

## 2. Credits Earned by Secondary School Students With Disabilities

The U.S. Department of Education has as one of its goals to “ensure that all students are on track to graduate from high school on-time and ready for college and careers,” with “on time” defined as high school freshmen graduating within 4 years (U.S. Department of Education 2010). Course credits<sup>21</sup> are the metric by which high schools measure the progress of their students toward graduation. Thus, understanding the number of credits earned as a whole and at each high school grade level is an important perspective on students’ high school experience. Understanding the distribution of those credits across the various course content areas further enriches this perspective by signaling the breadth of content to which students are exposed during their high school careers

This chapter examines the credits earned by high school students with disabilities by drawing on the high school transcript data compiled as part of NLTS2 for students with disabilities nationally who attended typical high schools at some time from 2001 to 2009. Findings reported here address the following questions for students with disabilities in typical high schools:<sup>22</sup>

- How many credits did high school students with disabilities earn and how were they distributed among academic, vocational, and other types of courses?
- How did the pattern of credits earned by students with disabilities compare with that of students in the general population?
- What were the similarities and differences in the patterns of credits earned by students who differed in primary disability category, demographic characteristics, grade level, and high school completion status?

The chapter begins with an overview of the credit-earning experiences of students with disabilities in high school and then focuses separately on experiences in academic, vocational, and nonacademic, nonvocational courses. As noted in chapter 1, NLTS2 intends to describe the experiences of the population of students with disabilities as a whole, including both those who eventually completed their high school programs and those who did not. Each section of this chapter begins with an examination of credit-earning patterns by students with disabilities as a whole and then continues with a focus on students who differed in disability category, grade level, and selected demographic characteristics. Each section then distinguishes the credit-earning experiences of students with disabilities by high school completion status, presenting data separately for those who did and did not complete high school.

In computing the average number of credits earned, courses with zero credits (because of a failing course grade or a non-credit bearing course) were counted as zero credits. The text mentions only differences reaching at least the  $p < .01$  level of significance.

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<sup>21</sup> Credits typically are expressed as Carnegie units. A Carnegie unit is a standard of measurement used for secondary education that represents the completion of a course that meets for one period a day of at least 40 minutes for one academic year. In NLTS2, the number of credits, in Carnegie units, usually were indicated on transcripts. The courses that did not have Carnegie units assigned were converted to the Carnegie standard unit of one period per day per academic year.

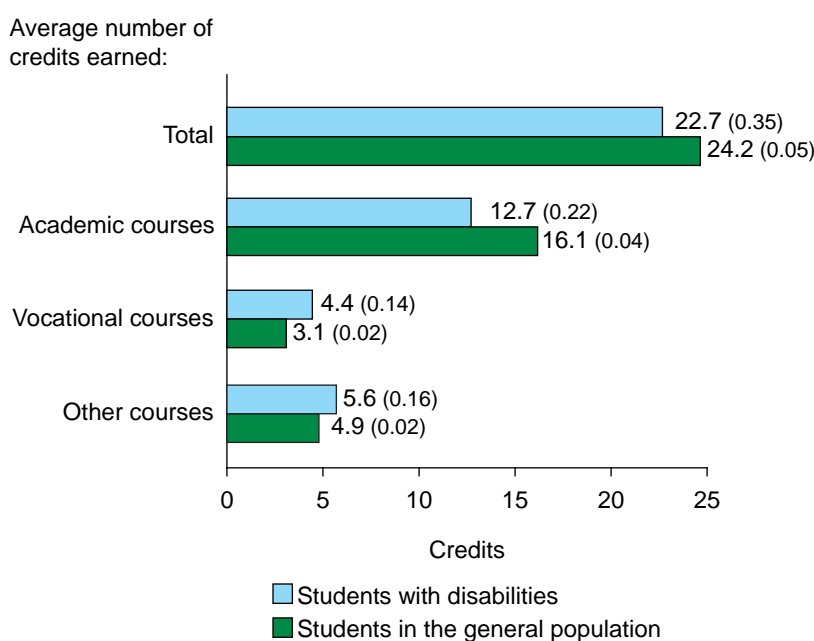
<sup>22</sup> Students who attended non-typical schools (e.g., schools serving only students with disabilities, hospital-based schools, home schools) are not included in these analyses.

## An Overview of Credits Earned in Academic, Vocational, and Nonacademic, Nonvocational Types of Courses

This section describes the overall pattern of credits earned by secondary school students with disabilities attending typical high schools, including total credits earned and their distribution among academic, vocational, and nonacademic, nonvocational courses. The distribution of credits earned across these subject areas may reflect the graduation requirements of a student's state and district of residence; the abilities, preferences, and goals of students themselves; and/or other factors.

High school students with disabilities earned, on average, 22.7 credits<sup>23</sup> during their time in high school<sup>24</sup> (figure 1). Academic courses<sup>25</sup> accounted for an average of 12.7 credits, more than

Figure 1. Average number of credits earned by students with disabilities and students in the general population



NOTE: Standard errors are in parentheses. Numbers are weighted population estimates based on samples that ranged across types of courses from approximately 6,080 to 6,110 for students in NLTS2 and include 14,800 students in ELS:2002.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), transcript data collection, 2002 through 2009; U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002), High School Transcript Study.

<sup>23</sup> Credits are expressed as Carnegie units. A Carnegie unit represents the completion of a course that meets for one period a day for at least 40 minutes for 1 academic year. The number of credits, in Carnegie units, usually was indicated on transcripts. For the courses that did not have Carnegie units assigned were converted to the Carnegie standard unit of one period per day per academic year.

<sup>24</sup> The analyses included in this chapter are based only on complete transcripts, with the exception of the by-grade-level analyses. Transcripts for students who had completed their high school programs typically included 4 or more years of coursework. Transcripts for students who had not completed high school were considered to be complete if transcript information was available for all of the grading periods the students had been in high school prior to leaving. For example, if a student had dropped out of high school after 9th grade, the student's one year of 9th-grade transcript data would be included here. Partial transcripts (e.g., only 9th-grade transcript information was collected for a student who had continued his or her education beyond the 9th grade) were not included in the analyses in this chapter, other than the by-grade-level analyses.

<sup>25</sup> Academic courses include English, mathematics, science, social studies, and foreign languages.

half of the total credits earned in high school. In contrast, vocational courses accounted for an average of 4.4 credits, and other courses that were neither academic nor vocational, such as physical education and life skills, accounted for an average of 5.6 credits.

Students with disabilities earned fewer overall credits, on average, than did their peers in the general population (22.7 vs. 24.2).<sup>26</sup> The coursework of students in the general population was focused more heavily on academic courses, compared with that of students with disabilities. Students in the general population accrued, on average, 3.4 more academic credits during their time in high school than did students with disabilities (16.1 vs. 12.7). In contrast, students with disabilities earned more vocational and nonacademic, nonvocational credits than did students in the general population (4.4 vs. 3.1 and 5.6 vs. 4.9, respectively).

### ***Disability Differences in Credits Earned in Academic, Vocational, and Nonacademic, Nonvocational Courses***

Total credits accrued during high school ranged from 17.8 credits for students with emotional disturbances to 28.5 credits for students with autism (table 1). Students with emotional disturbances earned fewer credits than students in all other disability categories. Their lower rate of credit earning parallels their lower rate of high school completion compared with their peers in other disability categories (National Longitudinal Transition Study-2 2005). Students with other health impairments averaged fewer credits (22.0) than students with speech/language impairments, hearing impairments, orthopedic impairments, autism, multiple disabilities, or deaf-blindness (25.3 to 28.5).

Students with autism earned more credits (28.5) than students with learning disabilities, speech/language impairments, visual impairments, mental retardation, or traumatic brain injuries (22.8 to 24.5). Students with orthopedic impairments (26.0 credits) or hearing impairments (25.6 credits) also accrued more credits than students with learning disabilities (23.0 credits).

Accrued academic course credits ranged from 10.6 for students with mental retardation to 15.4 for students with hearing impairments. Students with speech/language impairments, hearing impairments, visual impairments, or orthopedic impairments earned more academic credits (14.8, 15.4, 15.2, and 14.6, respectively) than students with mental retardation, emotional disturbance, other health impairment, traumatic brain injury, and multiple disabilities (10.5 to 12.6). Students with speech/language impairments, hearing impairments, or visual impairments also earned more academic credits than students with learning disabilities (13.2). In addition, students with autism accrued more academic credits (13.3) than students with mental retardation or emotional disturbances (10.6 and 10.5). However, students with autism earned fewer academic credits than students with hearing impairments (15.4). Students with learning disabilities or other health impairments (12.6) also earned more academic credits (13.2) than students with mental retardation or emotional disturbances (10.6 and 10.5), and students with learning disabilities earned more academic credits than students with multiple disabilities (13.2 vs. 11.3).

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<sup>26</sup> General population estimates are based on calculations using the restricted use dataset from the U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002), High School Transcript Study. All general population estimates include students who have completed high school, as well as those who have not (i.e., both graduates and dropouts have been included).

Table 1. Average number of credits earned, by disability category

	Learning disability	Speech/language impairment	Mental retardation	Emotional disturbance	Hearing impairment	Visual impairment	Orthopedic impairment	Other health impairment	Autism	Traumatic brain injury	Multiple disabilities	Deaf-blindness
Average number of credits earned:												
Total	23.0 (0.47)	24.2 (0.46)	23.8 (0.71)	17.8 (0.75)	25.6 (0.68)	24.5 (0.92)	26.0 (0.81)	22.0 (0.58)	28.5 (1.23)	22.8 (1.03)	25.3 (1.04)	25.7 (1.31)
Academic courses	13.2 (0.30)	14.8 (0.34)	10.6 (0.37)	10.5 (0.47)	15.4 (0.50)	15.2 (0.68)	14.6 (0.47)	12.6 (0.36)	13.3 (0.62)	12.2 (0.75)	11.3 (0.59)	13.2 (0.94)
Vocational courses	4.4 (0.19)	4.0 (0.19)	5.8 (0.31)	3.2 (0.23)	4.5 (0.30)	3.2 (0.31)	4.2 (0.28)	3.9 (0.24)	5.5 (0.89)	4.3 (0.50)	5.9 (0.49)	4.2 (0.51)
Nonacademic, nonvocational courses	5.4 (0.19)	5.4 (0.19)	7.4 (0.42)	4.1 (0.23)	5.8 (0.27)	6.1 (0.41)	7.2 (0.40)	5.5 (0.26)	9.7 (0.72)	6.3 (0.57)	8.2 (0.72)	8.4 (1.21)

NOTE: Standard errors are in parentheses. Numbers are weighted population estimates derived from analyses in which the total sample ranged across types of courses from approximately 6,080 to 6,110 students.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), transcript data collection, 2002 through 2009.

Credits earned for vocational coursework ranged from 3.2 for students with emotional disturbances or visual impairments to 5.9 for students with multiple disabilities. Students with multiple disabilities averaged more vocational credits (5.9) than students with learning disabilities, emotional disturbances, speech/language impairments, visual impairments, orthopedic impairments, and other health impairments (3.2 to 4.4). Youth with mental retardation also exceeded these groups in vocational credits earned (5.8 on average) as well as students with hearing impairments and deaf-blindness (4.5 and 4.2 credits, respectively). In contrast, students with emotional disturbances or visual impairments averaged fewer vocational credits (3.2 for both groups) than students with learning disabilities or hearing impairments (4.4 and 4.5 for each disability category respectively), and students with emotional disturbances earned fewer vocational credits than students with orthopedic impairments (4.2).

Credits earned in nonacademic, nonvocational courses (e.g., physical education or fine arts) ranged from 4.1 credits for students with emotional disturbances to 9.7 credits for students with autism. Students with emotional disturbances earned fewer nonacademic, nonvocational credits, on average, than students in all other disability categories. Conversely, students with autism earned more nonacademic, nonvocational credits than students all other disability categories except those with mental retardation, multiple disabilities, or deaf-blindness (7.6 to 8.6 credits). Students with mental retardation or multiple disabilities also accrued more nonacademic, nonvocational credits (7.4 and 8.2, respectively) than students with learning disabilities or speech/language impairments (5.4), or hearing or other health impairments (5.8, and 5.5, respectively). In addition, students with orthopedic impairments averaged more nonacademic, nonvocational credits (7.2) than students with learning disabilities, speech/language impairments, other health impairments, or hearing impairments.

### **Grade-Level Differences in Credits Earned in Academic, Vocational, and Nonacademic, Nonvocational Courses**

The total number of credits earned did not differ significantly across grade levels, with the exception of students in programs not assigned a grade level (table 2).<sup>27</sup> On average, students earned 6.1 credits in 9th and 10th grades and 6.3 credits in 11th and 12th grades; those who remained in high school beyond the 12th grade earned an average of 6.2 credits in the extended 13th grade.<sup>28</sup> Students in ungraded programs averaged 3.4 credits per school year, significantly fewer credits than students in 9th through 12th grades.

Table 2. Average number of credits earned by students with disabilities, by grade level

	9th grade	10th grade	11th grade	12th grade	Extended 13th grade	Ungraded <sup>1</sup>
Average number of credits earned:						
Total	6.1 (0.08)	6.1 (0.10)	6.3 (0.13)	6.3 (0.13)	6.2 (1.45)	3.4 (0.99)
Academic courses	3.6 (0.06)	3.7 (0.07)	3.5 (0.08)	2.9 (0.08)	2.6 (0.76)	1.3 (0.59)
Vocational courses	0.8 (0.03)	0.9 (0.04)	1.4 (0.06)	1.9 (0.08)	1.6 (0.54)	0.5 (0.24)
Nonacademic, nonvocational courses	1.7 (0.04)	1.5 (0.05)	1.4 (0.06)	1.5 (0.08)	1.9 (0.70)	1.6 (0.53)

<sup>1</sup> Number of credits per school year.

NOTE: Standard errors are in parentheses. Analyses for each grade level include all students with data for that grade level. Numbers are weighted population estimates derived from analyses in which the total sample ranged across types of courses from approximately 6,080 to 6,010 9th-graders, 6,700 to 6,780 10th-graders, 6,130 to 6,220 11th-graders, 5,460 to 5,500 12th-graders, 90 to 100 13th-graders, and 50 ungraded students.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), transcript data collection, 2002 through 2009.

Other than in ungraded programs, students' coursework was focused more heavily on academic courses than on other subjects. Credits earned in academic courses in grades 9 through 13 ranged from 2.6 to 3.7, whereas from 0.8 to 1.9 credits were earned in vocational courses and from 1.4 to 1.9 credits were accrued in nonacademic, nonvocational courses.

Despite this strong academic emphasis in course taking across grade levels, the focus on academic courses declined in students' later high school years. For example, students earned 3.6, 3.7, and 3.5 academic credits in 9th, 10th, and 11th grades, respectively, significantly more than the 2.9 academic credits earned in 12th grade. In contrast, students earned more vocational credits across their high school years, increasing from 0.8 in 9th grade to 0.9 in 10th grade, 1.4 in

<sup>27</sup> As indicated in footnote 2, only students with complete transcript information for the years they had been in high school were included in the analyses for this chapter, with the exception of the by-grade-level analyses. To benefit from the full range of available transcript information, transcript data for the students not included in the overall analyses were included in the by-grade-level analyses. To be included in the by-grade-level analyses, a transcript needed to be complete for the grade for which it provided information.

<sup>28</sup> The Individuals with Disabilities Education Act (IDEA) allows students with disabilities to remain in public school transition programs through age 21 if they have transition needs and have not received a regular high school diploma. Students who continued their high school programs beyond 12th grade often remained in high school for longer than 1 additional school year; on average, students spent 1.57 school years in extended 13th grade. The credits reported here reflect the total credits earned while in an extended-13th-grade program.

11th grade, and 1.9 in 12th grade. Students in extended 13th grade earned 2.6 academic credits and 1.6 vocational credits. In a single school year, students in ungraded programs earned 1.3 credits in academic courses, and 0.5 vocational credits

Credits earned in nonacademic, nonvocational courses ranged from 1.4 in 11th grade to 1.9 in extended 13th grade.

### ***Demographic Differences in Credits Earned in Academic, Vocational, and Nonacademic, Nonvocational Courses***

Earned credits differed to some extent by gender, race/ethnicity, and household income (table 3). Although the total number of credits earned overall and in academic courses did not differ significantly by gender, males earned more vocational course credits, on average, than females (4.7 vs. 3.8). In contrast, females concentrated more on nonacademic, nonvocational courses, averaging 6.3 credits in those courses, compared with 5.3 credits earned by males. White students earned more vocational credits (4.8) than either African American or Hispanic students (3.8 and 3.9, respectively). Students from households with incomes of \$25,000 or less earned fewer total credits in high school (20.7), on average, than students from households with incomes of \$25,001 to \$50,000 (23.9) or more than \$50,000 (24.2). Students in the lowest income group also earned fewer academic credits—11.5, compared with 13.1 and 13.7 earned by students in the middle and highest income groups.

Table 3. Average number of credits earned by students with disabilities, by demographic characteristics

	Gender		Race/ethnicity			Household income		
	Male	Female	White	African American	Hispanic	\$25,000 or less	\$25,001 to \$50,000	More than \$50,000
Average number of credits earned:								
Total	22.5 (0.44)	23.0 (0.61)	23.5 (0.42)	21.0 (0.90)	21.9 (1.00)	20.7 (0.69)	23.9 (0.67)	24.2 (0.63)
Academic courses	12.6 (0.27)	12.9 (0.37)	12.9 (0.26)	12.0 (0.56)	13.0 (0.63)	11.5 (0.40)	13.1 (0.41)	13.7 (0.41)
Vocational courses	4.7 (0.18)	3.8 (0.22)	4.8 (0.18)	3.8 (0.32)	3.9 (0.39)	4.1 (0.26)	4.8 (0.27)	4.6 (0.28)
Nonacademic, nonvocational courses	5.3 (0.19)	6.3 (0.28)	5.8 (0.19)	5.2 (0.34)	5.1 (0.49)	5.1 (0.29)	5.9 (0.31)	5.9 (0.29)

NOTE: Standard errors are in parentheses. Numbers for each of the three demographic analyses are weighted population estimates derived from analyses in which the total sample ranged across types of courses from approximately 6,080 to 6,110 students.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), transcript data collection, 2002 through 2009.

### ***Differences in Credits Earned in Academic, Vocational, and Nonacademic, Nonvocational Courses, by High School Completion Status***

This section focuses on high school completers and noncompleters to illuminate the amount of education they acquired before leaving high school, as indicated by the number of credits earned. Not surprisingly, students who completed their high school programs generally spent more years in high school than noncompleters and, thus, earned more credits (table 4). On

average, completers earned more than twice as many credits as noncompleters (25.8 vs. 11.8). This pattern was apparent across the various types of courses. High school completers earned more credits than noncompleters from academic courses (14.4 vs. 6.9), vocational courses (5.2 vs. 2.1), and nonacademic, nonvocational courses (6.4 vs. 3.0).

Table 4. Average number of credits earned by students with disabilities, by high school completion status

	Completers	Non-completers
Average number of credits earned:		
Total	25.8 (0.29)	11.8 (0.62)
Academic courses	14.4 (0.20)	6.9 (0.39)
Vocational courses	5.2 (0.17)	2.1 (0.17)
Nonacademic, nonvocational courses	6.4 (0.18)	3.0 (0.21)

NOTE: Standard errors are in parentheses. Numbers are weighted population estimates derived from analyses in which the total sample ranged across types of courses from approximately 6,080 to 6,110 students.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), transcript data collection, 2002 through 2009.

## Academic Course Taking

As noted above, academic courses accounted for more than half of the total credits earned by students with disabilities. This section provides further detail on the academic courses students with disabilities took, including how credits were distributed across the subject areas of English, mathematics, science, social studies, and foreign language; how their academic course taking compared with that of students in the general population; and how academic course taking differed for students with different primary disabilities, demographic characteristics, grade levels, and school completion status. There were three types of math courses, as presented in Table 5. For the three types of math courses, if a student had earned any credits in the overall math category and had not taken any credits in a subset type of class (e.g., had six math credits but no advanced math credits), the number of credits for that subset was set to zero, to more accurately reflect the denominator when computing the average number of credits earned in the subset math course.

Academic courses were part of the school programs of virtually all students with disabilities (99 percent) attending typical high schools (table 5) and accounted for more than half (56 percent) of the course credits they earned. The percentage enrolled in any academic courses did not differ significantly between students with disabilities and students in the general population; however, the percentage of total high school credits earned in academic courses differed significantly, with students in the general population earning more academic credits on average than students with disabilities (66 percent vs. 56 percent).<sup>29</sup>

<sup>29</sup> General population estimates are based on calculations using the restricted use dataset from the U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002), High

Table 5. Academic course taking by students with disabilities and students in the general population

	Students with disabilities in grades 9 through 12	Students in the general population in grades 9 through 12
Percentage enrolled in any academic courses	99.1 (0.37)	99.9 (0.03)
Percentage of total high school credits earned in academic courses	56.1 (0.58)	66.4 (0.01)
Average number of credits earned in:		
English	4.0 (0.07)	4.1 (0.01)
Mathematics	2.9 (0.05)	3.4 (0.01)
Basic	1.6 (0.06)	0.5 (0.01)
Mid-level	1.2 (0.06)	2.0 (0.01)
Advanced	0.1 (0.01)	0.9 (0.01)
Science	2.3 (0.05)	3.0 (0.01)
Social studies	3.0 (0.06)	3.8 (0.01)
Foreign language	0.5 (0.04)	1.8 (0.01)

NOTE: Standard errors are in parentheses. Values are weighted population estimates derived from analyses in which the total sample ranged across variables from approximately 5,710 to 6,010 students in NLTS2 and included 14,800 students in ELS:2002.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), transcript data collection, 2002 through 2009; U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002), High School Transcript Study.

The number of credits earned by students with disabilities varied by academic subject. Students with disabilities earned significantly more credits, on average, in English courses (4.0 credits) than in any other subject. An average of 3.0 credits were earned by students with disabilities in social studies courses, significantly more than the 2.3 credits earned in science courses and the 0.5 credit earned in foreign language courses. Course credits earned in mathematics (2.9, on average) also significantly exceeded those earned in science, and credits earned in both mathematics and science exceeded those earned in foreign language courses. Among the various kinds of mathematics courses taken by students with disabilities, credits earned in basic mathematics<sup>30</sup> (1.6) exceeded the average of those earned in both mid-level

School Transcript Study. All general population estimates include students who have completed high school, as well as those who have not (i.e., both graduates and dropouts have been included).

<sup>30</sup> Basic mathematics courses include mathematics (undifferentiated); integrated, consumer, basic, general, remedial, fundamental, and “higher level” mathematics; and pre-algebra. Mid-level mathematics courses include



mathematics (1.2) and advanced mathematics courses (0.1), and the average number of credits earned in mid-level mathematics exceeded the average number earned in advanced mathematics.

Comparing the credits earned by students with disabilities in specific academic subjects with those of students in the general population, the average number of credits earned in English courses did not differ. For all the other major academic subjects, students with disabilities earned fewer credits on average, than students in the general population: students with disabilities earned 2.9 credits in mathematics, 2.3 in science, 3.0 in social studies, and 0.5 in foreign language, compared with 3.4 credits in mathematics, 3.0 in science, 3.8 in social studies, and 1.8 in foreign language for students in the general population.

### ***Disability Differences in Academic Course Taking***

The predominance of academic course taking in the school programs of students with disabilities as a whole also is apparent across disability categories (table 6). The percentage of students with disabilities taking any academic courses ranged from 93 percent of students with multiple disabilities and 95 percent of students with mental retardation to virtually all students with learning disabilities, speech/language impairments, other health impairments, or traumatic brain injuries (percentages round to 100). Students with mental retardation were less likely to enroll in any academic course than students with emotional disturbances, hearing impairments, orthopedic impairments, or autism. There were no other significant differences in the percentage of students enrolled in any academic courses by disability category.

The average percentage of all credits earned that came from enrollment in academic classes ranged from 46 percent for students with mental retardation or multiple disabilities to 60 percent, 61 percent, and 61 percent for students with hearing impairments, speech/language impairments, or visual impairments, respectively. Students with speech/language impairments, hearing impairments, or visual impairments also earned a higher percentage of credits in academic subjects than students with traumatic brain injuries (53 percent), and students with speech/language impairments or visual impairments earned a higher percentage of credits in academics than students with learning disabilities or deaf-blindness (57 percent and 51 percent, respectively). The percentage of credits earned in academics also was higher for students with speech/language impairments (61 percent) than for students with orthopedic impairments or other health impairments (59 percent and 58 percent, respectively).

Within each disability category, more credits were earned in English classes than in any other subject area; however, the average number of credits earned in English classes varied by disability category. Students with emotional disturbances averaged fewer credits in English (3.3) than students with learning disabilities (4.1), speech/language impairments (4.3), hearing impairments (4.6), visual impairments (4.3), orthopedic impairments (4.6), or autism (4.3). Students with other health impairments averaged fewer credits (3.9) than students with speech/language impairments, hearing impairments, or orthopedic impairments. In addition, students with orthopedic impairments earned more credits in English (4.6) than students with learning disabilities (4.1) or mental retardation (3.7), and students with hearing impairments or speech/language impairments earned more English credits than students with mental retardation.

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algebra (I, II, and undifferentiated) and geometry. Advanced mathematics courses include advanced math (undifferentiated), algebra/trigonometry, trigonometry, trigonometry/geometry, pre-calculus, statistics/probability, and calculus (all levels).

Table 6. Academic course taking, by disability category

	Learning disability	Speech/language impairment	Mental retardation	Emotional disturbance	Hearing impairment	Visual impairment	Orthopedic impairment	Other health impairment	Autism	Traumatic brain injury	Multiple disabilities	Deaf-blindness
Percentage enrolled in any academic courses	99.9 (0.16)	99.7 (0.34)	94.6 (1.47)	99.3 (0.61)	99.4 (0.64)	98.9 (1.22)	99.2 (0.69)	99.8 (0.29)	99.2 (0.89)	99.9 (0.33)	93.1 (2.40)	97.0 (2.73)
Percentage of credits earned in academic courses	57.3 (0.72)	61.0 (0.80)	45.9 (1.35)	58.7 (1.13)	60.1 (1.18)	61.1 (1.70)	58.5 (1.20)	57.5 (0.91)	48.5 (2.01)	53.1 (2.26)	45.8 (2.05)	51.0 (3.28)
Percentage enrolled in any academic courses	99.9 (0.16)	99.7 (0.34)	94.6 (1.47)	99.3 (0.61)	99.4 (0.64)	98.9 (1.22)	99.2 (0.69)	99.8 (0.29)	99.1 (0.89)	99.9 (0.35)	93.1 (2.40)	97.0 (2.73)
Percentage of credits earned in academic courses	57.3 (0.72)	61.0 (0.80)	48.3 (1.18)	59.1 (1.13)	60.4 (1.13)	61.9 (1.53)	57.0 (1.15)	57.6 (0.89)	49.0 (1.99)	53.1 (2.26)	49.1 (1.84)	52.7 (3.01)
Average number of credits earned in:												
English	4.1 (0.10)	4.3 (0.10)	3.7 (0.14)	3.3 (0.17)	4.6 (0.18)	4.3 (0.21)	4.6 (0.16)	3.9 (0.12)	4.3 (0.23)	3.9 (0.25)	3.7 (0.20)	4.3 (0.37)
Mathematics	3.0 (0.07)	3.3 (0.08)	2.7 (0.11)	2.4 (0.10)	3.4 (0.12)	3.3 (0.16)	3.3 (0.12)	2.9 (0.09)	3.2 (0.17)	2.8 (0.18)	2.7 (0.16)	3.0 (0.24)
Basic	1.6 (0.08)	1.3 (0.08)	2.3 (0.11)	1.3 (0.09)	1.6 (0.13)	1.2 (0.17)	1.9 (0.13)	1.4 (0.09)	2.0 (0.18)	1.7 (0.20)	2.4 (0.16)	2.0 (0.29)
Mid-level	1.3 (0.08)	1.7 (0.09)	0.4 (0.06)	1.0 (0.09)	1.6 (0.13)	1.9 (0.17)	1.4 (0.11)	1.4 (0.10)	1.1 (0.13)	1.1 (0.17)	0.3 (0.09)	1.0 (0.20)
Advanced	0.1 (0.02)	0.2 (0.04)	#	0.1 (0.02)	0.2 (0.05)	0.3 (0.07)	0.1 (0.03)	0.1 (0.02)	0.2 (0.05)	0.1 (0.04)	#	0.2 (0.06)
Science	2.4 (0.07)	2.8 (0.08)	1.8 (0.09)	2.0 (0.12)	2.9 (0.13)	2.8 (0.14)	2.6 (0.10)	2.5 (0.09)	2.2 (0.14)	2.3 (0.19)	1.9 (0.13)	2.3 (0.24)
Social studies	3.2 (0.09)	3.4 (0.09)	2.2 (0.11)	2.5 (0.12)	3.5 (0.14)	3.4 (0.18)	3.4 (0.14)	2.9 (0.11)	2.8 (0.18)	2.7 (0.20)	2.5 (0.17)	2.7 (0.25)
Foreign language	0.6 (0.05)	1.0 (0.08)	0.1 (0.02)	0.4 (0.06)	1.0 (0.11)	1.4 (0.17)	0.7 (0.09)	0.5 (0.06)	0.6 (0.11)	0.4 (0.11)	0.3 (0.08)	0.6 (0.15)

# Rounds to zero.

NOTE: Standard errors are in parentheses. Values are weighted population estimates derived from analyses in which the total sample ranged across variables from approximately 5,710 to 6,010 students.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), transcript data collection, 2002 through 2009.

On average, 2.4 to 3.4 credits were earned in mathematics courses across disability categories. Similar to their rank relative to others in earning English credits, students in the category of emotional disturbance averaged significantly fewer credits in mathematics (2.4) than students with disabilities in every other category except traumatic brain injury, multiple disabilities, and deaf-blindness (2.7 to 3.0). Students with mental retardation or other health impairments earned fewer mathematics credits (2.7 and 2.9 respectively) than students with speech/language impairments, hearing impairments, or orthopedic impairments (3.3 to 3.4); students with other health impairments also earned fewer mathematics credits than students with visual impairments (3.3). Fewer mathematics credits were earned by students with traumatic

brain injuries or learning disabilities than by students with hearing impairments (2.8 and 3.0, respectively, vs. 3.4), and students with learning disabilities also earned fewer credits in mathematics than students with speech/language impairments (3.0 vs. 3.3).

The average number of credits earned in basic mathematics courses ranged from 1.2 to 2.4. Students with speech/language impairments, emotional disturbances, visual impairments, or other health impairments averaged significantly fewer credits (1.2 to 1.4) than students with mental retardation, orthopedic impairments, autism, or multiple disabilities (1.9 to 2.4). Similarly, students with learning disabilities, hearing impairments, orthopedic impairments, or traumatic brain injuries earned fewer credits in basic mathematics (1.6 to 1.9) than students with mental retardation or multiple disabilities (2.3 and 2.4, respectively).

Credits earned in mid-level mathematics courses, on average, ranged from 0.3 to 1.9. Students with mental retardation or multiple disabilities averaged fewer credits in mid-level mathematics courses (0.4 and 0.3, respectively) than students in any other disability category (1.0 to 1.9). In addition, on average, students with learning disabilities, emotional disturbances, orthopedic impairments, autism, traumatic brain injuries, or deaf-blindness earned fewer credits in mid-level mathematics (1.1 to 1.4) than students with visual impairments (1.9). Students with speech/language impairments also outpaced students with emotional disturbances, autism, traumatic brain injuries, or deaf-blindness in credits earned in mid-level math. Fewer mid-level mathematics credits were also earned by students with other health impairments (1.4), compared with students with visual impairments (1.9). In addition, students with autism or emotional disturbances earned fewer of these mathematics credits (1.0 and 1.1, respectively) than students with hearing impairments (1.6).

Fewer differences between disability categories were noted regarding credits earned in advanced mathematics courses, which ranged from 0.0 to 0.3. Students in the mental retardation and multiple disabilities categories had an average of 0.0 credit in advanced mathematics courses, compared with 0.1 to 0.3 credit for students with speech/language impairments, hearing impairments, visual impairments, orthopedic impairments, or autism. Students with emotional disturbances and students with other health impairments earned significantly fewer credits in advanced mathematics courses than students with visual impairments (0.1 vs. 0.3).

The average number of credits earned in science ranged from 1.8 to 2.9 across disability categories. From 1.8 to 2.0 credits were earned in science, on average, by students with emotional disturbances, mental retardation, or multiple disabilities, significantly fewer than the science credits earned by students with speech/language impairments, hearing impairments, visual impairments, or orthopedic impairments (2.6 to 2.9). Students with mental retardation or emotional disturbances also earned fewer science credits, on average, than students with learning disabilities or other health impairments (2.4 and 2.5, respectively). Students with learning disabilities, or autism earned fewer credits in science (2.2 to 2.4) than students with speech/language impairments or hearing impairments (2.8 and 2.9, respectively). Students with autism also earned fewer credits in science courses than students with visual impairments (2.2 vs. 2.8).

Credits earned in social studies, on average, ranged from 2.2 to 3.5, with students with mental retardation, emotional disturbances, and multiple disabilities again earning fewer credits (2.2 and 2.5, respectively) than students in several other categories: learning disabilities, speech/language impairment, hearing impairment, visual impairment, and orthopedic impairment (3.2 to 3.5). Students with mental retardation also earned fewer social studies credits than students with other health impairments (2.2 vs. 2.9). Additionally, students with other health

impairments, autism, traumatic brain injuries, or multiple disabilities earned fewer social studies credits (2.5 to 2.9), on average, than students with speech/language impairments, hearing impairments, or orthopedic impairments (3.4 to 3.5), and students with traumatic brain injuries or multiple disabilities (2.5 and 2.7) also earned fewer credits in social studies courses than students with visual impairments (3.4).

The average number of credits earned in foreign language ranged from 0.1 credit to 1.4 credits. Students with mental retardation earned fewer credits in foreign language courses (0.1) than students in any other disability category except multiple disabilities (0.4 to 1.4). Fewer foreign language credits were earned by students with learning disabilities, emotional disturbances, other health impairments, autism, traumatic brain injuries, or multiple disabilities (0.3 to 0.6) than by students with speech/language impairments, hearing impairments, or visual impairments (1.0 to 1.4). Students with multiple disabilities or emotional disturbances earned fewer credits in foreign language courses than students with orthopedic impairments (0.3 and 0.4, respectively, vs. 0.7), who in turn earned fewer foreign language credits than students with speech/language impairments or visual impairments (1.0 and 1.4). In addition, students with deaf-blindness earned fewer credits in foreign language courses (0.6) than students with visual impairments (1.4).

### ***Grade-Level Differences in Academic Course Taking***

There were no significant differences across grade levels in the percentage of students who had taken one or more academic courses as part of their high school programs. However, differences were apparent in the percentage of total credits earned that were in academic courses (table 7). Twelfth-grade students averaged a smaller proportion of their credits from academic classes (47 percent) than students in 9th through 11th grades (55 percent to 60 percent). The percentage of total credits that came from academic classes also was smaller for 11th-graders (55 percent) than for 9th- or 10th-graders (58 percent and 60 percent).

Across 9th through 12th grades, the average number of credits earned in English by students with disabilities did not differ significantly; however, there were significant differences in credits earned in mathematics by grade level. Students with disabilities in 9th and 10th grades earned more credits in mathematics, on average, (0.9 for both groups) than students in 11th and 12th grades (0.8 and 0.5, respectively), and students in 11th grade earned more credits in mathematics courses than students in 12th grade. In basic-level mathematics courses, 9th-grade students with disabilities earned more credits (0.6), on average, than students in 10th and 11th grades (0.5 for both groups). Students with disabilities in 10th grade averaged more credits in mid-level mathematics courses (0.4) than students in 9th, 11th, and 12th grades (0.2 to 0.3), and students in 9th grade earned more credits in mid-level mathematics courses (0.3) than students in 12th grade (0.2). For advanced mathematics courses, students with disabilities in 12th grade earned more credits (0.1), on average, than students in 9th through 11th grades, as well as students in extended 13th grade (0.0).

There were a few significant differences in the average number of credits earned in other subjects by grade level. Credits in science courses were higher for students with disabilities in 9th and 10th grades (0.8), compared with students in 11th and 12th grades (0.6 and 0.3, respectively), and students with disabilities in 11th grade earned more science credits than

Table 7. Academic course taking by students with disabilities, by grade level

	9th grade	10th grade	11th grade	12th grade	Extended 13th grade	Ungraded
Percentage enrolled in any academic courses	98.1 (0.50)	97.9 (0.54)	97.6 (0.61)	96.7 (0.77)	86.2 (8.91)	90.6 (9.83)
Percentage of total high school credits earned in academic courses	58.4 (0.72)	60.2 (0.76)	55.2 (0.87)	47.4 (0.94)	45.8 (6.95)	40.5 (10.87)
Average number of credits earned in:						
English	1.1 (0.03)	1.1 (0.03)	1.1 (0.04)	1.1 (0.03)	1.0 (0.29)	0.5 (0.18)
Mathematics	0.9 (0.02)	0.9 (0.02)	0.8 (0.02)	0.5 (0.03)	0.7 (0.26)	0.4 (0.17)
Basic	0.6 (0.02)	0.5 (0.02)	0.5 (0.03)	0.3 (0.02)	0.6 (0.27)	0.3 (0.27)
Mid-level	0.3 (0.02)	0.4 (0.02)	0.4 (0.03)	0.2 (0.02)	0.1 (0.08)	#
Advanced	#	#	#	0.1 (0.01)	#	#
Science	0.8 (0.02)	0.8 (0.02)	0.6 (0.03)	0.3 (0.02)	0.4 (0.17)	0.2 (0.13)
Social studies	0.7 (0.02)	0.8 (0.02)	0.9 (0.03)	0.9 (0.03)	0.5 (0.26)	0.3 (0.14)
Foreign language	0.1 (0.01)	0.2 (0.02)	0.2 (0.02)	0.1 (0.01)	0.1 (0.10)	#

# Rounds to zero.

NOTE: Standard errors are in parentheses. Analyses for each grade level include all students with data for that grade level. Values are weighted population estimates derived from analyses in which the total sample ranged across variables from approximately 6,040 to 7,230 9th-graders, 6,560 to 6,860 10th-graders, 4,660 to 5,570 11th-graders, 2,950 to 5,570 12th-graders, and 50 to 100 13th-graders.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), transcript data collection, 2002 through 2009.

students in 12th grade. Earned credits in social studies courses were higher among 11th- and 12th-graders (0.9 for both groups), compared with 9th- and 10th-graders (0.7 and 0.8, respectively). Students with disabilities in 10th and 11th grades earned more credits in foreign language courses (0.2) than students in 9th and 12th grades (0.1). There were no other significant differences in academic credits earned by grade level.

### ***Demographic Differences in Academic Course Taking***

A few significant differences were noted in the academic course taking of students with disabilities who had different demographic characteristics (table 8). There were no differences in the percentage of students with disabilities taking any academic courses by gender, race/ethnicity, or household income, but there was one significant difference in the average percentage of all credits earned that came from academic courses; Hispanic students with disabilities earned a higher percentage of their total credits from academic classes than White students with disabilities (60 percent vs. 55 percent).

Regarding specific types of academic courses, male and female students with disabilities did not differ significantly in credits earned in any type of academic course. There were differences,

Table 8. Academic course taking by students with disabilities, by demographic characteristics

	Gender		Race/ethnicity			Household income		
	Male	Female	White	African American	Hispanic	\$25,000 or less	\$25,001 to \$50,000	More than \$50,000
Percentage enrolled in any academic courses	99.2 (0.43)	98.9 (0.69)	99.3 (0.39)	98.4 (1.14)	99.2 (1.09)	98.5 (0.86)	99.3 (0.66)	99.7 (0.41)
Percentage of total high school credits earned in academic courses	56.0 (0.73)	56.1 (0.98)	55.2 (0.65)	56.6 (1.67)	60.3 (1.61)	54.8 (1.19)	55.7 (1.06)	56.8 (0.98)
Average number of credits earned in:								
English	4.0 (0.09)	4.1 (0.13)	4.0 (0.09)	3.9 (0.19)	4.3 (0.21)	3.8 (0.14)	4.2 (0.15)	4.1 (0.13)
Mathematics	2.9 (0.07)	2.9 (0.09)	2.9 (0.06)	2.8 (0.14)	2.7 (0.14)	2.7 (0.10)	2.9 (0.10)	3.1 (0.10)
Basic	1.5 (0.07)	1.7 (0.09)	1.6 (0.07)	1.7 (0.13)	1.4 (0.15)	1.7 (0.10)	1.7 (0.11)	1.5 (0.10)
Mid-level	1.2 (0.07)	1.2 (0.09)	1.2 (0.07)	1.1 (0.12)	1.4 (0.15)	1.0 (0.09)	1.2 (0.10)	1.5 (0.11)
Advanced	0.1 (0.02)	# )	0.1 (0.02)	#	0.1 (0.03)	#	0.1 (0.02)	0.2 (0.03)
Science	2.3 (0.06)	2.4 (0.09)	2.4 (0.06)	2.2 (0.13)	2.2 (0.13)	2.1 (0.09)	2.4 (0.10)	2.5 (0.10)
Social studies	3.0 (0.08)	3.0 (0.10)	3.1 (0.08)	2.7 (0.15)	2.9 (0.17)	2.6 (0.11)	3.2 (0.14)	3.2 (0.11)
Foreign language	0.5 (0.04)	0.6 (0.06)	0.5 (0.04)	0.4 (0.07)	0.9 (0.12)	0.4 (0.05)	0.5 (0.06)	0.7 (0.08)

# Rounds to zero.

NOTE: Standard errors are in parentheses. Values for each of the three demographic analyses are weighted population estimates derived from analyses in which the total sample ranged across variables from approximately 5,710 to 6,010 students.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), transcript data collection, 2002 through 2009.

however, by race/ethnicity and household income. White and Hispanic students with disabilities earned more credits, on average, in advanced mathematics courses (0.1) than African American students (0.0). In addition, Hispanic students with disabilities earned more credits in foreign language courses (0.9) than White or African American students with disabilities (0.5 and 0.4). Students with disabilities from households with incomes greater than \$50,000 earned more credits than students from households with incomes of \$25,000 or less in mathematics (3.1 vs. 2.7), science (2.5 vs. 2.1), social studies (3.2 vs. 2.6), and foreign language (0.7 vs. 0.4). Students from households with incomes of more than \$50,000 also earned more credits in mid-level and advanced mathematics (1.5 and 0.2, respectively) than students from households with incomes of \$25,000 or less (1.0 and 0.0, respectively). In addition, students with disabilities in households with incomes from \$25,001 to \$50,000 earned more credits in social studies courses (3.2) than students in households with incomes of \$25,000 or less (2.6).

### ***Differences in Academic Course Taking, by High School Completion Status***

Students with disabilities who completed high school were as likely to enroll in academic courses as students who did not complete high school—99 percent of both groups had done so—and the proportion of their total credits from those academic courses did not differ significantly

(56 percent and 57 percent, respectively) (table 9). However, there were notable differences in the average number of credits earned for several academic courses by students who had and had

Table 9. Academic course taking by students with disabilities, by high school completion status

	Completers	Non-completers
Percentage enrolled in any academic courses	99.3 (0.38)	98.6 (0.96)
Percentage of total high school credits earned in academic courses	55.8 (0.61)	57.1 (1.57)
Average number of credits earned in:		
English	4.5 (0.07)	2.2 (0.14)
Mathematics	3.2 (0.05)	1.7 (0.10)
Basic	1.7 (0.07)	1.2 (0.09)
Mid-level	1.4 (0.06)	0.5 (0.07)
Advanced	0.1 (0.02)	#
Science	2.6 (0.05)	1.4 (0.11)
Social studies	3.4 (0.06)	1.4 (0.10)
Foreign language	0.6 (0.04)	0.1 (0.03)

# Rounds to zero.

NOTE: Standard errors are in parentheses. Values are weighted population estimates derived from analyses in which the total sample ranged across variables from approximately 5,710 to 6,010 students.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), transcript data collection, 2002 through 2009.

not completed high school. Across all academic subjects, students with disabilities who had completed high school earned more credits than students who had not completed high school, likely reflecting completers having been in school longer than noncompleters. For example, high school completers had more than twice the average number of credits earned in English classes, compared with noncompleters (4.5 vs. 2.2), and the average number of mathematics credits earned overall and in each level of mathematics was higher among high school completers than among noncompleters. Students with disabilities who completed high school accrued an average of 2.6 credits in science courses, compared with an average of 1.4 credits earned by noncompleters, and completers earned an average of 3.4 social studies credits, compared with 1.4 credits by noncompleters. Credits earned in foreign language courses also were higher for completers than for students who had not completed high school (0.6 vs. 0.1).

## Vocational Course Taking

Vocational course enrollment included prevocational courses (e.g., career exploration), occupation-specific courses (e.g., agriculture, alternate business occupations), and work study or cooperative education. There were nine types of occupationally-specific courses, as presented in Table 10. For the nine types of occupationally-specific courses, if a student had earned any credits in the overall occupationally specific category and had not taken any credits in a subset type of class (e.g., had earned four occupationally specific credits but no credits in business), the number of credits for that subset was set to zero, to more accurately reflect the denominator when computing the average number of credits earned in the subset occupationally specific course.

Nearly all students with disabilities (96 percent) enrolled in some type of vocational course during high school (table 10), with those courses accounting for 19 percent of the total high

Table 10. Vocational course taking by students with disabilities and students in the general population

	Students with disabilities in grades 9 through 12	Students in the general population in grades 9 through 12
Percentage enrolled in any vocational courses	95.6 (0.81)	93.5 (0.20)
Percentage of total high school credits earned in vocational courses	18.9 (0.55)	13.9 (0.01)
Average number of credits earned in:		
Prevocational courses	0.6 (0.06)	0.5 (0.01)
Occupation-specific courses	3.3 (0.12)	2.6 (0.02)
Agriculture	0.3 (0.04)	0.2 (0.01)
Business	0.4 (0.03)	0.6 (0.01)
Food services and hospitality	0.2 (0.03)	0.1 (0.01)
Health	0.1 (0.02)	0.1 (0.01)
Home economics	0.1 (0.02)	0.1 (0.01)
Marketing	0.1 (0.02)	0.1 (0.01)
Technology	0.8 (0.05)	0.8 (0.01)
Trade and industry	1.2 (0.08)	0.6 (0.02)
Other occupation-specific courses	0.2 (0.04)	0.1 (0.04)
Work study or cooperative education	0.5 (0.06)	0.1 (0.01)

NOTE: Standard errors are in parentheses. Values are weighted population estimates derived from analyses in which the total sample ranged across variables from 5,150 to 6,180 students in NLTS2 and included 14,800 youth in ELS:2002.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), transcript data collection, 2002 through 2009; U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002), High School Transcript Study.



school credits earned. On average, 0.6 credit was earned for prevocational courses, 3.3 credits were earned in occupation-specific courses, and 0.5 credit was earned in work study or cooperative education. A breakdown of occupation-specific courses ranged from 0.1 credit for health, home economics, and marketing to 1.2 credits for trade and industry occupations.

### ***Disability Differences in Vocational Course Taking***

The percentage of students having ever enrolled in a vocational course ranged from 85 percent of students with traumatic brain injuries to 97 percent of students with learning disabilities (table 11); however, only the difference in enrollment between students with emotional disturbances and students with learning disabilities was significant (90 percent vs. 97 percent).

The percentage of total high school credits earned in vocational courses ranged from 13 percent for students with visual impairments to 23 percent for students with multiple disabilities. Students with mental retardation or multiple disabilities earned a higher percentage of credits in vocational courses (23 percent for both) than students with learning disabilities, emotional disturbances, speech/language impairments, hearing impairments, visual impairments, orthopedic impairments, other health impairments, or autism (13 percent to 19 percent). Similarly, students with learning disabilities earned a higher percentage of high school credits in vocational courses (19 percent) than students with speech/language impairments (16 percent). In contrast, students with visual impairments earned a smaller proportion of high school credits in vocational courses (13 percent) than students with learning disabilities, traumatic brain injuries, or autism (18 percent to 19 percent).

Table 11. Vocational course taking, by disability category

	Learning disability	Speech/language impairment	Mental retardation	Emotional disturbance	Hearing impairment	Visual impairment	Orthopedic impairment	Other health impairment	Autism	Traumatic brain injury	Multiple disabilities	Deaf-blindness
Percentage enrolled in any vocational courses	96.9 (1.01)	96.2 (1.17)	94.1 (1.53)	90.2 (2.14)	96.2 (1.64)	92.2 (3.09)	94.8 (1.69)	95.4 (1.51)	93.1 (2.41)	84.7 (4.68)	92.0 (2.57)	93.6 (3.91)
Percentage of total high school credits earned in vocational courses	18.9 (0.78)	16.1 (0.75)	22.5 (1.04)	16.1 (1.02)	17.0 (1.03)	13.1 (1.17)	16.4 (0.96)	17.0 (0.90)	17.8 (1.40)	18.0 (2.11)	23.2 (1.78)	17.0 (2.63)
Average number of credits earned in:												
Prevocational courses	0.5 (0.06)	0.5 (0.07)	1.5 (0.17)	0.4 (0.07)	0.8 (0.15)	0.4 (0.12)	1.1 (0.17)	0.5 (0.08)	1.3 (0.26)	0.6 (0.17)	1.6 (0.26)	0.9 (0.27)
Occupation-specific courses	3.4 (0.17)	3.1 (0.18)	3.5 (0.22)	2.3 (0.19)	3.4 (0.25)	2.6 (0.27)	2.9 (0.23)	3.1 (0.26)	3.4 (0.36)	3.1 (0.44)	3.7 (0.41)	2.9 (0.47)
Work study or cooperative education	0.5 (0.08)	0.3 (0.06)	0.8 (0.14)	0.5 (0.10)	0.3 (0.08)	0.2 (0.09)	0.3 (0.07)	0.3 (0.08)	0.8 (0.79)	0.5 (0.43)	0.6 (0.16)	0.4 (0.15)

NOTE: Standard errors are in parentheses. Values are weighted population estimates derived from analyses in which the total sample ranged across variables from 5,150 to 6,180 students.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), transcript data collection, 2002 through 2009.

Prevocational courses accounted for 0.4 to 1.6 credits across disability categories. Students with mental retardation or multiple disabilities, on average, had significantly higher numbers of prevocational credits than students in all categories except those with orthopedic impairments, autism, multiple disabilities, and deaf-blindness. (1.5 and 1.6 vs. 0.4 to 0.8). Students with Autism also surpassed those with learning disabilities, speech/language impairments, emotional disturbances, visual impairments, and other health impairments in prevocational credits earned (1.4 vs. .04 to .06), and students with orthopedic impairments earned more prevocational credits than students with learning disabilities, speech/language impairments, emotional disturbances, or visual impairments.

The average number of credits earned in occupation-specific courses ranged from 2.3 for students with emotional disturbances to 3.7 for students with multiple disabilities. Students with emotional disturbances earned significantly fewer credits in occupation-specific courses than students with learning disabilities, speech/language impairments, mental retardation, hearing impairments, autism, or multiple disabilities (2.3 vs. 3.1 to 3.7). Students with visual impairments also earned fewer credits in occupation-specific courses than students with mental retardation (2.6 vs. 3.5).

Credits earned for work study or cooperative education ranged from 0.2 for students with visual impairments to 0.8 for students with mental retardation or autism. Students with visual impairments, speech/language impairments, mental retardation, hearing impairments, orthopedic impairments, or other health impairments earned significantly fewer credits in such courses than students with mental retardation (0.2 or 0.3 vs. 0.8).

### ***Grade-Level Differences in Vocational Course Taking***

Students with disabilities in 9th and 10th grades were less likely to have enrolled in vocational courses than students in 11th and 12th grades (table 12). Sixty-nine percent of students in both 9th and 10th grades had enrolled in one or more vocational courses, whereas 78 percent of students in 11th grade and 82 percent of students in 12th grade had done so. Students with disabilities in extended 13th grade and ungraded programs did not differ from students in 9th through 12th grades. Consistent with their lower enrollment rates for vocational courses, students in the lower grades accrued significantly smaller proportions of their total credits from vocational courses than students in upper grades (13 percent and 14 percent for 9th- and 10th-graders vs. 22 percent and 29 percent for 11th- and 12th-graders, respectively). For students in ungraded programs, vocational courses accounted for a smaller proportion of overall high school credits (10 percent) than for students in grades 11 and 12.

Across grade levels, students were similar in the average number of credits earned from prevocational, occupation-specific, or work study or cooperative education courses.

Table 12. Vocational course taking by students with disabilities, by grade level

	9th grade	10th grade	11th grade	12th grade	Extended 13th grade	Ungraded
Percentage enrolled in any vocational courses	69.2 (1.67)	68.8 (1.75)	78.4 (1.65)	81.8 (1.64)	79.5 (10.41)	76.3 (14.32)
Percentage of total high school credits earned in vocational courses	12.7 (0.55)	14.2 (0.62)	22.1 (0.83)	28.7 (1.04)	24.8 (6.20)	10.5 (4.03)
Average number of credits earned in:						
Prevocational courses	0.1 (0.01)	0.1 (0.02)	0.2 (0.02)	0.3 (0.04)	0.1 (0.15)	0.3 (0.24)
Occupation-specific courses	0.7 (0.04)	0.7 (0.04)	1.1 (0.07)	1.2 (0.07)	1.2 (0.56)	0.3 (0.24)
Work study or cooperative education	#	0.1 (0.01)	0.1 (0.03)	0.4 (0.05)	0.3 (0.23)	#

# Rounds to zero.

NOTE: Standard errors are in parentheses. Analyses for each grade level include all students with data for that grade level. Values are weighted population estimates based on samples that ranged across variables from approximately 4,340 to 7,250 9th-graders, 4,270 to 6,860 10th-graders, 4,440 to 6,290 11th-graders, 4,300 to 5,570 12th-graders, 74 to 100 13th-graders, and 30 to 60 for students in ungraded programs.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), transcript data collection, 2002 through 2009.

### ***Demographic Differences in Vocational Course Taking***

Rates of enrollment and credits earned in vocational courses did not differ significantly by household income or race/ethnicity (table 13). However, males earned a higher proportion of their overall credits in vocational courses than females (20 percent vs. 16 percent).

Table 13. Vocational course taking by students with disabilities, by demographic characteristics

	Gender		Race/ethnicity			Household income		
	Male	Female	White	African American	Hispanic	\$25,000 or less	\$25,001 to \$50,000	More than \$50,000
Percentage enrolled in any vocational courses	96.4 (0.92)	94.1 (1.53)	96.0 (0.95)	94.6 (2.02)	94.8 (2.64)	94.4 (1.64)	96.7 (1.40)	96.5 (1.34)
Percentage of total high school credits earned in vocational courses	20.3 (0.71)	15.8 (0.79)	19.9 (0.68)	17.7 (1.36)	16.7 (1.39)	19.0 (1.04)	19.8 (1.00)	18.9 (1.03)
Average number of credits earned in:								
Prevocational courses	0.6 (0.07)	0.7 (0.09)	0.7 (0.07)	0.6 (0.14)	0.5 (0.13)	0.6 (0.12)	0.6 (0.11)	0.6 (0.09)
Occupation-specific courses	3.6 (0.15)	2.7 (0.17)	3.5 (0.15)	2.9 (0.25)	3.1 (0.33)	3.1 (0.21)	3.6 (0.23)	3.5 (0.22)
Work study or cooperative education	0.5 (0.08)	0.4 (0.11)	0.6 (0.09)	0.3 (0.09)	0.3 (0.11)	0.4 (0.09)	0.6 (0.11)	0.5 (0.14)

NOTE: Standard errors are in parentheses. Values for each of the three demographic analyses are weighted population estimates derived from analyses in which the total sample ranged across variables from approximately 5,150 to 6,180 students.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), transcript data collection, 2002 through 2009.

### **Vocational Course Taking, by High School Completion Status**

Students with disabilities who completed high school were no more likely to have ever enrolled in vocational courses than students who did not complete high school (97 percent vs. 92 percent) (table 14). The percentages of credits earned in such courses by the two groups also were similar (19 percent and 16 percent). However, high school completers earned significantly more vocational credits of all types than noncompleters (0.7 vs. 0.1 prevocational credit, 3.8 vs. 1.7 occupational-specific credits, and 0.6 vs. 0.1 work study or cooperative education credits).

Table 14. Vocational course taking by students with disabilities, by high school completion status

	Completers	Non-completers
Percentage enrolled in any vocational courses	96.7 (0.80)	91.8 (2.22)
Percentage of total high school credits earned in vocational courses	19.4 (0.59)	16.7 (1.32)
Average number of credits earned in:		
Prevocational courses	0.7 (0.07)	0.3 (0.06)
Occupation-specific courses	3.8 (0.14)	1.7 (0.15)
Work study or cooperative education	0.6 (0.08)	0.1 (0.05)

NOTE: Standard errors are in parentheses. Values are weighted population estimates derived from analyses in which the total sample ranged across variables from approximately 5,150 to 6,180 students.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), transcript data collection, 2002 through 2009.

### **Nonacademic, Nonvocational Course Taking**

Nearly all (99.7 percent) of students with disabilities were enrolled in at least one nonacademic, nonvocational<sup>31</sup> course during high school (table 15), which accounted for one-quarter (25 percent) of the total number of credits students earned in high school. The average number of credits earned across different types of nonacademic, nonvocational courses ranged from 0.3 to 1.7. Students with disabilities were more likely to earn credits in fine and performing arts,<sup>32</sup> physical education and health, and learning support courses (1.5 to 1.7) than in learning support<sup>33</sup> and other nonacademic, nonvocational courses (0.7 and 0.3, respectively).

<sup>31</sup> Nonacademic, nonvocational courses include courses in the fine and performing arts, physical education (PE) and health, learning support courses, life skills, and other, uncategorized courses.

<sup>32</sup> Courses in fine and performing arts include drama, music, dance, art, and photography and film.

<sup>33</sup> Courses in life skills include living skills, resource management, health and safety education, driver's education, community living, communication and social development instruction, and food and nutrition.

Table 15. Nonacademic, nonvocational course taking by students with disabilities and students in the general population

	Students with disabilities in grades 9 through 12	Students in the general population in grades 9 through 12
Percentage enrolled in any nonacademic, nonvocational courses	99.7 (0.22)	99.8 (0.04)
Percentage of total high school credits earned in nonacademic, nonvocational courses	25.0 (0.57)	20.7 (0.01)
Average credits earned in:		
Fine and performing arts courses	1.5 (0.07)	1.8 (0.02)
Physical education and health courses	1.7 (0.05)	1.6 (0.01)
Learning support courses	0.7 (0.06)	0.3 (0.01)
Life skills courses	1.4 (0.09)	1.0 (0.01)
Other nonacademic, nonvocational courses	0.3 (0.04)	0.2 (0.01)

NOTE: Standard errors are in parentheses. Values are weighted population estimates derived from analyses in which the total sample ranged across variables from approximately 6,010 to 6,180 students in NLTS2 and includes 14,800 youth in ELS:2002.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), transcript data collection, 2002 through 2009.

Compared with high school students in the general population, students with disabilities earned a higher proportion of overall credits in nonacademic, nonvocational courses (25 percent vs. 21 percent).<sup>34</sup> Students with disabilities earned more credits in learning support courses and other, uncategorized courses (0.7 and 0.3, respectively) than did students in the general population (0.3 and 0.2, respectively). In contrast, students in the general population earned more credits in fine and performing arts courses than students with disabilities (1.8 vs. 1.5).

### ***Disability Differences in Nonacademic, Nonvocational Course Taking***

The percentage of students with disabilities enrolled in any nonacademic, nonvocational courses during high school ranged from 99 percent to 100 percent across disability categories (table 16), with no significant differences between them. However, students with mental retardation, orthopedic impairments, autism, traumatic brain injuries, or multiple disabilities earned a higher proportion of their credits from nonacademic, nonvocational courses (27 percent to 34 percent) than students with speech/language impairments or hearing impairments (23 percent for both groups). Similarly, the percentages of total credits that were earned in

<sup>34</sup> General population estimates are based on calculations using the restricted use dataset from the U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002), High School Transcript Study. All general population estimates include students who have completed high school, as well as those who have not (i.e. both graduates and dropouts have been included).

Table 16. Nonacademic, nonvocational course taking, by disability category

	Learning disability	Speech/language impairment	Mental retardation	Emotional disturbance	Hearing impairment	Visual impairment	Orthopedic impairment	Other health impairment	Autism	Traumatic brain injury	Multiple disabilities	Deaf-blindness
Percentage enrolled in any nonacademic, nonvocational courses	99.8 (0.24)	99.8 (0.27)	99.5 (0.47)	98.8 (0.80)	100.0 (0.21)	100.0 (0.00)	99.5 (0.56)	100.0 (0.00)	99.8 (0.46)	100.0 (0.00)	99.9 (0.28)	100.0 (0.00)
Percentage of total high school credits earned in nonacademic, nonvocational courses	23.8 (0.71)	22.7 (0.67)	31.4 (1.40)	24.7 (1.14)	23.0 (0.95)	25.8 (1.69)	27.0 (1.05)	25.2 (0.89)	33.7 (1.96)	28.9 (2.10)	30.5 (2.07)	32.0 (3.72)
Average credits earned in:												
Fine and performing arts courses	1.6 (0.11)	1.7 (0.12)	1.2 (0.10)	0.9 (0.10)	1.6 (0.15)	2.2 (0.29)	2.0 (0.18)	1.6 (0.13)	2.1 (0.23)	1.5 (0.20)	1.5 (0.16)	1.9 (0.38)
Physical education and health courses	1.7 (0.07)	1.7 (0.08)	1.8 (0.11)	1.3 (0.09)	1.8 (0.11)	1.4 (0.13)	1.6 (0.11)	1.6 (0.08)	2.3 (0.22)	1.8 (0.18)	1.9 (0.16)	1.9 (0.24)
Learning support courses	0.8 (0.08)	0.4 (0.06)	0.7 (0.12)	0.5 (0.07)	0.7 (0.14)	0.9 (0.22)	1.4 (0.17)	0.8 (0.10)	1.1 (0.25)	0.9 (0.21)	1.1 (0.33)	1.4 (0.47)
Life skills courses	1.1 (0.07)	1.3 (0.06)	3.3 (0.31)	1.2 (0.11)	1.4 (0.15)	1.2 (0.18)	1.9 (0.21)	1.3 (0.13)	3.9 (0.52)	1.8 (0.31)	3.4 (0.52)	2.8 (0.87)
Other nonacademic, nonvocational courses	0.2 (0.03)	0.3 (0.04)	0.4 (0.14)	0.2 (0.05)	0.7 (0.13)	0.4 (0.09)	0.3 (0.10)	0.2 (0.05)	0.3 (0.11)	0.4 (0.17)	0.3 (0.14)	0.5 (0.26)

NOTE: Standard errors are in parentheses. Values are weighted population estimates derived from analyses in which the total sample ranged across variables from approximately 6,010 to 6,180 students.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), transcript data collection, 2002 through 2009.

nonacademic, nonvocational courses were higher for students with mental retardation, autism, or multiple disabilities (29 percent to 34 percent) than for students with learning disabilities (24 percent). Students with mental retardation or autism also accrued higher percentages of their total credits in nonacademic, nonvocational courses (31 percent and 34 percent, respectively) than students with emotional disturbances, visual impairments, or other health impairments (25 percent to 26 percent). Students with autism also earned a larger percentage of credits in nonacademic, nonvocational courses than students with orthopedic impairments (34 percent vs. 27 percent).

Some differences across disability categories were noted for several nonacademic, nonvocational subject areas. For courses in fine and performing arts, students with emotional disturbances or mental retardation averaged the fewest credits earned (0.9 and 1.2, respectively), which were significantly lower than the credits earned by students with learning disabilities, speech/language impairments, visual impairments, orthopedic impairments, or autism (1.6 to 2.1). Students with emotional disturbances also earned significantly fewer credits in fine and

performing arts (0.9) than students with multiple disabilities, traumatic brain injuries, or deaf-blindness (1.5 to 1.9). A similar course-taking pattern was observed for physical education (PE) and health courses.<sup>35</sup> Students with emotional disturbances accrued fewer credits in PE and health (1.3) than students with learning disabilities, speech/language impairments, hearing impairments, mental retardation, autism, or multiple disabilities (1.4 to 2.3). In contrast, students with autism earned more credits in PE and health (2.3), on average, than students with speech/language impairments, visual impairments, orthopedic impairments, or other health impairments.

Considering credits accrued in learning support classes,<sup>36</sup> on average, students with orthopedic impairments, earned more credits in learning support courses (1.4) than students with learning disabilities, speech/language impairments, mental retardation, emotional disturbances, hearing impairments, and other health impairments (.4 to 0.8). In addition, students with autism accrued more credits in learning support courses (1.1) than students with speech/language impairments (0.4). Additionally, students with mental retardation, autism, or multiple disabilities earned more credits in life skills courses (3.3 to 3.9) than students in all other categories except deaf-blindness (2.8). There were no significant differences across disability groups in credits earned in other nonacademic, nonvocational courses.

### ***Grade-Level Differences in Nonacademic, Nonvocational Course Taking***

Differences in patterns of taking nonacademic, nonvocational courses were found across grade levels (table 17). Ninth-grade students with disabilities were more likely to have taken one or more nonacademic, nonvocational courses (98 percent) than students in 10th, 11th, or 12th grade (85 percent to 94 percent), and 10th-graders were more likely to be enrolled in such courses (94 percent) than students in grade 11 or 12 (86 percent and 85 percent, respectively). Also, the percentage of total credits earned in nonacademic, nonvocational courses was higher for students with disabilities in 9th grade than students in 11th grade (29 percent vs. 22 percent).

For fine and performing arts courses, 12th-grade students with disabilities earned significantly more credits (0.5 on average) than students in 9th through 11th grades (0.4 on average). Conversely, students in 9th grade averaged more credits in physical education and health courses (0.6) than students in 10th grade through extended 13th grade. Students in the 12th grade also had earned more life skills credits on average (1.0) than those in grades 9, 10, and 11 (0.4).

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<sup>35</sup> Physical education and health courses include physical education, health, and adapted physical education.

<sup>36</sup> Courses in learning support include study skills, test preparation, learning strategies, special resources, self-contained classroom, and homebound instruction.

Table 17. Nonacademic, nonvocational course taking by students with disabilities, by grade level

	9th grade	10th grade	11th grade	12th grade	Extended 13th grade	Ungraded
Percentage enrolled in any nonacademic, nonvocational courses	98.1 (0.49)	93.6 (0.93)	85.8 (1.40)	84.5 (1.54)	84.4 (9.37)	97.8 (5.00)
Percentage of total high school credits earned in nonacademic, nonvocational courses	28.7 (0.68)	25.1 (0.72)	22.1 (0.78)	23.1 (0.84)	26.3 (6.79)	46.5 (12.20)
Average credits earned in:						
Fine and performing arts courses	0.4 (0.02)	0.4 (0.02)	0.4 (0.02)	0.5 (0.03)	0.4 (0.17)	0.5 (0.41)
Physical education and health courses	0.6 (0.02)	0.5 (0.02)	0.4 (0.03)	0.4 (0.03)	0.4 (0.24)	0.6 (0.32)
Learning support courses	0.2 (0.02)	0.2 (0.02)	0.2 (0.02)	0.2 (0.02)	0.1 (0.15)	0.4 (0.70)
Life skills courses	0.4 (0.02)	0.4 (0.03)	0.4 (0.03)	0.4 (0.05)	1.0 (0.46)	1.7 (1.05)
Other nonacademic, nonvocational courses	0.1 (0.01)	0.1 (0.01)	0.1 (0.02)	0.1 (0.02)	0.1 (0.13)	0.9 (0.69)

NOTE: Standard errors are in parentheses. Analyses for each grade level include all students with data for that grade level. Values are weighted population estimates derived from analyses in which the total sample ranged across variables from approximately 6,740 to 7,250 9th-graders, 6,110 to 6,860 10th-graders, 5,140 to 6,290 11th-graders, 4,510 to 5,570 12th-graders, 70 to 80 13th-graders, and 40 to 60 students in ungraded programs.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), transcript data collection, 2002 through 2009.

### ***Demographic Differences in Nonacademic, Nonvocational Course Taking***

Table 18 shows the percentage and average number of credits accrued in nonacademic, nonvocational courses for students who differed in gender, race/ethnicity, and household income. Although there were no significant differences by students' race/ethnicity, some differences were noted by gender and household income. On average, the percentage of total credits earned in nonacademic, nonvocational courses was higher for females than males (28 percent vs. 24 percent). Females also earned more credits in fine and performing arts and learning support courses (1.9 and 0.8, respectively), on average, than males (1.3 and 0.7 respectively). However, males averaged more credits earned in PE and health than females (1.8 vs. 1.4). Differences related to household income were significant for both fine and performing arts courses and PE and health courses. Students with household incomes of less than \$25,000 had fewer fine and performing arts credits, on average, than students from households with incomes above \$50,000 per year (1.2 vs. 1.7) and accrued fewer credits in PE and health courses than students from households with income from \$25,001 to \$50,000 (1.5 vs. 1.7).



Table 18. Nonacademic, nonvocational course taking by students with disabilities, by demographic characteristics

	Gender		Race/ethnicity			Household income		
	Male	Female	White	African American	Hispanic	\$25,000 or less	\$25,001 to \$50,000	More than \$50,000
Percentage enrolled in any nonacademic, nonvocational courses	99.5 (0.33)	100.0 (0.04)	99.6 (0.30)	99.9 (0.33)	99.7 (0.67)	99.4 (0.54)	99.9 (0.21)	99.8 (0.33)
Percentage of total high school credits earned in nonacademic, and nonvocational courses	23.6 (0.69)	28.0 (0.99)	24.8 (0.64)	25.8 (1.46)	22.9 (1.72)	26.2 (1.24)	24.5 (0.97)	24.3 (0.98)
Average number of credits earned in:								
Fine and performing arts courses	1.3 (0.08)	1.9 (0.13)	1.6 (0.09)	1.3 (0.16)	1.3 (0.18)	1.2 (0.11)	1.5 (0.13)	1.7 (0.15)
Physical education and health courses	1.8 (0.07)	1.4 (0.08)	1.7 (0.06)	1.7 (0.12)	1.6 (0.16)	1.5 (0.09)	1.9 (0.11)	1.7 (0.09)
Learning support courses	0.7 (0.07)	0.8 (0.11)	0.8 (0.08)	0.6 (0.11)	0.7 (0.17)	0.7 (0.10)	0.8 (0.14)	0.8 (0.10)
Life skills courses	1.2 (0.10)	1.9 (0.18)	1.5 (0.12)	1.4 (0.18)	1.2 (0.25)	1.5 (0.18)	1.5 (0.17)	1.4 (0.10)
Other nonacademic, nonvocational courses	0.2 (0.05)	0.3 (0.05)	0.2 (0.04)	0.2 (0.07)	0.4 (0.22)	0.3 (0.09)	0.3 (0.06)	0.2 (0.05)

NOTE: Standard errors are in parentheses. Values for each of the three demographic analyses are weighted population estimates derived from analyses in which the total sample ranged across variables from approximately 6,010 to 6,080 students.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), transcript data collection, 2002 through 2009.

### ***Differences in Nonacademic, Nonvocational Course Taking, by High School Completion Status***

Overall, students who did and did not complete high school were similar in their likelihood of having taken any nonacademic, nonvocational courses and in the percentage of total accrued credits that were earned in nonacademic, nonvocational courses (table 19). Differences were noted, however, in the average number of credits earned in various types of nonacademic, nonvocational courses. Students with disabilities who completed high school earned more credits in every specific kind of nonacademic, nonvocational course (0.3 to 1.9 across types of courses) than noncompleters (0.1 to 1.0), which, in part, may reflect the fact that completers had been in school longer than noncompleters, completers took a wider variety of courses than noncompleters, noncompleters had failed more classes, and/or other factors.

Table 19. Nonacademic, nonvocational course taking by students with disabilities, by high school completion status

	Completers	Non-completers
Percentage enrolled in any nonacademic, nonvocational courses	100.0 (0.09)	98.8 (0.90)
Percentage of total high school credits earned in nonacademic, nonvocational courses	24.7 (0.60)	26.2 (1.49)
Average number of credits earned in:		
Fine and performing arts courses	1.8 (0.09)	0.6 (0.07)
Physical education and health courses	1.9 (0.06)	1.0 (0.08)
Learning support courses	0.8 (0.07)	0.4 (0.08)
Life skills courses	1.6 (0.11)	0.8 (0.19)
Other nonacademic, nonvocational courses	0.3 (0.05)	0.1 (0.05)

NOTE: Standard errors are in parentheses. Values are weighted population estimates derived from analyses in which the total sample ranged across variables from approximately 6,110 to 6,080 students.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), transcript data collection, 2002 through 2009.

This chapter has focused on credits earned by students with disabilities who attended typical high schools. Chapter 3 will consider the instructional settings in which credits were earned.