education participation overall and in their enrollment in both 2- and 4-year colleges. Overall, 32% of cohort 2 youth with disabilities had been enrolled in some kind of postsecondary education since high school, including 21% of out-of-school youth who had attended a 2-year college and 10% who had attended a 4-year college. The 17-percentage-point increase in 2-year college enrollment was particularly large, consistent with the notable increase in parents' expectations that their children with disabilities would pursue that path after high school.

Parents' increased expectations that their adolescent children with disabilities would find paid employment after high school also were realized in the higher proportion of cohort 2 youth who had worked since leaving high school (70%), relative to their cohort 1 peers (55%). With both postsecondary education and employment rates increasing independently, it is not surprising that more cohort 2 than cohort 1 youth were pursuing both modes of engagement simultaneously. Consistent with their dual roles as students and workers, an increase in the proportion of postsecondary students going to school full-time was accompanied by a reduction in the proportion of youth who were working full-time. Moreover, despite the demands of school and/or work, the 11-percentage-point increase in secondary school students with disabilities participating in organized community groups grew to a 17-percentage-point increase in this activity among those who had been out of high school up to 2 years. More than one-fourth of cohort 2 youth with disabilities belonged to one or more organized groups. Thus in 2003, youth with disabilities clearly were participating in their communities in multiple ways to a markedly greater extent than was true in the mid-1980s.

Behaviors Resulting in Negative Consequences

Despite the positive changes noted above, other changes were disconcerting. Perhaps most troubling of the findings documented in this report is the sizable increase in the proportion of youth with disabilities who had exhibited behavior at some point that led to their being subject to

disciplinary action at school, fired from a job, or arrested. Whereas 34% of cohort 1 youth had experienced these negative consequences by the time they had been out of high school up to 2 years, 56% of cohort 2 youth had been in trouble in one or more of these ways. An increase over time also was noted in earlier analyses of secondary school students with disabilities, albeit a much smaller, 6-percentage-point change (Wagner, Cameto, et al., 2003).

No Real Wage Gains

Although there was a considerable increase over time in the percentage of out-of-school youth with disabilities who were earning more than the federal minimum wage—more than 8 in 10 youth had such earnings in cohort 2—there was no real change in earnings over time when wages were adjusted for inflation. On average, cohort 1 youth earned \$7.80 per hour in 2003 dollars, and their cohort 2 peers earned \$7.30. At this average wage, the 40% of cohort 2 youth with disabilities who were working full-time would have earned an average of \$14,600 per year;¹ the majority who were working part-time would have averaged \$9,125 for 25 hours of work per week—less than the federal poverty threshold of \$9,573 for a single-person household (U.S. Census Bureau, 2004). With these earnings, it is not surprising that there was no increase over time in the percentage of youth with disabilities who were living independently; about three-fourths of youth with disabilities in both cohorts still lived with a parent or parents.

The increase in postsecondary education enrollment among youth with disabilities holds promise for an improvement in the long-term earnings potential of more youth in 2003 than had been the case in 1987. Still, fewer than one-third of cohort 2 youth with disabilities had enrolled in any kind of postsecondary school since leaving high school, and only 10% had gone to a 4-year institution. These rates are fractions of the participation rates for youth in the general population. Further, most postsecondary school students in the general population went to 4-year colleges, whereas 2-year college enrollment was most common postsecondary participation among youth with disabilities. Thus, an earnings gap between youth with disabilities and youth in the general population is likely and could well widen over time as a higher rate of educational attainment among youth in the general population boosts their lifetime earnings relative to youth with disabilities (Day & Newburger, 2002).

Differential Changes in Outcomes across Disability Categories

Each chapter in this report noted differences across disability categories in the ways youth experienced changes over time in their early postschool outcomes. Because youth with learning disabilities are the largest category, their experiences most closely mirror those of youth with disabilities as a whole. However, youth in some other categories differ from the general pattern of change on key outcomes.

Youth with Hearing or Visual Impairments

Youth with these sensory impairments tended to succeed while in school and to follow that trajectory of academic success into postsecondary education. They shared in the increase in academic course-taking that was apparent for youth with disabilities overall, thereby preparing for postsecondary education, and they performed well in their classes, with grades increasing

¹ This calculation assumes youth work 40 hours per week, 50 weeks per year.

over time and being among the highest of any disability category (Wagner, Newman, et al., 2004). With this background, it is not surprising that 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, and both groups surpassed all others in the size of increase in participation in both 2-year and 4-year colleges, giving them the highest rate of enrollment in those institutions of any category of youth.

However, youth with hearing or visual impairments did not focus on postsecondary education alone in their postschool years. Youth with visual impairments had the largest increase in the likelihood of paid employment since high school, as well as the highest rate of receiving accommodations on the job (Cameto, 2005); they joined cohort 2 youth with hearing impairments in having a 62% rate of employment since high school. Further, youth with both sensory impairments experienced large increases in engagement in their communities via the dual roles of employee and college student; more than one-third of youth in each category had experienced both work and postsecondary education since leaving high school. Social involvement in their communities also was high and positive for most youth with sensory impairments. They had among the highest rates of participation in organized group activities while in school, and that pattern continued into their postschool years. In addition, out-of-school youth with hearing or visual impairments experienced the only significant increases of any disability category in their participation in volunteer or community service activities; about half of cohort 2 youth in each category had done so since leaving high school.

Youth with Emotional Disturbances

Youth in this category demonstrated a complex pattern of changes over time relative to many other categories. Academically, when they were in secondary school, students with emotional disturbances shared in the improvements over time in grades and in being at the appropriate grade level for their age that occurred among students with disabilities as a whole (Wagner, Cameto, et al., 2003; Wagner, Newman, et al., 2004). This translated into a substantial improvement in their school completion rate and in the percentage who had been out of school at least 1 year, suggesting they were more likely to have graduated with their same-age peers than had been true in cohort 1. However, their school completion rate remained among the lowest of any disability category in cohort 2—56%. And, unlike for youth with disabilities as a whole, an improved school completion rate among youth with emotional disturbances did not translate into a higher rate of postsecondary education participation overall or of enrollment in 4-year colleges; however, an increase in 2-year college enrollment was seen for this group. Nonetheless, with their high dropout rates, youth with emotional disturbances joined youth with mental retardation in being the least likely in both cohorts to have enrolled in any postsecondary school since leaving high school.

Additionally, youth with emotional disturbances did not share in the increase in employment that occurred for youth with disabilities as a whole, although working youth in that category were the only group to show an increase in earnings relative to the federal minimum wage. However, as noted above, low postsecondary education participation by youth with emotional disturbances is likely to be associated with depressed earnings over the long term relative not only to youth in the general population but also to youth with disabilities in other categories who more actively pursue postsecondary education.

Finally, the emotional and behavioral issues that were problematic for youth with emotional disturbances in secondary school continued into their early postschool years. Secondary school students with emotional disturbances in cohort 2 showed significant increases over cohort 1 in the likelihood that they had been suspended from school (Wagner, Newman, et al., 2004), and they had the highest absenteeism rate and among the lowest rates of participation in organized school groups of any disability group in both cohorts, possibly suggesting weak bonds with school. Moreover, in the postschool years, youth with emotional disturbances had a dramatic increase over time in the likelihood that they had ever 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 negative consequences of behavior 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 disability categories.

Youth with Other Health Impairments

The category of other health impairment has grown tremendously in the years since NLTS. Federal child count statistics (U.S. Department of Education, 2002) indicated that whereas secondary school students with disabilities ages 15 through 17 increased by 59% between 1987 and 2001, the category of other health impairment increased by 630% (Wagner, Cameto, et al., 2003). The kinds of disabilities represented in the category also changed dramatically. For example, in 1987, the category included many youth with autism, who now are classified separately for special education purposes.² In cohort 2, the largest single disability represented in the category of other health impairment, according to parents, was attention deficit or attention deficit/hyperactivity disorder (ADD/ADHD) (Marder, Levine, & Wagner, 2003).

In addition to these disability-related changes, a number of changes were experienced by youth with other health impairments both during and after secondary school. Along with students with mental retardation, those with other health impairments were the only category of students not to experience an improvement in grades, and students with other health impairments experienced the largest increase in the percentage who had been suspended in the current school year (Wagner, Newman, et al., 2004). Outside of school, however, secondary school students with other health impairments showed important increases in participation in community groups and in volunteer or community service activities and in employment (Wagner, Cameto, et al., 2003); whereas cohort 1 youth in this category lagged behind youth with disabilities overall in these forms of participation in the community, in cohort 2, they were on par with others.

Consistent with their lack of improvement in grades during secondary school, youth with other health impairments did not share in the improved school completion rate that was evident for youth with disabilities overall; more than 40% of youth in this category dropped out of high school. Nor did they share in the increased participation in postsecondary education. Further, in the employment domain, cohort 2 youth with other health impairments lagged significantly

² Although the federal child count now categorizes youth with autism separately, cohort 2 youth with autism have been included in the category of other health impairment in analyses in this report to be comparable with the category as defined in 1987.

behind youth with disabilities overall in the percentage who had worked since leaving high school (about half had done so, compared with 7 in 10 youth with disabilities overall), having experienced no improvement in the employment rate since cohort 1. Given their lower rate of employment, youth with other health impairments also were less likely than youth with disabilities overall to have been engaged in school, work, or preparation for work since leaving high school. Consistent with their large increase in having been suspended while in secondary 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 serious social and educational implications of the significant disabilities within the category of multiple disabilities, including deaf-blindness. However, there has been some improvement over time, including increased participation in their schools and communities. While in school, for example, they were significantly more likely to be taking at least one course in a general education classroom, although only in the case of language arts was there an increase in taking an academic class in that setting; the largest increases in general education course-taking involved physical education or fine arts (Wagner, Newman, et al., 2004). Large increases also were noted regarding participation in community groups, volunteer or community service activities, and school-sponsored work-study programs among secondary school students with multiple disabilities or deaf-blindness (Wagner, Cameto, et al., 2003).

Although their grades improved while in secondary school, out-of-school youth with multiple disabilities or deaf-blindness remained among the least likely to have finished high school; about half had done so, compared with 70% of youth with disabilities over all. Nonetheless, in cohort 2, they were as likely as youth with disabilities as a whole to have been enrolled in a postsecondary school since leaving high school, although a postsecondary vocational, technical, or business school dominated their choices of postsecondary institutions to a degree not evident for youth in other categories. In contrast, in the employment domain, youth with multiple disabilities did not show an increase in the likelihood of having worked for pay since leaving high school, remaining the category of youth least likely to have done so. However, they were not the least likely to have been engaged in school, work, or preparation for work since leaving high school; youth with mental retardation and orthopedic or other health impairments joined them in having a rate of participation in these activities that was below 60%.

Emerging Changes in Postschool Outcomes Associated with Gender

Comparisons of youth with disabilities represented in NLTS and NLTS2 both while they were in secondary school and in the first few years after high school indicate that the similarities and differences between boys and girls with disabilities that were apparent in 1987 shifted in some ways over time. Some of these shifts resulted in a narrowing of the gap between genders that existed in cohort 1. For example, there were marked differences related to gender in cohort 1 in parents' expectations that their children with disabilities would find paid employment in the future and in the actual employment experiences of their children, favoring sons. By

cohort 2, both parents' expectations and youth's employment experiences while in secondary school no longer differed; girls were as likely as boys to be expected to participate in the workforce and were doing so while still in secondary school (Wagner, Cameto, et al., 2003).

The pattern of change over time seen in the employment of boys and girls with disabilities while they were in secondary school was mirrored in their early postschool years. Whereas cohort 1 boys who had been out of school up to 2 years were almost twice as likely as girls to have worked for pay since leaving high school, their employment rates were very similar in cohort 2. A similar convergence over time in the experiences of boys and girls with disabilities is seen in the virtual elimination by cohort 2 of the 19-percentage-point difference between cohort 1 boys and girls in their engagement in school, work, or preparation for work since high school. 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 in cohort 1 had been reduced and was no longer significant in cohort 2.

However, not all changes experienced by boys and girls with disabilities over time resulted in a narrowing of differences between them. Both during high school and in their early postschool years, girls remained less likely than boys to be single. Some other changes that were experienced by one gender more markedly than the other did not reach statistical significance but may be part of a trend that could have future implications. For example, only boys experienced a significant improvement in their high school completion rate; in cohort 1, they lagged behind girls by 4 percentage points, whereas in cohort 2, they were 6 percentage points ahead. Similarly and relatedly, boys showed a significant increase in attending a 4-year college that was not demonstrated by girls, such that at cohort 2 they were almost twice as likely as girls to have attended such a school. Although for neither cohort were differences between genders in school completion or 4-year college enrollment statistically significant, the long-term benefits associated with positive changes in these outcomes may be more likely to accrue to boys with disabilities than to girls.

Challenging Consequences of Dropping Out

As noted previously in this chapter, a marked decline in the dropout rate among out-ofschool youth with disabilities is part of the good news story in their collective experiences over time. Nonetheless, differences between youth with disabilities who did and did not complete high school underscore the challenges dropouts face. Not only did they leave school without benefit of a complete education and a high school diploma, 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. Both cohort 1 and cohort 2 dropouts also were more likely than their peers who completed high school to have been in trouble at school and/or in the community.

In addition to differences between dropouts and completers that persisted across cohorts, differences in the pattern of changes experienced by the two groups over time suggest that the 30% of cohort 2 youth who dropped out may face a number of significant challenges in the future. Most obvious is the fact that 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. The fact that only about one-fourth of dropouts had enrolled in a high school completion program suggests that postsecondary education options may remain limited for dropouts with disabilities.

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 between the two groups in this important outcome. Differences in the participation of cohort 1 dropouts and completers in organized community groups or volunteer or community service activities also moderated over time, indicating that more dropouts were experiencing the benefits of these forms of community participation. Dropouts also experienced a smaller increase than school completers in the likelihood of experiencing negative consequences for their behavior. Yet despite an improved employment rate, earnings increases relative to the federal minimum wage were not shared by dropouts. Further, the discrepancy in education between dropouts and completers is likely to widen, creating a discrepancy in future earnings as well. And notwithstanding a smaller increase in negative consequences for their behavior, dropouts in both cohorts were more likely than school completers to have those experiences.

Continued Limitations for Lower-Income Households

The changes that occurred over time for youth with disabilities, both while they were in secondary school and in their early postschool years, were experienced differently by youth in the bottom, middle, and upper thirds of the household income distribution, with youth from households in the lowest income group demonstrating a pattern of changes that raises concerns about their future.

Youth with disabilities from households in the lowest income group showed the only significant increase in taking academic courses in general education settings, including general education mathematics, science, and social studies (Wagner, Newman, et al., 2004). This may have contributed to the large increase, shared with youth from households in the middle income group, in their rate of high school completion. However, despite these increases, youth from households in the lowest income group in both cohorts lagged behind those from the highest income group in the likelihood of completing high school. Youth from households in the lowest income group also did not share with youth from the other two groups a significant improvement in postsecondary education participation.

In the employment domain, secondary school students from households in the lowest income group did not share the increase in having worked for pay in the previous year or increased earnings relative to the minimum wage, and they were the only group to show a significant decrease in current employment. In the early years after high school, the employment picture of youth from households in the lowest income group continued to be worrisome. They did not share with their highest-income peers in an increase in the likelihood of being employed 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 hourly wage for the lowest-income group resulted in comparable wages across income groups.

Decreasing but Persistent Racial/Ethnic Differences

The patterns of changes revealed in comparisons of youth represented in NLTS and NLTS2 have shown that African-American and Hispanic youth with disabilities increasingly had experiences that were similar to those of their white peers in multiple domains. For example, whereas among cohort 1 out-of-school youth with disabilities, only 2% of Hispanic youth had participated in their communities through membership in organized groups or volunteer or community service activities, large increases resulted in levels of participation being quite similar across racial/ethnic groups in cohort 2. Similarly, cohort 1 African-American youth with disabilities lagged significantly behind white youth in the likelihood that they had worked for pay in the first few years after high school, a gap that no longer existed in cohort 2.

Yet, despite these instances of increasingly similar experiences across groups, some racial/ethnic differences remained. For example, changes over time left white youth exceeding their African-American peers in the likelihood that they were living independently in the early years after high school. Further, some changes over time suggest that some gaps may be forming between racial/ethnic groups if trends continue. For example, only white youth with disabilities experienced a significant increase in postsecondary education enrollment and in the pursuit of both employment and postsecondary education since leaving high school, and only they showed an hourly wage increase relative to the federal minimum wage. Although these changes did not create significant differences between cohort 2 white and African-American or Hispanic youth with disabilities, if this pattern of changes continues, such differences may emerge in the future.

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.