

### 3. THE SCHOOLS ATTENDED BY SECONDARY SCHOOL STUDENTS WITH DISABILITIES

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Students' experiences at school are shaped in important ways by their own instructional programs and extracurricular involvement and what they bring to them. However, the schools in which those experiences occur also can influence students' learning, engagement, performance, and satisfaction. For example, there is a growing movement in support of smaller high schools (e.g., Coalition of Essential Schools, 2003) because they are believed to provide a context that is more conducive to authentic instruction, positive student-adult and student-student relationships, and effective preparation for postschool success. Similarly, increases in standards for teacher quality embedded in the No Child Left Behind Act of 2001 (NCLB) recognize that adequate staff resources in schools are a key ingredient in improving student achievement. Aspects of the school context can be important for all students, but perhaps particularly for students with disabilities, who may be challenged in their ability to engage in their instructional programs and/or in positive relationships at school. Thus, an awareness of the characteristics of schools attended by students with disabilities is an important element of understanding the school programs they are provided and the outcomes they achieve.<sup>1</sup>

This chapter provides a backdrop for subsequent analyses of students' school programs by describing several key features of the school contexts in which secondary school students<sup>2</sup> with disabilities are educated:

- The types of schools they attend
- School and class size
- Characteristics of the student bodies in those schools
- Resources available in schools
- Policies that affect students with disabilities
- School climate.

These characteristics of schools<sup>3</sup> are described for secondary school students with disabilities as a group and for middle and high school students where they differ.<sup>4</sup>

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<sup>1</sup> The outcomes of secondary school students with disabilities in the domains of school engagement, academic performance, social adjustment, and independence are presented in Wagner, Marder, Blackorby, et al., 2003.

<sup>2</sup> "Secondary school students" refers to those in grades 7 through 12, and "secondary schools" refers to schools that serve those grade levels.

<sup>3</sup> This chapter reports the characteristics of schools attended by a nationally representative sample of students with disabilities; those schools do not constitute a nationally representative sample of schools. Percentages reported are percentages of students who attend schools with particular characteristics, not the percentage of schools with those characteristics.

<sup>4</sup> Unlike most other analyses in this report, school characteristics are not described separately for students who differ in their primary disability category or selected demographic characteristics because, for the most part, the school contexts for students who differ on these factors are quite similar.

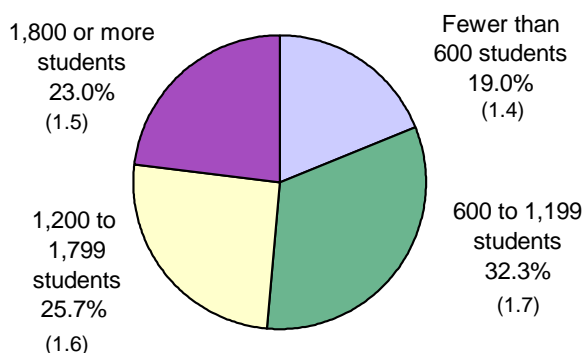
## Type of School Attended

Almost all secondary school students with disabilities (98%) attend public schools,<sup>5</sup> a higher rate of attendance at public schools than same-age students in the general population (92%,  $p < .001$ ).<sup>6</sup> About as many students with disabilities (72%) as students in the general population (75%) attend schools in their neighborhoods. Overall, 93% of students with disabilities attend regular schools that serve a wide variety of students, and about 3% attend special schools that serve only students with disabilities. The other 3% of students attend charter, magnet, or alternative schools. Among 14- to 18-year-old students with disabilities, almost 14% attend middle or junior high schools and 76% attend high schools. Multilevel schools (e.g., kindergarten through 12th grade) are attended by about 10% of students with disabilities. This distribution differs significantly from that of the general population in the same age range, among whom fewer attend middle schools (9%,  $p < .001$ ) and high schools (71%,  $p < .01$ ) and more attend multilevel schools (20%,  $p < .001$ ). The relatively small proportion of students with disabilities attending middle schools means that the findings in this chapter represent largely the characteristics of high schools.

## School and Class Size

Secondary school students with disabilities attend schools with an average enrollment of 1,310 students, although about one in five go to schools with fewer than 600 students and 23% attend schools with 1,800 or more students (Exhibit 3-1). There is a clear pattern of lower student enrollments in middle schools than in high schools. The average enrollment in schools attended by

**Exhibit 3-1**  
**STUDENT ENROLLMENT IN SCHOOLS ATTENDED BY STUDENTS WITH DISABILITIES**



Average enrollment = 1,310.  
Source: NLTS2 Wave 1 school characteristics survey.  
Standard errors are in parentheses.

7th- and 8th-grade students with disabilities is 863, compared with average enrollments of 1,288 to 1,534 for 9th through 12th graders ( $p < .001$ ).

Students with disabilities generally attend larger schools than students in the general population, whose middle schools average 605 students and whose high schools average 751 students (Hoffman, 2002). This difference may result in part from some school districts' clustering students with disabilities in larger schools within the district. A larger student body can have the critical mass of students with particular learning needs to justify having specialized staff or other resources to address them. Further, the size of schools

<sup>5</sup> NLTS2 students were chosen from rosters of students receiving special education from or through public school districts. Districts were instructed to include all students for whom they were responsible, regardless of where they went to school or the type of school attended (e.g., a residential school in another state). Despite these instructions, it is possible that districts underreported students served in non-public-school placements, thereby increasing the proportion of students reported to be attending public schools.

<sup>6</sup> Calculated for 14- through 18-year-olds from the National Household Education Survey of 1999.

attended by students with disabilities has increased by more than 25% since 1987, a higher rate of growth than experienced in schools attended by the general student population (Wagner, Newman, & Cameto, forthcoming).

Average class sizes also are larger in schools attended by secondary school students with disabilities than in schools overall. General education academic classes in schools attended by students with disabilities average almost 27 students, compared with averages of 22 to almost 25 across academic subjects in schools nationally ( $p < .001$ ; Council of Chief State School Officers, 2003). Special education classes are smaller; resource rooms average 11 students, and self-contained special education classes average 10 students. Vocational education classes in schools attended by students with disabilities have 22 students, on average.

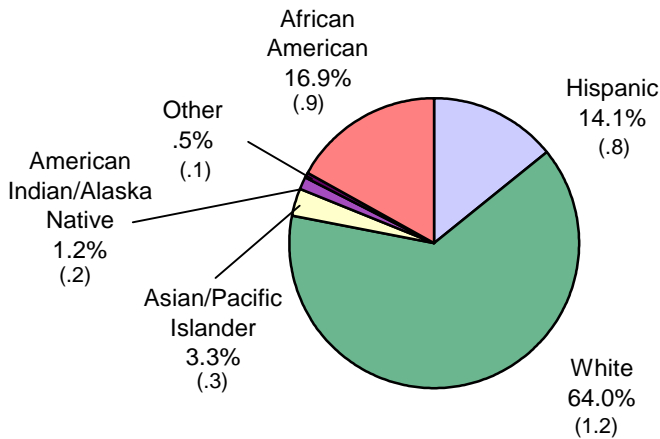
The larger size of both schools attended by students with disabilities and the classes in them could be cause for concern. Attending large schools can have adverse effects for racial and ethnic minorities and for students living in low-income households (Haller, Monk, & Tien, 1993; Howley & Bickel, 2000; Roza, 2001; Wasley, 2002), groups that are disproportionately represented among students with disabilities (Marder, Levine, & Wagner, 2003; Marder, Levine, Wagner, et al., 2003). Smaller school size has been linked to improved student and staff attitudes, social behavior, extracurricular participation, attendance, graduation rates, parent involvement, and student attitudes (Cotton, 2001; Haller, et al., 1993). Smaller class sizes also are associated with positive student outcomes (Finn, 1998; Greenwald, Hedges, & Laine, 1996; Mosteller, 1995; National Center for Education Statistics, 2000; Pritchard, 1998). This association has been found to be true particularly for disadvantaged and minority students (Finn, 1998; Grissmer, Flanagan, & Williamson, 1998; Hanushek, 1998; Krueger, 1998; Mosteller, 1995). Many teachers and parents believe that small class sizes also improve the outcomes of special education students (Folger, 1989; Johnston, 1989; Nye, Boyd-Zaharias, Fulton, & Wallenhorst, 1992), and a review of the literature supports that association (McCrea, 1996).

## **Student Body Characteristics**

As America's population has become more diverse, so has the student population, with important implications. The characteristics of a school's inhabitants are often critical but overlooked factors in understanding the dynamics of schools and the experiences of students in them. This section examines several key characteristics of the student bodies of schools attended by students with disabilities, including racial/ethnic distribution, prevalence of English language learners, and economic status. The prevalence of students with disabilities being served in the school also is reported, including the proportion of students with "504 plans," those receiving special education, and those with each of the primary disability category designations. None of these characteristics differ for students at middle and high school grade levels.

**Racial/ethnic background.** The diversity in the American population is mirrored in schools attended by students with disabilities. As a whole, they attend schools where 64% of the student population are white (Exhibit 3-2), 17% are African American, and 14% are Hispanic, just as in the general population. However, these averages mask considerable variation among schools. About 17% of secondary school students with disabilities attend schools where one-fourth or fewer of the student body are white, and almost half (48%) are in schools where more than three-fourths of their classmates are white.

**Exhibit 3-2**  
**AVERAGE RACIAL/ETHNIC DISTRIBUTION IN SCHOOLS**  
**ATTENDED BY STUDENTS WITH DISABILITIES**



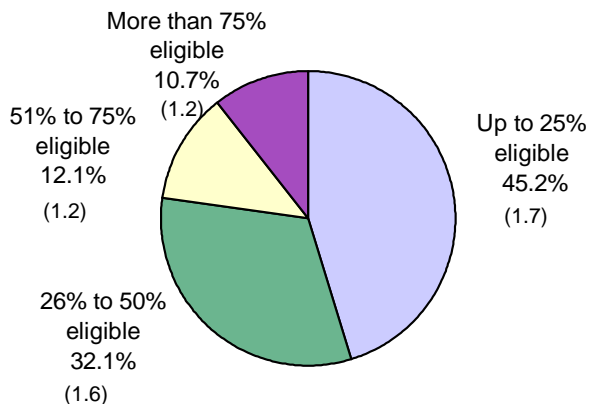
Source: NLTS2 Wave 1 school characteristics survey.  
 Standard errors are in parentheses.

**Language diversity.** School staff report that an average of 3% of the student bodies in schools attended by secondary school students with disabilities are English language learner (ELL) students. Almost half of students with disabilities (46%) attend schools with no ELL students at all, and 8% attend schools where more than 10% of the student population are identified as ELL or English as a second language (ESL).

**Student poverty.** Many students in schools attended by students with disabilities participate in the National School Lunch Program, through which students from households with incomes below 185% of the federal

poverty level are eligible for reduced-price lunches and those from households with incomes below 130% of poverty are eligible for free lunches. In the 2000-01 school year, 57% of students in the general population received free or reduced-price lunches on a typical school day (Food Research and Action Center, 2002; Hoffman, 2002), primarily at the elementary school level. About 1 in 10 high school students with disabilities (11%) are in schools where more than 75% of students participate in this program (Exhibit 3-3). On the other hand, almost half of students with disabilities (45%) go to schools where one-fourth or fewer of students are eligible for free or reduced-priced lunches.

**Exhibit 3-3**  
**PERCENTAGE OF STUDENTS ELIGIBLE FOR FREE OR**  
**REDUCED-PRICE LUNCHES IN SCHOOLS ATTENDED BY**  
**STUDENTS WITH DISABILITIES**



Source: NLTS2 Wave 1 school characteristics survey.  
 Standard errors are in parentheses.

**Student mobility.** As noted in Chapter 2, research has demonstrated relationships between high rates of student mobility and poor school performance and frequent behavioral problems, independent of characteristics such as poverty, race, and family structure (Rumberger, 2002; Rumberger & Larson, 1998; Simpson & Fowler, 1994; Swanson & Schneider, 1999). High rates of mobility at the school level mean that sizable percentages of students are experiencing these kinds of negative consequences. Students with disabilities attend schools with an average mobility rate of 11%, similar to the national average of 15% (U.S. General Accounting Office, 1994).

More than one-third (39%) of students with disabilities go to schools with mobility rates of 5% or less, whereas 13% of students attend schools with mobility rates of more than 20%.

**Students with disabilities in the schools.** There has been a steady increase over the past 25 years in the number of students receiving special education services (U.S. Department of Education, 2002). Larger numbers of students with disabilities in a school can present a wide range of instructional and service challenges to schools.

NLTS2 findings show that secondary school students with disabilities attend schools where an average of 16% of students have individualized education programs and receive special education services. Almost one in four students with disabilities (23%) go to schools where they are less than 10% of the student population, whereas 10% go to schools where students with disabilities are 25% or more of the student body. In addition to students who receive special education services, an average of another 1% of the student bodies in the schools are reported to receive accommodations for a disability under section 504 of the Rehabilitation Act of 1973.

## **School Resources**

Although NLTS2 does not collect information on the budgets or financial resources of schools,<sup>7</sup> staff of schools attended by elementary and middle school students with disabilities were asked to report on five aspects of their schools' resources:

- The size and characteristics of their staffs
- The presence of programs that support the learning and development of students
- The availability of computer technology
- Special education placement options
- Supports for teachers.

## **Staff**

The quality of teachers clearly is important to student performance. In fact, some research has shown that teacher quality is the most important factor in student achievement (Rivkin, Hanushek, & Kain, 1998). Two proxies for teacher quality are credentials and experience. Associations have been found between both of these and student outcomes (Darling-Hammond, 2000; Goldhaber & Brewer, 1997; Monk & King, 1994). Unfortunately, inexperienced teachers and teachers who teach out-of-field are not uncommon (Henke, Choy, Chen, Geis, & Abt, 1997; Ingersoll, 1999; Lewis et al., 1999; Seastrom, Gruber, Henke, McGrath, & Cohen, 2002), particularly when fully qualified teachers are in short supply. Having underprepared teachers is particularly likely in schools that serve students with low academic performance (National Center for Education Statistics, 2002).

Secondary school students with disabilities attend schools where an average of 88% of teachers are reported to be fully credentialed for their primary teaching assignment. This is similar to the rate found for the general population of students; between 13% and 22% of teachers

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<sup>7</sup> Information on expenditures related to special education services is reported by the Special Education Expenditure Project (SEEP), available at <http://csef.air.org>.

of English, social science, mathematics, or science in fifth through ninth grades nationally did not have a major, minor, or certification to teach in their subject area in 1999-2000 (Seastrom et al.,

<b>Exhibit 3-4 NONTeaching Staff in Schools Attended By Students with Disabilities</b>		
	Number or Percentage	Standard Error
All nonteaching professional staff		
Average number in the school	28	1.0
Average students per staff member	58	1.4
Related services staff		
Speech therapists/pathologists		
Percentage <sup>a</sup>	89.6	1.5
Average number <sup>b</sup>	1.5	.3
Nursing/medical personnel		
Percentage <sup>a</sup>	89.4	1.4
Average number <sup>b</sup>	1.6	.3
School psychologists/diagnostic personnel		
Percentage <sup>a</sup>	87.7	1.5
Average number <sup>b</sup>	1.5	.3
Social workers		
Percentage <sup>a</sup>	53.6	2.3
Average number <sup>b</sup>	1.1	.3
Guidance counselors		
Percentage <sup>a</sup>	98.6	.5
Average number <sup>b</sup>	4.1	.3
Other related services personnel		
Percentage <sup>a</sup>	63.1	2.3
Average number <sup>b</sup>	2.0	.4
Other staff		
Administrators		
Percentage <sup>a</sup>	99.9	.1
Average number <sup>b</sup>	4.3	.1
Librarians/other media personnel		
Percentage <sup>a</sup>	98.1	.6
Average number <sup>b</sup>	2.4	.1
Reading specialists		
Percentage <sup>a</sup>	45.7	2.3
Average number <sup>b</sup>	1.2	.3
Instructional aides		
Percentage <sup>a</sup>	97.2	.7
Average number <sup>b</sup>	10.1	.6
Itinerant or special-subject staff		
Percentage <sup>a</sup>	56.6	2.3
Average number <sup>b</sup>	1.5	.1

Source: NLTS2 Wave 1 school characteristics survey.  
<sup>a</sup> Percentage of students going to schools with kind of staff.  
<sup>b</sup> Average number of kind of staff in schools attended by students with disabilities.

2002). About 17% of teachers in schools attended by students with disabilities have less than 3 years teaching experience, and 12% are in their first year of teaching. However, there is some variation in these aspects of teacher preparation. For example, 16% of students with disabilities go to schools where 5% or fewer of teachers have less than 3 years teaching experience, but a similar percentage go to schools where more than one-fourth have that level of experience.

In addition to teachers, a variety of professional staff may provide important services to support student learning. Guidance counselors, library and media staff, and administrators support the needs of all students. Having students with disabilities in a school also can occasion the need for related services professionals, such as speech or physical therapists. Respondents to the school characteristics survey were asked to report the number of these various kinds of staff that worked in their school (Exhibit 3-4).

Overall, students with disabilities attend schools with an average of 28 nonteaching staff, resulting in a ratio of all students to nonteaching staff of 58 to 1. Virtually all secondary school students with disabilities go to schools that have guidance counselors (99%), whose average caseload is 352 students. A large majority of students with disabilities (88% to 90%) also attend schools with speech therapists and/or pathologists, nursing or medical staff, and school psychologists or diagnostic personnel. School psychologists have an average caseload of 231 students. More than half of students with disabilities (54%) attend schools that also have a social worker, and 63% go to

schools with other related services personnel. On average, schools that have a given type of nonteaching staff member have one or two of these staff, although schools have an average of four guidance counselors.

Virtually all students with disabilities attend schools with administrators (an average of 4), librarians or other media personnel (an average of 2), and instructional aides (an average of 10). Reading specialists are somewhat less common but are in the schools of almost half of students (46%), more commonly in middle schools (59% of middle school students with disabilities have reading specialists in their schools, compared with 42% of high school juniors or seniors,  $p < .05$ ). More than half of students (57%) attend schools that use itinerant or special-subject staff.

Despite the fact that, on average, high school students with disabilities attend schools that are much larger than those attended by middle school students, high schools do not have more of most kinds of nonteaching staff than middle schools. Exceptions are that, on average, the schools attended by high school students with disabilities have more administrators (4 vs. 2,  $p < .001$ ), instructional aides (11 vs. 7,  $p < .01$ ), and guidance counselors (4 or 5 vs. 2,  $p < .001$ ). Having a larger number of guidance counselors to handle the larger enrollment of high schools results in similar average caseloads of those staff in middle and high schools (ranging from 344 to 371 across grade levels).

### **Programs to Support Student Learning and Development**

In response to the considerable diversity of students' interests and learning styles, schools provide a wide variety of programs and activities to help students engage and perform successfully in school. Some programs have an academic bent, such as after-school or weekend tutoring programs, whereas others encourage the nonacademic interests and abilities of students, such as organized sports teams and performing groups. Some programs may be especially important to the needs of students with disabilities, such as diagnostic services to identify learning problems and intervention strategies for them. Other programs are intended to benefit the entire school, rather than participating students, such as schoolwide reform activities. The presence of a broad range of programs, services, and activities at school that appeal to students' interests and support improved performance may be particularly important for students with disabilities, many of whom struggle academically. Academic supports may provide the additional instructional attention students need, and nonacademic programs may provide opportunities for success in a variety of settings that encourage students to engage in school.

**Academic support programs.** The large majority of secondary school students with disabilities attend schools with some kind of academic support program (Exhibit 3-5). College and career awareness programs are the most common of the academic programs investigated in NLTS2; 88% of students with disabilities go to schools that have such programs. To support students' academic performance, schools attended by about 82% of students with disabilities offer tutoring programs, homework clubs, or mentoring programs or summer school, and those attended by almost two-thirds of students provide supplemental reading or math instruction. About three-fourths (76%) go to schools that have diagnostic and prescriptive programs to identify learning problems, similar to the 74% who attend schools with gifted and talented programs.

Most academic support programs are about equally likely to be provided in schools attended by middle and high school students with disabilities, with the exception of college and career awareness programs, which are more common in high schools than in middle schools (92% of

juniors or seniors go to schools with these programs vs. 68% of students in seventh or eighth grade,  $p < .001$ ).

<b>Exhibit 3-5 SUPPORT PROGRAMS IN SCHOOLS ATTENDED BY STUDENTS WITH DISABILITIES</b>		
	Percentage <sup>a</sup>	Standard Error
<b>Academic programs</b>		
College and career awareness and preparation program	87.6	1.4
Tutoring, homework club, mentoring program	82.8	1.6
Summer school	82.2	1.6
Diagnostic and prescriptive program to identify learning problems	76.3	1.8
Gifted and talented program	74.3	1.8
Supplemental instruction in reading/language arts	65.8	2.0
Supplemental instruction in math	64.1	2.0
Peer support program for students with disabilities	40.2	2.1
<b>Enrichment/recreation programs</b>		
Band, chorus, other performing opportunities	94.9	.9
Clubs/activities outside of class	85.7	1.4
Organized school sports program	94.9	.9
Weekend program for students	31.1	1.9
<b>Other programs/services</b>		
Counseling or pupil services	90.2	1.2
School-to-work activities	74.2	1.8
Substance abuse education	72.2	1.9
Reproductive health and pregnancy prevention education	62.7	2.0
Conflict resolution/management program	55.4	2.1
School-based health clinic	44.9	2.1
Dropout prevention program or services	41.5	2.0
Services for out-of-school youth (e.g., GED program)	39.4	2.0
Teen parenting program	31.5	1.9
Title I	30.4	1.9
Substance abuse treatment services	18.5	1.6
Childcare for children of parenting teens	17.4	1.6
<b>Schoolwide initiatives</b>		
Class size reduction initiative	24.8	1.8
Schoolwide reform project	21.9	1.7
Obey-Porter grant to support schoolwide reform	2.3	.6
Source: NLTS2 Wave 1 school characteristics survey		
<sup>a</sup> Percentage of students attending schools with program.		

**Enrichment programs.** Virtually all students with disabilities attend schools with some type of enrichment program, particularly organized sports and performing opportunities. Although these activities are about equally common in schools attended by middle and high school students with disabilities, other enrichment activities are not. Clubs and other extracurricular groups are offered in schools attended by 76% of middle school students with disabilities, compared with 90% of high school freshmen with disabilities ( $p < .05$ ). Similarly, weekend programs are offered in schools attended by 20% of middle school students and more than 30% of high school students with disabilities ( $p < .05$ ).

**Other programs and services.** Counseling or pupil services programs are ubiquitous and equally common across grade levels. In addition, the interests and needs of adolescents are reflected in the kinds of programs offered in their schools. Almost three-fourths of students with disabilities (74%) go to schools that offer school-to-work activities, and 42% have dropout prevention programs. Overall, 72% of youth go to schools that offer substance abuse education, and 63% have reproductive health and pregnancy prevention education in their schools. However, substance abuse treatment and health services are less common (18% and 45%, respectively). More than half of students with disabilities (55%) are enrolled in schools that offer programs in conflict resolution or violence prevention.

With the exception of school health clinics, all of these adolescent services are more common in high schools than in middle schools. For example, substance abuse education is offered in



schools attended by about three-fourths of high school students with disabilities but in those attended by only 58% of seventh and eighth graders ( $p < .05$ ), and dropout prevention programs are more than twice as common in schools attended by juniors and seniors as in those attended by middle school students (46% vs. 21%,  $p < .01$ ).

### Computer Technology

Being familiar with and competent in the use of computer technology has become essential for students as they transition into adulthood. Fortunately, nearly all students with disabilities attend schools with computers that connect to the Internet and that are available for students' use in a library, media center, or computer lab (Exhibit 3-6), and almost all are in schools where computers are available in at least some general, special, and vocational education classes.

<b>Exhibit 3-6 COMPUTER TECHNOLOGY IN SCHOOLS ATTENDED BY STUDENTS WITH DISABILITIES</b>		
	Percentage <sup>a</sup>	Standard Error
Computers available to students in:		
A library/media center		
Available at all	99.9	.1
With Internet access	99.9	.1
General education classes		
None	2.5	.7
Some	39.7	2.1
All	57.8	2.1
Computers have Internet access	97.3	.7
Special education classes		
None	3.1	.7
Some	28.5	1.9
All	68.5	1.9
Computers have Internet access	95.1	.9
Vocational education classes		
None	1.6	.6
Some	36.8	2.2
All	61.6	2.2
Computers have Internet access	98.5	.6
Students can use computers:		
During class	97.5	.6
During lunch	75.5	1.8
Before and after school	87.6	1.4
During evenings	14.0	1.4
On weekends	3.7	.8
During school vacations	1.8	.6
Source: NLTS2 Wave 1 school characteristics survey.		
<sup>a</sup> Percentage of students attending schools with computers available in locations and times indicated.		

However, only 58% of students with disabilities go to schools where all general education classes have them, and 68% and 62% attend schools that have computers in all special education and vocational education classrooms, respectively. Although the prevalence of computers in general education and special education classes is similar in middle and high schools, somewhat surprisingly, middle school students are more likely than high school students to have computers available in all their vocational education classes (81% for middle school students vs. 60% for juniors and seniors,  $p < .01$ ). Virtually all computers that are available connect to the Internet. Almost all students with disabilities have access to such computers during class, and most can use school computers before and after school (88%) or during lunch (76%).

### Special Education Placement Options

The best placement for students with disabilities has been the subject of considerable controversy for some time. IDEA '97 mandates that students be educated in the least restrictive environment and requires justification when students are not educated in the

regular classroom with nondisabled students. This section explores the prevalence of various placement options for special education students.

NLTS2 examined the prevalence of five placement options in students' schools: part-time resource rooms, general education/inclusion programs with services or supports in the general education classroom, self-contained special education classes, individual instruction, and classes co-taught by general education and special education teachers (Exhibit 3-7). Both general education inclusion programs and special education resource rooms are available in schools attended by the large majority of students with disabilities (96% and 93%, respectively). Individual instruction and classes that are co-taught by general education and special education teachers are less common but still are available in schools attended by about 60% of students with disabilities. Only individualized instruction differs across grade levels, being more common in schools attended by high school students than middle school students with disabilities (60% vs. 46%,  $p < .05$ ).

**Exhibit 3-7**  
**PLACEMENT OPTIONS IN SCHOOLS ATTENDED BY STUDENTS WITH DISABILITIES**

	Percentage <sup>a</sup>	Average Class Size
General education/inclusion program with services and supports	95.8 (.8)	26.6 (.2)
Part-time resource room	93.2 (1.1)	11.4 (.2)
Self-contained special education classes	86.7 (1.4)	10.3 (.2)
Classes co-taught by general and special education teachers	60.4 (2.1)	NA
Individual instruction	59.4 (2.1)	NA

Source: NLTS2 Wave 1 school characteristics survey.  
<sup>a</sup> Percentage of students attending schools with placement option.  
 NA = Not available.  
 Standard errors are in parentheses.

Comparisons between NLTS2 and the original National Longitudinal Transition Study (NLTS)<sup>8</sup> indicate that students with disabilities now are 27 percentage points more likely to go to schools that have self-contained classrooms as a placement option than in the mid-1980s. This increase may reflect, in part, a significant decrease in students with disabilities attending special schools that serve that population; as they move to regular secondary schools, those schools may have established self-contained special education classrooms to serve them (Wagner, Newman, & Cameto, forthcoming).

### Supports for General Education Teachers

Research has found that for students with disabilities to be successful in general education classes, general education teachers need support (Eraclides, 2001; Harris, Graham, & Deshler, 1998; Maheady, 1997; McLeskey & Waldron, 2002). NLTS2 investigated the extent to which general education teachers receive six types of support in schools that have general education/inclusion placement options for special education students: consultation by special education or other staff; teacher aides, instructional assistants, or aides for individual students; special materials or equipment to use with special education students; inservice training regarding the needs of special education students; co-teaching/team teaching with a special education teacher; and smaller student loads or class sizes.

Consultation by special education or other staff is the most common type of support; 97% of students attend schools where this type of support is made available to general education teachers who have students with disabilities in their classes (Exhibit 3-8). Teacher aides, instructional assistants, or aides for individual students; special materials to use with special education

<sup>8</sup> NLTS was designed and conducted for the Office of Special Education Programs between 1984 and 1993. It included a nationally representative sample of students who were ages 15 through 23 when the first data were collected in 1987. Many of its design features are mirrored in NLTS2 to permit comparisons between them.

**Exhibit 3-8  
SUPPORTS FOR GENERAL EDUCATION  
TEACHERS IN SCHOOLS ATTENDED BY  
STUDENTS WITH DISABILITIES**

	Percentage <sup>a</sup>	Standard Error
Consultation by special education staff or other staff	96.8	.7
Teacher aides, instructional assistants, or aides for individual students	84.4	1.5
Special equipment or materials to use with special education students	79.2	1.7
Inservice training on needs of special education students	71.2	1.9
Co-teaching/team teaching with a special education teacher	60.1	2.1
Smaller student load or class size	31.8	2.0
Other	1.9	.6

Source: NLTS2 Wave 1 school characteristics survey.

<sup>a</sup> Percentage of students attending schools with type of support for teachers.

NA = Not available.

students; and inservice training regarding the needs of special education students also are quite common. They are available to general education teachers in the schools of 71% to 84% of students. About 60% of students with disabilities go to schools where teachers who have students with disabilities in general education classes have the option of co-teaching or team teaching with a special education teacher. Fewer than one-third of students with disabilities go to schools where general education teachers have a reduced student load or class size as a result of having students with disabilities in their classes. Inservice training, smaller classes or student caseloads, and co-teaching or team teaching all are more common in schools attended by high school than middle school students (e.g., inservice training on the needs of students with disabilities is

provided in schools of 58% of middle school students and more than 70% of high school students,  $p < .01$ ).

Comparisons between NLTS2 and NLTS reveal substantial increases in the likelihood that students with disabilities attend schools with most of these kinds of teacher supports. The largest increase, 56 percentage points, has occurred in provision of teacher aides or instructional assistants. Increases of 28, 27, and 22 percentage points are noted for provision of inservice training on the needs of students with disabilities, special equipment or materials to use with them, and a smaller class size or student load, respectively (Wagner, Newman, & Cameto, forthcoming).

### **School Policies**

Clearly articulated and effective policies are an essential element of all successful organizations, including schools. Policies can communicate a school's mission and values to both internal and external audiences. They also provide procedural guidance for addressing recurring issues systematically and support decisions regarding such issues as resource allocation, eligibility for programs, and staff management.

Students with disabilities present a particular challenge for schools, which must consider whether and how policies regarding the general student population (e.g., grade-level promotion, discipline) apply to the diversity of needs and circumstances of students with disabilities. In addition, there are policies that specifically address the issues of students with disabilities, such as eligibility assessments and testing accommodations. Despite the fact that policies that affect students with disabilities are spelled out in legislation, regulations, and decisions at the federal, state, and local levels, historically there have been significant variations in policy implementation

that create differences in the ways they are experienced by students, parents, teachers, service providers, and administrators.

NLTS2 has generated information from schools attended by secondary school students with disabilities that identifies variations at the school level in the implementation of several policies that affect students with disabilities<sup>9</sup>:

- Schoolwide initiatives.
- Participation of students with disabilities in mandated standardized testing.
- Social promotion.
- Alternative placements and services for students with disabilities who have been suspended or expelled.

### **Schoolwide Initiatives**

Schoolwide reform projects (e.g., Comer Schools, Accelerated Schools) are being implemented in schools attended by 22% of secondary school students with disabilities, and 25% go to schools with class size reduction initiatives. Two percent of students with disabilities attend schools that have received an Obey-Porter grant—a grant from the federal Comprehensive School Reform Demonstration Program—to support implementation of a schoolwide reform model.

### **Standardized Testing**

In response to calls to improve educational results, states' use of standardized tests to measure students' skills and learning increased steadily through the 1990s. NCLB has elevated the importance of these tests further, as part of a national strategy to improve American education. Although the impetus for testing is widespread throughout the country, the implementation of state testing programs varies considerably on a variety of dimensions, including the grade levels that are tested, their content, whether tests are state-developed or published instruments, and how test results are used and disseminated.

Historically, states have struggled to include students with disabilities in state tests. A decade ago, few states included students with disabilities in statewide tests at all. Since that time, states have been pushed to be accountable for all students, including those with disabilities, because “participation in large-scale assessments is now recognized...as a critical element of equal opportunity and access to education. Low expectations and lack of information on which to make programmatic decisions plague the programs of students with disabilities who do not participate in state and district assessments” (National Center on Educational Outcomes, 2002b, p. 1). Recognizing the importance of including students with disabilities in large-scale assessments, the Individuals with Disabilities Education Act Amendments of 1997 (IDEA '97) mandate that states include students with disabilities in statewide tests, with appropriate accommodations, and develop alternate assessments. The question remains, however, how these mandates are being implemented at the school level. To address this question, respondents to the school characteristics survey were asked to report on their “practices regarding mandated standardized tests for students with disabilities.”

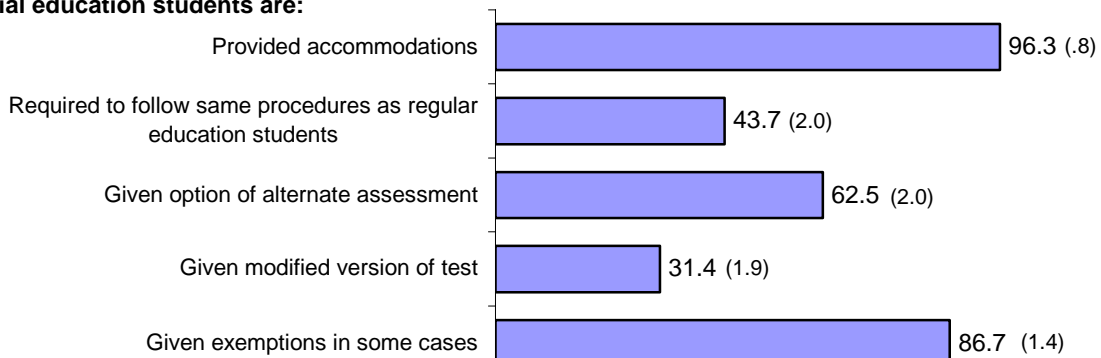
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<sup>9</sup> Detailed information on special-education-related policies of states, school districts, and schools is reported by the study of the State and Local Implementation and Impact of IDEA (SLIIDEA), available at <http://www.abt.sliidea.org>.

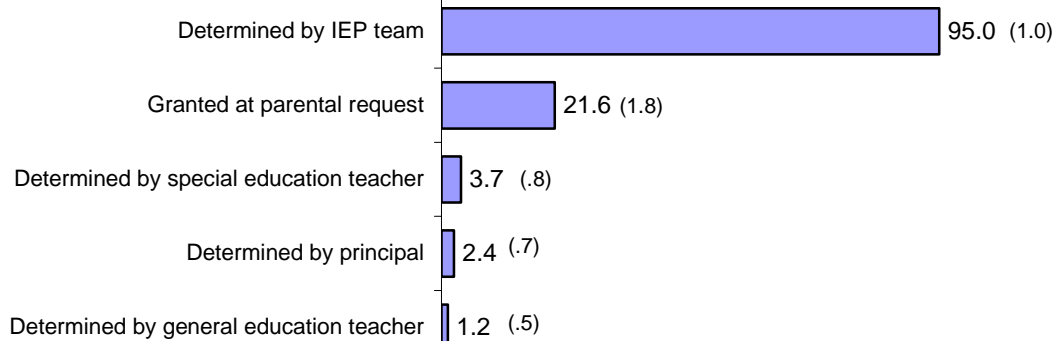
**Participation in testing.** Only 1% of students with disabilities are reported to go to schools that have no mandated standardized testing. Virtually all students with disabilities who attend schools with such tests are subject to school policies that call for them to be included in mandated standardized tests; fewer than one-half of 1% go to schools where students with disabilities are not included in testing as a matter of policy. Overall, 44% of students with disabilities go to schools where they are required to follow the same procedures and meet the same standards as students in the general population (Exhibit 3-9), almost one-third (31%) are in schools that permit a modified version of the standardized test to be used, and 62% are in schools that allow an alternate assessment to be used for some students with disabilities.

**Exhibit 3-9  
POLICIES REGARDING PARTICIPATION IN, SCORING OF, AND EXEMPTIONS FROM  
STANDARDIZED TESTING OF STUDENTS WITH DISABILITIES**

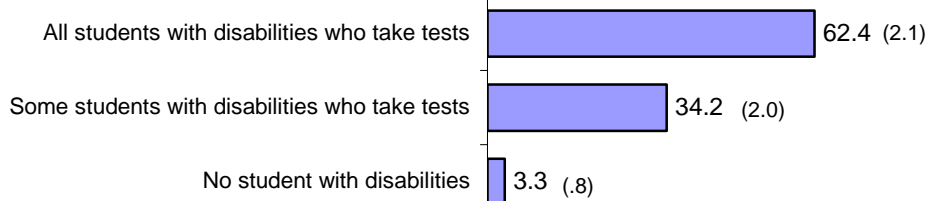
**When standardized tests are mandated,  
special education students are:**



**Exemptions to standardized tests are:**



**Standardized test scores are reported for:**



Source: NLT2 Wave 1 school characteristics survey.  
Standard errors are in parentheses.

Percentage attending schools with testing policy

Although as a matter of policy, schools are encouraged to include all students in mandated statewide testing, 87% of secondary school students with disabilities attend schools where exemptions are allowed under certain circumstances. A key issue in exemptions is the mechanism used to grant them; NLTS2 findings show that multiple methods are used to grant exemptions. Almost all students with disabilities (95%) attend schools where exemption decisions are made by the IEP team. Parents' requests trigger exemptions from tests in schools attended by 22% of students. Teachers and principals make exemption decisions in schools attended by 4% or fewer of students with disabilities.

**Accommodations.** In addition to mandating participation, IDEA '97 requires the provision of appropriate accommodations to support students' participation in statewide tests, and all states now have written guidelines to indicate the accommodations they allow (National Center on Educational Outcomes, 2002a). Accommodations are intended to remove any obstacle that is unrelated to a student's understanding of the content of the tests, so that his or her true capabilities can be measured, and can include alterations to setting, timing/scheduling, presentation, or response mode.

Consistent with the ubiquitous nature of state guidelines specifying accommodations, the vast majority of students with disabilities (96%) attend schools that have policies explicitly providing testing accommodations to students with disabilities who need them to participate in testing.

**Use of test results.** Not only is participation in mandated statewide tests important for accountability for student performance, it also is necessary to include the test results of students with disabilities in reports to schools, communities, and policy audiences in order to provide a comprehensive picture of a school's or district's success. Inclusion of test results of at least some students with disabilities in schoolwide reports is the policy in the large majority of schools. Overall, 62% of students with disabilities attend schools where standardized test scores of all students with disabilities are included in school and district averages. For about one-third of students, schools include the scores of some students with disabilities, and 3% of students with disabilities attend schools that do not include their scores at all.

Practices regarding standardized testing do not differ for students at middle and high school grade levels.

## **Social Promotion**

Social promotion has been part of the debate surrounding American public education for many years, with two primary views being articulated. One position holds that promotion to the next grade level implies that a student has mastered the academic skills and content of the prior grade and is prepared for the increased demands in the next grade level; students who have not achieved that mastery should repeat the grade so that they have the opportunity to learn the skills necessary as a foundation for future success. An alternative perspective holds that, although mastery of academic skills is important, social development is part of the educational process. When students are retained a grade, they are separated from their age peers and may suffer a loss in motivation and self-esteem, which, in turn, may erode a student's ability to succeed in school (Holmes, 1989; Thompson, 1999).

During the 1970s and 1980s, social promotion was viewed favorably by many and was commonly practiced. During the 1990s, reports of high school graduates without basic academic skills and the standards-based reform movement led to a less favorable view of social promotion.

“The pendulum today is clearly swinging toward not allowing for any conditional promotion and mandating retention for all low-performing students...” (Smink, 2001, p. 2). Several states (e.g., Georgia, North Carolina, and Texas) and some large school districts (e.g., Chicago, Dallas, and Philadelphia) have explicit policies that mandate retention at grade level on the basis of poor scores on a single standardized test.

The issue of social promotion is particularly complicated for students with disabilities, some of whom may not master content and skills at the same rate as other students. Indeed, 36% of secondary school students with disabilities have been retained at some point in their educational careers; it is unknown whether they were retained before receiving special education services or after they began to receive them. The retention rate for students with disabilities is higher than that for the general population (18%,  $p < .001$ ).<sup>10</sup>

Given this higher rate of grade retention among students with disabilities relative to the general population, one might expect that schools would be more likely to prohibit the social promotion of students with disabilities than of the general student population. In fact, the opposite is the case. Overall, 50% of students with disabilities attend schools that prohibit the promotion of students with disabilities who are performing poorly. Somewhat more students with disabilities (56%,  $p < .05$ ) go to schools that prohibit promotion of poorly performing students in the general population. However, the policies of secondary schools attended by students with disabilities may not be pertinent to their own grade retention experience if it occurred during elementary school.

### **Discipline Policy: Alternative Placements and Services**

Determining appropriate responses when students commit serious violations of school rules continues to challenge schools. Concerns over school safety have increased, contributing to widespread adoption of “zero-tolerance” policies for certain offenses, but application of discipline policies for students with disabilities who break school rules is more complicated. In general, IDEA '97 stipulates that if a problematic infraction or behavior is linked to a student’s disability, suspensions cannot exceed 10 days without a meeting of the IEP team to consider service or placement alternatives. Further, in contrast to students in the general population, schools are obligated to provide a free appropriate public education to students with disabilities, despite suspension status (Hartwig & Ruesch, 2000). NLTS2 data show that the vast majority of students with disabilities (95%) attend schools that arrange alternative services or placements for students with disabilities who are expelled or suspended from school.

### **School Climate**

School climate refers broadly to the social atmosphere of a school, or its “learning environment.” Although school climate can be thought of as encapsulating a variety of aspects of a school, it most often includes attention to a school’s relationships (among staff, among students, between staff and students, and between staff and families), its expectations and standards for performance, and the orderliness of the environment (North Central Regional Educational Laboratory, 1996). A more positive climate at school has been linked to higher student achievement in the research literature (see, for example, Bulach, Malone, & Castleman, 1995; Stickard & Mayberry, 1986).

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<sup>10</sup> Calculated for 14- to 18-year-olds from the National Household Education Survey of 1999.

Three aspects of the climate of the schools attended by secondary school students with disabilities are considered:

- An emphasis on improving academic performance.
- Student engagement—students demonstrate engagement in school through regular attendance.
- The maintenance of an orderly and safe environment is maintained.

**Emphasis on academic performance.** The last several years have witnessed an increased emphasis on the accountability of schools for the performance of students. NCLB requires schools to establish clear standards for what students should know and to test them yearly to determine whether they are learning the required information and skills. In some states, rewards and sanctions for schools are associated with the performance of their students on mandated standardized tests. This accountability emphasis can raise the stakes associated with student testing and its results, potentially influencing the priorities of schools and their general climate.

The majority of students with disabilities (54%) go to schools where school staff respondents report “a great deal” of pressure to improve test scores for all students. Another 38% go to schools where respondents report “a fair amount” of pressure to improve test scores. Feeling no pressure at all is rare (8% attend such schools).

Pressure can be felt by students, too, sometimes in response to the graduation requirements imposed by their schools. Virtually all students with disabilities who go to schools that include 12<sup>th</sup>-grade students are subject to specific graduation requirements (Exhibit 3-10). On average, students with disabilities go to schools that require a total of 24 semesters of academic courses to graduate with a regular high school diploma, or an average of three academic classes each semester over 4 years in high school. Fourteen states have graduation requirements that exceed this average number of academic credits (National Center for Education Statistics, 2001).

<b>Exhibit 3-10 GRADUATION REQUIREMENTS IN SCHOOLS THAT SERVE 12TH-GRADE STUDENTS</b>		
	Number or Percentage	Standard Error
Percentage who go to schools with specific graduation requirements	97.9	.7
For high school graduation, average number of semesters required in:		
English or language arts	7.3	.1
Mathematics	5.2	.1
Science	4.8	.1
Social studies	6.0	.1
Foreign language	1.0	.1
Source: NLTS2 Wave 1 school characteristics survey.		

Students also may feel academic pressure if large proportions of students in their school take college entrance examinations, graduate from high school, and go on to college after high school. In schools that have 12th-grade students and are attended by students with disabilities, school staff report that 92% of those 12th graders graduate from high school with a regular diploma in a given school year (Exhibit 3-11), as do 55% of 12th graders with disabilities. This graduation rate for students with disabilities is quite similar to the 57% national high school graduation rate for students with disabilities reported by states (U.S. Department of Education, 2002). In

addition to these high school graduates, about 10% of 12th graders with disabilities are reported to leave high school with a special diploma or certificate of completion.



**Exhibit 3-11  
HIGH SCHOOL COMPLETION AND  
POSTSECONDARY EDUCATION ATTENDANCE  
RATES IN SCHOOLS THAT SERVE  
12TH-GRADE STUDENTS**

	Percentage	Standard Error
Average percentage of 12th graders in the student body who graduate with a regular diploma among:		
The general student population	92.5	
Students with disabilities	55.4	
Average percentage of 12th grade students with disabilities in the student body who graduate with a special diploma or certificate of completion	9.6	
Students who go to schools where the following percentages of 12th graders take college entrance examinations:		
Fewer than 50%	33.9	2.2
50% to 75%	40.5	2.3
76% to 90%	19.6	1.9
More than 90%	6.1	1.1
Students who go to schools where the following percentages of 12th graders go or to 2- or 4-year college after high school:		
Fewer than 50%	27.4	2.1
50% to 75%	39.3	2.3
76% to 90%	28.5	2.1
More than 90%	4.8	1.0
Source: NLTS2 Wave 1 school characteristics survey.		

The emphasis on college enrollment in high schools attended by students with disabilities varies widely. Among students with disabilities who go to schools that serve 12th graders, about one-fourth go to high schools where more than three-fourths of seniors take college entrance examinations, and about one-third go to schools where the college attendance rate is higher than 75%. In contrast, about one-third of students with disabilities go to high schools where fewer than 50% of 12th graders take college entrance exams, and about one-fourth go to schools where fewer than 50% of graduates attend college.

**Student engagement.** Absenteeism from school can be problematic for both students and teachers. Students miss exposure to instructional materials and activities, and frequent or prolonged absences could jeopardize their ability to keep up in their classes. Having students absent from school also requires that teachers repeat information and schedule make-up activities for absent students.

Nationwide, an average of 6% of students were absent on a typical day in 1994, the last year in which national data were collected (National Center for Education Statistics, 1996). Nationally, 14% of teachers have affirmed that absenteeism is a serious problem in their school (Editorial Projects in Education, 1997), and some policy-makers are responding. For example, Georgia's Education Coordinating Council has decided that the state's schools will be held accountable for improving the attendance of their students, as well as their academic performance (Jacobson, 2002).

Secondary school students with disabilities attend schools where an average of about 7% of students are absent on a given day (Exhibit 3-12). Although about one-fourth of students attend schools where fewer than 5% are absent, more than one-third (35%) go to schools with absenteeism of 8% or more. Absenteeism is about 1 percentage point higher in high schools than in middle schools ( $p < .05$ ). This grade-level difference is consistent with that in the general population (National Center for Education Statistics, 1996).

**Exhibit 3-12  
ABSENTEEISM IN SCHOOLS ATTENDED  
BY STUDENTS WITH DISABILITIES**

	Percentage	Standard Error
Average proportion of students absent in a typical day	7.0	.2
Students attending schools with typical absence rate of:		
Less than 5%	26.2	1.8
5% to 7.99%	38.7	2.0
8% or more	35.1	2.0

Source: NLTS2 Wave 1 school characteristics survey.

**An orderly and safe environment.** The orderliness of the school environment, including the clarity of rules and the consistency with which they are enforced, is a key aspect of the overall climate of a school (North Central Regional Educational Laboratory, 1996). This section documents the orderliness of the environment at school by considering the extent to which the rules of the school are violated to such a degree that students are suspended or expelled from school, involved in violent incidents, or arrested.

Students with disabilities attend schools that average about 5 expulsions, 230 in-school suspensions, and 139 out-of-school suspensions in a school year (Exhibit 3-13). Although about one-third (35%) of students attend schools where no expulsions occur, many fewer students attend schools with no in-school or out-of-school suspensions (15% and 3%, respectively). In fact, 43% of students with disabilities go to schools with 175 or more in-school suspensions, and 29% go to schools with that level of out-of-school suspensions in the designated school year.

Schools attended by secondary school students with disabilities average 23 incidents of violence during a school year and 7 arrests at school or at school events. Relatively few students attend schools that escape these kinds of events entirely (14% go to schools with no violent incidents and 29% to schools with no arrests). These aspects of school orderliness are not markedly different for students with disabilities attending schools at middle vs. high school grade levels when figures are adjusted for the differences in the size of their schools.

## Summary

This review of the schools attended by 14- to 18-year-old students with disabilities shows that, not surprisingly, their school contexts are the same as those of the general student population in many ways. The vast majority attend regular public schools, where they constitute 16% of the student population. Their schools are as likely to be in their own neighborhoods as is true for students in the general population. The racial/ethnic distribution of the schools attended by students with disabilities is virtually the same as for the general population, as are absenteeism and mobility rates. Their schools have a wide range of staff resources, including teachers that average about the same level of qualifications and experience as those of students in the general population. There also are a variety of programmatic resources to meet students' needs, and Internet-accessible computers are available to students in virtually all schools.

**Exhibit 3-13  
ORDERLINESS AND SAFETY OF THE ENVIRONMENT  
IN SCHOOLS ATTENDED BY SECONDARY SCHOOL  
STUDENTS WITH DISABILITIES**

	Number or Percentage	Standard Error
Average number of expulsions in a school year	5	.3
Students attending schools with number of expulsions:		
None	34.6	2.1
1 or 2	24.8	1.9
3 to 10	28.2	2.0
11 or more	12.3	1.4
Average number of in-school suspensions in a school year	230	1.2
Students attending schools with number of in-school suspensions:		
None	15.0	1.6
1 to 24	14.0	1.6
25 to 74	12.1	1.5
75 to 174	15.8	1.6
175 or more	43.0	2.2
Average number of out-of-school suspensions in a school year	139	6.4
Students attending schools with number of out-of-school suspensions:		
None	2.8	.7
1 to 24	18.6	1.7
25 to 74	25.1	1.9
75 to 174	24.4	1.9
175 or more	29.1	2.0
Average number of incidents of violence in a school year	23	1.4
Students attending schools with number of incidents of violence:		
None	13.5	1.5
1 or 2	10.9	1.4
3 to 10	27.5	2.0
11 to 24	17.8	1.7
25 or more	30.3	2.1
Average number of arrests at school or school events in a school year	7	.6
Students attending schools with number of arrests at school or school events:		
None	28.9	2.1
1 or 2	17.8	1.7
3 to 10	35.7	2.2
11 to 24	9.2	1.3
25 or more	7.4	.6

Source: NLTS2 Wave 1 school characteristics survey.

The schools attended by students with disabilities include a variety of placement options to meet their needs, with self-contained classrooms being much more common now than in the mid-1980s. Reflecting national policy embodied in IDEA '97, virtually all schools report arranging alternative placements and services for students with disabilities who have been suspended or expelled, and virtually all include students with disabilities in mandated standardized testing.

However, there also are some aspects of schools attended by students with disabilities that are potentially problematic. Their schools are significantly larger, on average, than schools attended by the general population of students, suggesting that school districts may be clustering students with disabilities in schools where a larger student population may garner a wider array of resources. Class sizes and caseloads of support personnel also are large, potentially hindering efforts to meet the individual learning needs of a diverse student population. Further, many students with disabilities go to schools where disciplinary issues are apparent, including those that involve incidents of violence and arrests at school or school events.

This chapter has characterized the variation in schools attended by secondary school students with disabilities, as background for understanding the instructional programs they experience. Another component of that background, the characteristics of classrooms in which students with disabilities receive instruction, is presented in the next chapter.