

## 2. FACTORS EXPECTED TO RELATE TO ACHIEVEMENTS OF YOUTH WITH DISABILITIES

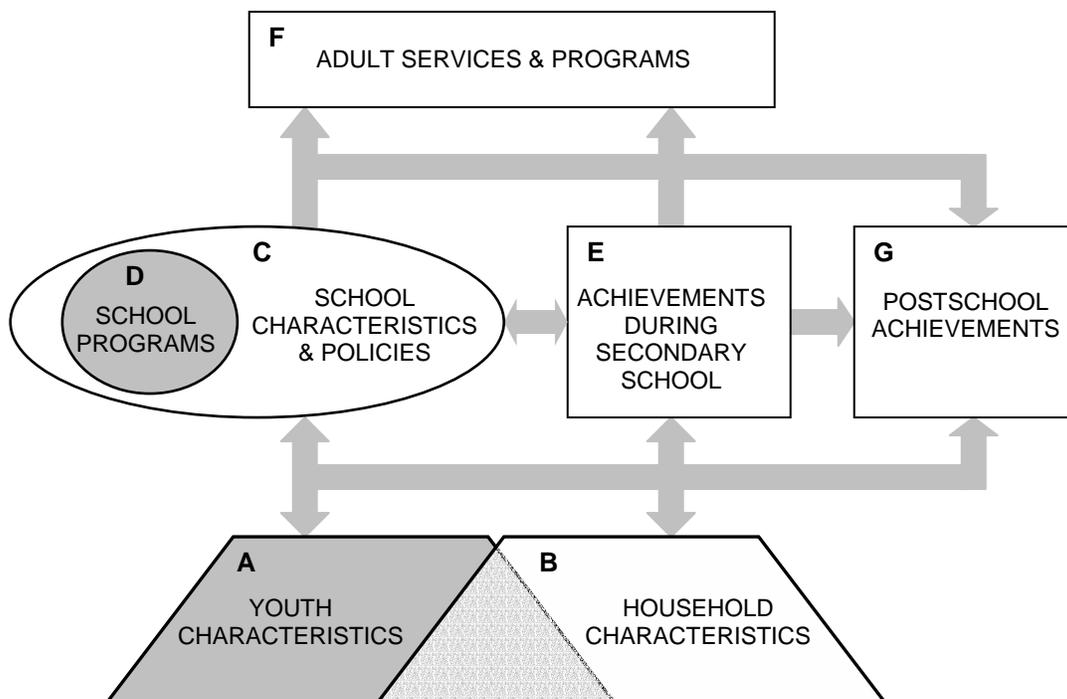
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The achievements of youth with disabilities during secondary school are the result of a complex interplay of many factors over time. Some are intrinsic to youth themselves; some are characteristics of their family environment; and some involve experiences in and outside of school. The importance of a particular factor and the ways such factors intertwine may differ for achievements in different domains. This chapter presents the factors that are expected to relate to achievements of youth with disabilities in one or more of the outcome domains outlined in Chapter 1.

### The NLTS2 Conceptual Framework

A conceptual framework is an organizational tool for specifying the primary elements involved in a particular phenomenon and the relationships among them. In the case of NLTS2, the conceptual framework identifies the elements related to the achievements of youth with disabilities during secondary school and in the early postschool years (Exhibit 2-1), as suggested by professional practice and previous research.

Exhibit 2-1  
NLTS2 CONCEPTUAL FRAMEWORK



The focus of this report—achievements of youth with disabilities during secondary school—is depicted as component E of the framework. Fundamental to understanding variations in achievements are the characteristics of youth themselves (component A), including those related to their disability, functioning, and demographics. Component B recognizes the importance of the household and family environment in helping shape the achievements of youth both in and outside of school. The specific programs of instruction and services provided individual youth with disabilities (component D) also are crucial to understanding variations in youth’s achievements.<sup>1</sup> The factors within these components and the expected relationships to outcomes that led to their inclusion in the analyses are described below.

## Individual Youth Characteristics

The outcomes identified in Chapter 1 occur through dynamic processes in which youth with disabilities are active participants. For example, the learning that promotes academic achievement occurs as teachers and students interact with each other and with instructional content and activities. Holding a job involves youth’s contributing their skills and labor to tasks defined by employers and often engaged in jointly with other employees. What youth bring to these processes are important elements in their success. Three major types of individual characteristics are hypothesized in NLTS2 to relate to the achievements of youth with disabilities in multiple domains: disability characteristics, functioning, and demographics.

### Disability Characteristics

In considering the variations in the achievements of youth in their secondary school years, it is important to understand the impact of disability, as related to:

- **Disability category.** The nature of a particular youth’s disability can powerfully condition his or her experiences, which may, in fact, be more like the experiences of youth who have no labeled disability than they are like the experiences of youth with a different kind of disability. Dichotomous variables are included in analyses that distinguish youth according to the federally defined special education disability categories in use for secondary-school-age students (please see Appendix A, Exhibit A-7).<sup>2</sup>

The assignment of youth to a disability category is based on the primary disability designated by the youth’s school or district in the 2000-01 school year. Although there are federal guidelines regarding making disability category assignments, criteria and methods for assigning students to categories vary widely. Therefore, NLTS2 category designations should be interpreted as describing those reported to have a particular disability, rather than those who have that disability.

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<sup>1</sup> NLTS2 analyses also investigated the independent relationships between school context factors (component C) and youth outcomes. Please see Appendix B for a discussion of this analysis and its results.

<sup>2</sup> For analysis purposes, the deaf-blind category was combined with the multiple disability category. In multivariate analyses, dichotomous variables such as these statistically contrast the effects of being in a category that is included in the analyses with being in a comparison category. Learning disability is the comparison category in NLTS2 multivariate analyses because it is the largest category and, therefore, most closely represents the experiences of students with disabilities as a whole.

Almost two-thirds of students receiving special education in the NLTS2 age group are classified as having a learning disability (62%). Youth with mental retardation and emotional disturbances make up 12% and 11% of students, respectively. Another 5% of youth are classified as having other health impairments, and 4% are identified as having speech impairments. The seven remaining disability categories each account for 1% or fewer of students and, together, make up about 5% of youth with disabilities. The nature of a youth's disability is hypothesized to account for much of the variation in achievements, with youth in such categories as learning disability and speech impairment generally experiencing more positive outcomes than, for example, youth in categories such as multiple disabilities or mental retardation.

- **Attention deficit disorder/attention deficit hyperactivity disorder (ADD/ADHD).** Although ADD/ADHD is not a separately designated disability category under IDEA '97, the behaviors that often characterize the disorder—distractability, poor impulse control, excess energy—can have a negative impact on the ability of youth to succeed academically and socially (Forehand, Wierson, Frame, Kempton, & Armistead, 1991; Reeve, 1994; Zentall, 1993). Thus, having ADD/ADHD is expected to exert its own influence on achievements of youth with disabilities, independent of the effects of being in a specific primary disability category. According to parents' reports, 36% of youth with disabilities receiving special education services in secondary school have been diagnosed with ADD/ADHD, including 76% of those in the other health impairment category, the category in which youth with ADD/ADHD as a primary disability generally are included. However, ADD/ADHD also is a secondary disability for many youth in other disability categories, including 63% of those with emotional disturbances and 32% of those with learning disabilities (Wagner, Marder, & Cardoso, 2003).
- **Age at identification of disability.** Early identification of a disability indicates that it affects functioning early in the developmental process, whereas later identification suggests that some degree of development occurred without the potentially limiting effects of disability. Thus, on average, youth whose disabilities were identified at an earlier age are expected to have greater challenges to achievement. Parents reported the age at which youth first exhibited a physical, learning, or other disability or problem for which they eventually were diagnosed. Although the average age is 5.7 years, approximately one in five youth have disabilities that first were diagnosed when they were infants or toddlers, and another 11% have disabilities or delays that were identified in their preschool years. School entry, at age 5 or 6, was when almost one-third of youth first had their disabilities identified, whereas 19% did not have their disabilities identified until they were at least 9 years old (Wagner, Marder, et al., 2003).
- **Number of domains influenced by disability.** The number of functional domains affected by disability indicates the breadth of the potential impact of disability on the outcomes youth may achieve. To assess the breadth of the functional impacts of youth's disabilities, parents were asked to report whether youth experience limitations in six areas: general health; vision; use of arms, hands, legs, and feet; speech production; understanding of speech; and participation in bidirectional communication. Parents of youth with disabilities report that half have problems in at least one area, whereas 8% have problems in four or more of these areas (Wagner, Blackorby, Marder, & Levine, 2003).

## Functioning

NLTS2 findings demonstrate the considerable variation in skills across several dimensions among youth who share a primary disability category designation (Cameto et al., 2003; Wagner, Blackorby, et al., 2003). Prior research for NLTS also showed that differences in functional abilities strongly relate to youth outcomes across multiple domains (D’Amico, 1991; Newman, 1991; Wagner, 1991a). Hence, NLTS2 analyses include variables that distinguish the level of functioning of youth with disabilities in the areas noted below. Although each of these measures is an indicator within an outcome domain, as described in Chapter 1, they have not been chosen for multivariate analyses. Instead, they are used as independent variables in explaining variation in other outcomes across domains.<sup>3</sup>

- **Self-care skills.** Higher self-care abilities are expected to relate to higher achievement in outcome domains for which physical functioning is particularly important (e.g., independence), but to have little relationship to achievements in other domains (e.g., academic engagement or performance).
- **Functional cognitive skills.** As an indicator of the ability to process information that is important to daily functioning, higher functional cognitive skills are expected to relate strongly to better outcomes across the outcome domains.
- **Social skills.** The ability to interact effectively with others is crucial to success at school, at home, and in the community. Hence, higher social skills are expected to relate to higher achievement across the outcome domains, with particular relevance to social adjustment.
- **Self-determination skills.** The ability to persist with tasks to completion is expected to be positively associated with other aspects of independence, as well as with higher levels of school engagement and academic achievement.
- **Students’ general health.** Students who are in poor health may find it difficult to attend school. For example, the Centers for Disease Control and Prevention (2003) estimate that from 1994 to 1996, 14 million school days were missed because of asthma—the most common long-term childhood disease, which affects 6.3 million children. For this reason, parents’ reports of the general health of youth with disabilities are included in the analysis of absenteeism. Parents report that youth with disabilities are about as healthy as youth in the general population, with 70% reported to be in excellent or very good health and 8% in fair or poor health (Wagner, Blackorby, et al., 2003).

## Demographic Characteristics

The factors noted above suggest that the nature of a youth’s disability can be a powerful influence on his or her experiences. However, especially during adolescence, other fundamental characteristics also help shape achievements. At this time of life, a single year of age can make a major difference in both competence and independence. Gender is a defining human characteristic at any age, and during adolescence, when youth are exploring their sexuality and gender roles, it can shape their experiences and choices in powerful ways. Race/ethnicity and language background can be associated with rich cultural traditions, patterns of relationships

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<sup>3</sup> Values for the skills scales are reported in the chapters dealing with the outcome domains to which they pertain.

within families and communities, and strong group identification. All of these factors can generate important differences in values, perspectives, expectations, and practices.

- **Age.** Youth with disabilities in NLTS2 were ages 13 through 17 when interview data were collected from parents and ages 14 through 18 when survey data were collected from their schools. Because this is a fairly narrow age range, the differences in some outcomes for youth who are at the lower and upper ends of the range were expected to be small. However, the independence domain is an exception, with older youth expected to acquire more experience in such aspects of independence as employment (D'Amico, 1991) and household responsibilities. Because the age distribution of youth differs across disability categories (e.g., youth with speech impairments tend to be younger, on average, than other groups) (Marder, Levine, & Wagner, 2003), multivariate analyses are required to disentangle the effects of age from those of disability.
- **Gender.** In the general population, differences in the achievements of young men and of young women both in school and in the workplace are notable (National Center for Education Statistics, 2002). Important differences have been noted for youth with disabilities regarding aspects of academics (Wagner, 1992), independence (D'Amico, 1991), and social adjustment (Newman, 1991; Wagner, Cadwallader, & Marder, 2003). Whereas youth in the general population are split about evenly between boys and girls, almost two-thirds of youth with disabilities in the NLTS2 age range are boys. Further, it also is clear that gender is intertwined with the nature of youth's disabilities, with males accounting for a much higher proportion of some disability categories (e.g., autism, emotional disturbances) than others (e.g., hearing or visual impairments) (Marder, Levine, & Wagner, 2003). Including both gender and disability in multivariate analyses will enable their independent relationships to outcomes to be identified.
- **Racial/ethnic background.** Research has documented the relative disadvantage minority youth experience in education and employment domains (National Center for Education Statistics, 2002), as has prior research on youth with disabilities (D'Amico, 1991; Wagner, 1991a, 1991b). A similar pattern was expected to emerge in the analyses reported in subsequent chapters. Overall, 62% of youth with disabilities are white, 21% are African American, 14% are Hispanic, and 3% have other or multiple racial/ethnic backgrounds. However, this distribution varies across disability categories, with the categories of mental retardation, emotional disturbance, and autism having particularly large percentages of African Americans and particularly small percentages of Hispanic students (Marder, Levine, & Wagner, 2003). Again, multivariate analyses permit the relationships of these factors to outcomes for youth with disabilities to be assessed independently.

## Household Characteristics

Although the variables described above were expected to do much to help illuminate important differences in the experiences of youth with disabilities, focusing on these variables alone would mistakenly imply that youth outcomes are determined solely by somewhat immutable characteristics that young people bring with them to school, and would ignore the important role of household and family context in shaping the experiences of youth. The

following characteristics of the households of youth with disabilities were expected to relate to their achievements in the ways noted below.

- **Household income.** Poverty has been shown to have serious negative consequences for children and youth as a whole (Duncan & Brooks-Gunn, 1997) and for the achievements of youth with disabilities in secondary school (Newman, 1991; Wagner, 1991a) and beyond (Wagner, Blackorby, Cameto, & Newman, 1993). A similar pattern was expected for NLTS2 analyses. One-fourth of youth with disabilities live in poverty, a higher rate than in the general population (Marder, Levine, Wagner, & Cardoso, 2003). However, the incomes of families of youth with disabilities range widely, with 19% living in households with annual incomes of \$15,000 or less and 13% living in households with incomes of more than \$75,000. Because poverty is often characteristic of the households of children and youth of color, including both household income and the racial/ethnic background of youth with disabilities in analyses will help disentangle their interrelationships.
- **Family support for education.** Parental support for learning is an important contributor to success in school for the general student population (Epstein, 1987, 1996; Henderson & Berla, 1994; Thorkildsen & Stein, 1998). Positive outcomes associated with family involvement in and support for education include better grades (Clark, 1983), more consistent attendance (National Middle School Association, 2000) and homework completion (Epstein, Simon, & Salinas, 1997), and more positive behavior (Epstein, 1987). Similar associations were expected for youth with disabilities. Two scales have been constructed to test this expectation. One scale, which assesses family involvement in education at home, is the frequency (on a 4-point scale) with which parents report helping youth with homework and talking with youth, and, a dichotomous variable indicating whether the family provides a computer at home that the student uses for educational purposes; summing responses to these items produces a scale ranging from 0 to 9, with a mean of 6.8. Family involvement at school is assessed with a second scale constructed by summing parents' reports (on a 4-point scale) of the frequency with which they did the following in the 2001-02 school year: "attend a general school meeting, for example back-to-school night or the meeting of a parent-teacher organization"; "attend a school or class event, such as a play, sports event, or science fair"; or "volunteer at school, for example, chaperoning a class field trip or serving on a committee." The scale ranges from 0 to 12, with a mean of 3.3.
- **Family expectations.** Research has demonstrated that having clear, consistent, and high expectations for academic performance plays a key role in student achievement for the general population (Thorkildsen & Stein, 1998). Similar relationships have been found for students with disabilities (Wagner, Blackorby, Cameto, and Newman, 1993) and were expected to emerge in NLTS2 analyses. Parents were asked to report their expectations that their adolescent children with disabilities will "get a regular high school diploma," "attend school after high school," "live away from home on his/her own without supervision," and "get a paid job." Expectations for youth are generally high. Overall, 85% of parents expect youth "definitely" or "probably" to get a regular high school diploma, 62% to attend postsecondary school, 85% to live independently, and 97% to get a paid job.

## School Programs and Experiences

School programs, support services, and other experiences can and do help shape youth's achievements, particularly in the domains of academic engagement and performance. Some aspects of students' school programs were expected to influence their achievements in a variety of domains. For example, spending a greater part of the school day in general education classes exposes students with disabilities both to more challenging content than many special education classes offer and to opportunities to interact with peers without disabilities. These experiences were expected to enhance the academic engagement and performance of students with disabilities, as well as their social integration. In contrast, taking life skills training was expected to increase the independence of youth but not to be related markedly to achievements in other domains. Thus, the specific aspects of students' school programs and services that are included in analyses of particular outcome domains are those that relate most directly to those domains, as discussed below.

### Course Taking

- **Extent of participation in general education classes.** Including students with disabilities in general education classrooms has been shown to benefit both students with disabilities (Baker, Wang, & Walberg, 1994; Waldron, 1997) and general education students (Stainback & Stainback, 1996; Staub & Peck, 1994; Waldron, 1997). Thus, a measure of the level of involvement of students with disabilities is included in analyses of school engagement, academic performance, and social adjustment. School staff reported an overview of the settings in which students with disabilities take 11 kinds of courses, enabling a calculation of the percentage of the types of courses students with disabilities take that are in general education classes, which has a mean of 60%. This aspect of students' school programs is expected to have a somewhat complex relationship to academic performance. For example, exposure to the more challenging content in general education classes, relative to many special education classes, is expected to better enable students with disabilities in general education classes to acquire the skills appropriate to their grade level. On the other hand, the more challenging content and, often, different grading standards in general education classes may be reflected in poorer grade performance relative to peers in special education classrooms. In fact, analyses for NLTS demonstrated that spending a greater proportion of the school day in general education classes relates to higher rates of course failure for youth with disabilities (Wagner, 1991a). Similar differences in the direction of relationship could be evident in the social adjustment domain. Although spending a greater part of the school day with peers without disabilities has been shown to be associated with greater involvement with friends or organized groups (Newman, 1991), different standards for the appropriateness of behavior in general vs. special education classes could result in a higher incidence of disciplinary actions for students with disabilities in general education classes than for those taking more classes in special education settings.
- **Participation in vocational education.** Taking vocational education has been demonstrated to relate to better school engagement (Wagner 1991a) and higher rates of school completion (Wagner, 1991b) for youth with disabilities. Along with participation in work experience programs, vocational education also relates to a higher likelihood of

employment when youth with disabilities leave high school (D'Amico, 1991). Similar relationships were expected for NLTS2. As part of the course-taking overview provided in the NLTS2 student's school program survey, school staff indicated whether each student was taking a prevocational or occupational vocational education program at the time of the survey; 70% of students with disabilities are reported to be taking one or more vocational education courses that semester. In addition, school staff indicated whether the student's school program included school- or community-based work experience activities; 19% of students with disabilities had such experience as part of their school programs.

- **Average class size.** Both the content of courses taken by youth with disabilities and the context within which those courses are taken potentially relate to their outcomes. One important aspect of that context is class size. In the general education arena, many states, as well as the federal government, have launched initiatives to reduce class sizes at various grade levels in the belief that teachers teach and students learn better when classes are smaller, both for students in the general population (Addonizio & Phelps, 2000; Finn, Gerber, Achilles, & Boyd-Zaharias, 2001; McLaughlin & Drori, 2000; Mitchell & Mitchell, 2001) and for students with disabilities (Bulgren et al., 2002). NLTS2 asked school staff to report the number of general and special education students in each student's general education academic, vocational education, and special education class (or any of those classes taken by the student). For students who take classes in both general education and special education settings, the setting in which he or she spends the most time was used to select the class size value to use in analyses. If those items were missing but class size had been reported for a vocational education class, that measure was used. Across settings, class size averages 15.4 students.

### **Services, Accommodations, and Supports**

It is important to understand the relationships between the outcomes of youth with disabilities and the kinds of services, accommodations, and supports they are provided to help improve those outcomes. To that end, a variety of measures of these factors are included in analyses. However, interpreting the relationships that result can be problematic. Although these kinds of supports were expected to benefit students who receive them, receiving them often is conditioned on students' exhibiting difficulty in the relevant outcome domain. Students in academic difficulty receive tutoring assistance; those exhibiting behaviors that are problematic for themselves and others may have behavior management plans. Thus, it is extremely difficult to disentangle the effects of receiving services and supports from the factors that indicate need for them in the first place when both are measured at a single point in time. Longitudinal analyses in subsequent waves of NLTS2 will enable a clearer look at the effects of receiving services, accommodations, and supports at one point in time on later outcomes. Nonetheless, current analyses explore the relationships between relevant outcomes and the following:

- **Tutoring.** Because tutoring has been shown to have beneficial effects on students' academic performance and behavior (DuPaul, Ervin, Hook, & McGoey, 1998; Franklin, Griffin, & Perry, 1995; Longwill & Kleinert, 1993), analyses of students' academic performance include exploration of relationships to students' receiving help from an adult or peer tutor, as indicated by school staff or parents. Although receiving such help would be expected to relate to better academic performance for the students who need it, the

confounding of need with service receipt, mentioned above, makes expectations regarding the direction of the relationship unclear. Overall, one-third of students with disabilities are reported to receive help from a tutor.

- **Receiving social adjustment support services.** The Individuals with Disabilities Education Act Amendments of 1997 (IDEA '97) require teams that plan a student's individualized education program (IEP) to consider, if appropriate, strategies to address behavior that impedes a student's learning or that of others [Sec. 614(d)(3)(B)(i)]. An IEP or behavioral intervention plan could call for a variety of behavioral supports or programs that have been shown to improve behavior (Sprague, 1995; Sprague et al., 2001). In analyses of social adjustment outcomes, relationships with a variety of such supports, services, and programs are explored. These services and programs and the percentage of youth receiving them include: mental health services (20%), social work services (12%), a behavior management plan (13%), an anger management or conflict resolution program (27%), substance abuse education or treatment (39%), and services from a behavioral interventionist (13%). In some analyses, the sum of these services and supports is included; it ranges from 0 to 6, with a mean of 1.1.
- **Receiving instructional accommodations or modifications.** Research has demonstrated the positive impacts of accommodations on the academic performance of students with disabilities, as indicated by test scores for secondary school students with disabilities (Calhoun, Fuchs, & Hamlett, 2000; Camara, Copeland, & Rothschild, 1998; Huynh, Meyer, & Gallant-Taylor, 2002). Thus, an indicator of receipt of such accommodations is included in NLTS2 analyses of academic performance. School staff indicated whether youth received the following: being given more time to take tests, having tests read to the student, taking modified tests, taking alternative assessments, having modified grading standards, receiving slower-paced instruction, being given more time to complete assignments, being given shorter or different assignments, or receiving help with learning strategies or study assistance. A scale of the extensiveness of such support was constructed by summing the number of supports provided each student. The scale ranges from 0 to 9, with a mean of 3.3.
- **Receiving communication or presentation accommodations or modifications.** In addition to instructional and/or testing accommodations, school staff indicated whether youth received each of the following accommodations related to communication or presentation of information: help from a reader or interpreter, use of books on tape, use of a calculator or a computer when other students were not allowed to use one, communication aids (e.g., Touch Talker), and computer hardware or software designed for students with disabilities. A scale of the extensiveness of such support was constructed by summing the number provided each student. The scale ranges from 0 to 7, with a mean of .7.
- **Receiving vocational services.** A variety of support services (e.g., job coaching, technical-preparation programs, job readiness training) can be provided students with disabilities to assist them in achieving vocationally oriented goals, with research suggesting benefits accruing to some students from some kinds of supports (Bang & Lamb, 1997; Bragg, 2002; Farris & Stancliffe, 2001; Flowers, 2000; Lee, Storey, Anderson, Goetz, & Zivolich, 1997). Receipt of each of 12 vocational support services

was reported by respondents to the student's school program survey.<sup>4</sup> The number of such services each student receives was calculated by summing item values, which results in a range from 0 to 12, with a mean of 2.1.

### **Other School Experiences**

In addition to the courses, settings, and services and supports that characterize the school programs of youth with disabilities, other current and past school-related experiences are expected to relate to student outcomes, particularly in the domains of school engagement and academic performance, including the following:

- **Student mobility.** Research has demonstrated relationships between high rates of student mobility and poor school performance and frequent behavioral problems (Demie, 2002; Rumberger, 2002; Simpson & Fowler, 1994; Wood, Halfon, Scarlata, Newacheck, & Nessim, 1993). These negative consequences of student mobility may result, at least in part, from the disruption and lack of continuity in students' learning experiences, which, for students with disabilities, may include compromised service coordination, the potential for poor communication between new and old schools and service systems, and inadequate record sharing (Kerbow, 1996). For these reasons, parents' reports of the number of times students with disabilities have changed schools, other than because they were moving from one grade level to the next, are included in analyses of school engagement, academic performance, and social adjustment.
- **Grades.** Because links have been identified between the academic performance and social behavior of students (Center for Mental Health in Schools, 2000; Fad & Ryser, 1993; Gresham & MacMillan, 1997; Gunter, Denny, & Venn, 2000), a measure of students' grades is included in analyses of social adjustment. Although the measure of grades that is used as a dependent measure (described in Chapter 1) includes only students who receive regular letter grades, the measure used as an independent variable is defined more broadly so that it also includes students who receive such grades as "excellent," "good," "fair," and "poor"; grades in this form were converted to correspond to the same scale as letter grades.<sup>5</sup>
- **Declassification.** Students with disabilities who meet their IEP goals or who otherwise are found no longer to need special education services are declassified from those services and return to the status of other students without disabilities. As an indication that specially designed instruction is no longer required to meet the unique needs of the student, the experience of declassification is expected to relate to more positive academic performance. NLTS2 data indicate that, according to school staff, in a 1-year period, about 4% of secondary-school-age students with disabilities are declassified from special education.<sup>6</sup>

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<sup>4</sup> Please see Appendix A for a list of these supports.

<sup>5</sup> Please see Appendix A for a description of the meshing of grade measures.

<sup>6</sup> Although some students are declassified from special education services each year and thus no longer are considered to have a disability for educational purposes, all youth continue to be referred to in NLTS2 as "youth with disabilities." Regardless of their participation in special education services, all youth selected for NLTS2 continue to be considered part of the study.

- **Absenteeism.** Because absenteeism results in students' missing exposure to curriculum and instruction and may interfere with relationships and behavior within the classroom, the number of days students are absent in a month, excluding suspensions and expulsions, is included in analyses of academic performance, classroom engagement, and social adjustment.
- **Grade retention.** The intention in making low-performing students repeat a grade is to provide an opportunity for them to master material missed in their first exposure to it at a given grade level. Although public policy is shifting against the practice of "social promotion" of underachieving students, research on the effects of grade retention provides little consistent evidence that it benefits students academically (Holmes, 1989); to the contrary, grade retention is linked to higher rates of dropping out of school (Roderick, Nagaoka, Bacon, & Easton, 2000) and poor social adjustment and employment outcomes after high school (Jimerson, 1999). NLTS2 analyses include a measure of parents' reports of whether youth have ever been retained at grade level in analyses of school engagement, academic performance, and social adjustment.

The following chapters report the relationships among the wide array of characteristics of individual youth with disabilities, their households, and their school programs and experiences with outcomes in the school engagement, academic performance, social adjustment, and independence domains.