

2. *Changes in the Characteristics of Students with Disabilities and Their Households* By Mary Wagner

This chapter revisits two aspects of the experiences of students with disabilities to identify the ways in which they have changed over the 2-year period between Wave 1 and 2 of SEELS. *The Children We Serve* (Wagner, Marder, Blackorby, et al., 2002) describes the individual and household characteristics of elementary and middle school students with disabilities, as reported by parents in 2000. Two years could bring changes to the households of those students in many ways. For example, divorce could result in changes in children's living arrangements and loss of jobs resulting from the financial downturn of the early years of this century could cause declines in the financial status of students' households.

Behind the Label: The Functional Implications of Disability (Blackorby, Wagner, et al., 2002) describes the functioning of elementary and middle school students with disabilities in multiple domains, as parents reported that functioning in 2000. To the extent that children's disabilities involve degenerative conditions, one could expect some aspects of functioning to decline over time for some children. On the other hand, limitations in functioning that are due to delays in development could be expected to improve over time.

The following sections describe changes in a 2-year period in the household circumstances of students with disabilities and in aspects of their functioning. Findings are reported for students with disabilities as a whole and for students who differ in their primary disability category, age, and selected demographic characteristics when significant.

Household Characteristics

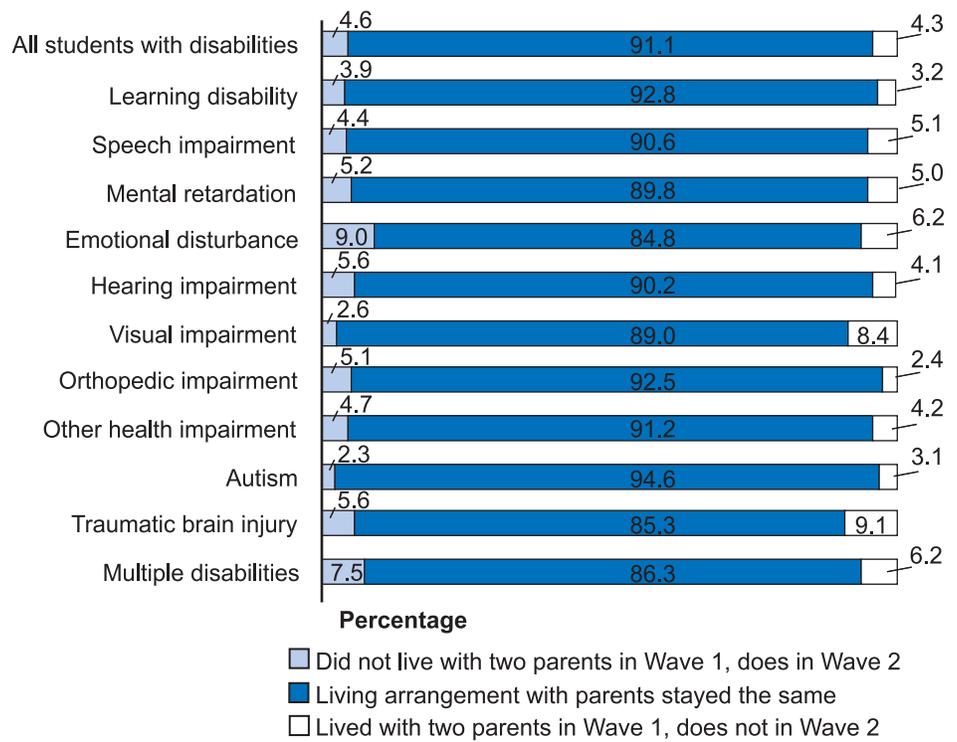
Although the American family has undergone significant change in recent decades, it is unclear how much and how rapidly changes occur in such important aspects of the family lives of students with disabilities as their living situations, the marital status of their parents, and the economic circumstances of their households. The extent to which these aspects of the households of students with disabilities have changed in 2 years is described below.

Students' Living Situations

The living situations of students with disabilities as a group have changed little over a 2-year period. In both Waves 1 and 2, nearly all students with disabilities had lived full time in the previous year with a parent (98% and 97% in the two waves), usually both parents (69% and 70%).

However, this apparent stability in living arrangements obscures the fact that about 1 in 10 students with disabilities have experienced changes in their living arrangements with parents (Exhibit 2-1).

Exhibit 2-1
Change in Children’s Living with Two Parents,
by Disability Category



Source: SEELS parent interviews, Waves 1 and 2.

- Although 91% of students with disabilities have had stable living arrangements with parents, 5% of them who did not live with two parents in Wave 1 do in Wave 2. This change could result from single parents marrying (with children acquiring a step parent); from children returning to their parents’ households from foster care, kinship care, or institutional arrangements; or perhaps other factors.
- Four percent of students with disabilities who were living with two parents in Wave 1 no longer do in Wave 2.
- Living arrangements with parents have been the most stable among students with autism; 95% of whom lived with two parents in both Waves 1 and 2. They also have among the highest rates of living with two parents of any disability category; 76% live with two parents in Wave 2.
- Considerably less stability in living arrangements with parents is noted for students with emotional disturbances or traumatic brain injuries, 15% of

whom have had changes in living arrangements with parents over 2 years. They also are the least likely to be living with two parents in Wave 2 (50% and 54%, respectively).

Parents' Marital Status

Changes in the marital status of students' parents mirror those regarding children's living arrangements with parents, suggesting that changes in marital status account for much of the change in children's living arrangements. There has been little change in parents' marital status in the aggregate; 70% and 67% of students with disabilities were living with married parents in 2000 and 2002, respectively. However, aggregate marriage rates mask change in the marital status of individual students' parents.

- Five percent of students with disabilities have parents who were single, separated, divorced, or widowed in Wave 1 and are married or in marriage-like relationships in Wave 2.
- Six percent of students with disabilities have parents who had a spouse or partner in Wave 1 but are divorced, separated, or widowed in Wave 2.
- The greatest stability in parents' marital status occurs among students with autism (95% have experienced no change in their parents' marital status), and the greatest instability among students with emotional disturbances or traumatic brain injuries (15% have experienced changes in their parents' marital status), as was true regarding changes in living arrangements with parents.

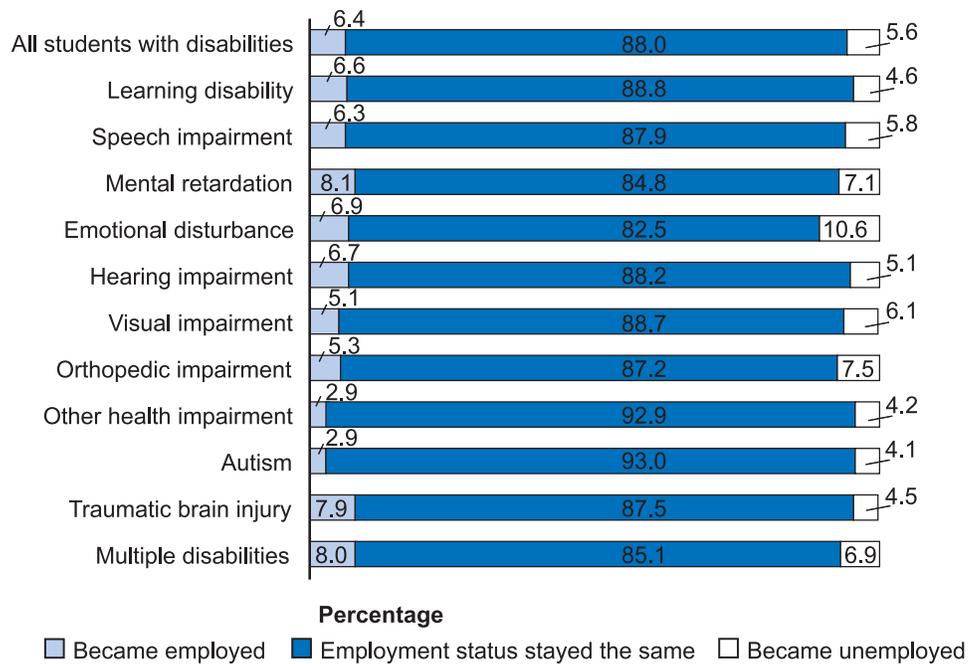
Employment Status of Heads of Household

Although the American economy has been in considerable turmoil in the early years of the 21st century, the employment status of adult family members of students with disabilities has been fairly stable; the heads of households of about 7 in 10 students with disabilities were employed when interviewed in both 2000 and 2002.¹ But again, aggregate employment rates do not reveal the some fluctuation in employment status within individual families.

- Overall, the employment status of the heads of household of 12% of students with disabilities has changed, with 6% becoming employed and a similar percentage becoming unemployed (Exhibit 2-2). In Wave 2, 85% of students with disabilities have heads of households who are employed.

¹ Readers should be aware that parents being employed at both interview times does not imply that they were steadily employed for the 2-year period between interviews.

Exhibit 2-2
Changes in the Employment Status of Heads of Household,
by Disability Category



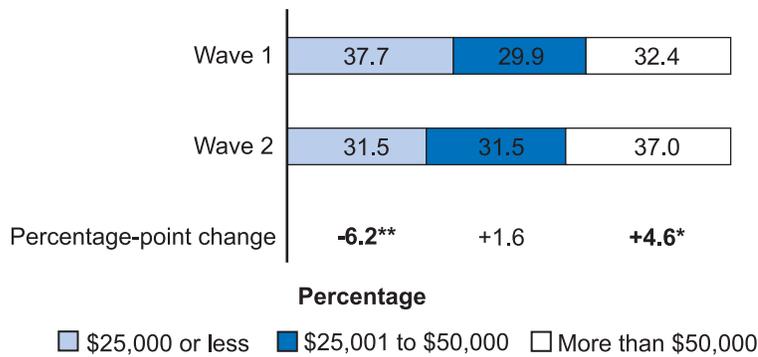
Source: SEELS parent interviews, Waves 1 and 2.

- Employment status has been the most stable among heads of household of students with other health impairments or autism, 93% of who have parents whose employment status has not changed, and 87% of whom are employed in Wave 2.
- As is true of their living arrangements and the marital status of their parents, students with emotional disturbances have experienced the greatest instability in the employment status of the heads of their households. Eleven percent has parents who have become unemployed, whereas 7% have parents who were unemployed in Wave 1 but have become employed. In Wave 2, 74% of students with emotional disturbances have heads of households of students who are employed, an employment rate that is shared with students with mental retardation and is the lowest rate of the disability categories.

Household Income

As noted above, newly unemployed parents are at least as common among students with disabilities as newly employed parents; nonetheless, inflation or other factors have resulted in increased incomes for some families (Exhibit 2-3).

Exhibit 2-3
Changes in the Household Incomes
of Students with Disabilities



Source: SEELS parent interviews, Waves 1 and 2.

Statistically significant difference in a two-tailed test at the following levels:

* $p < .05$; ** $p < .01$.

- There has been a decline of 6 percentage points in the proportion of students with disabilities whose households are in the lowest income group and a corresponding increase of 4 percentage points in the proportion in the highest income group. In Wave 2, 32% of students with disabilities are in household earning \$25,000 or less, and 37% in households earning more than \$50,000.
- These changes are not sufficient to cause a meaningful decline in the percentage of students with disabilities who live in poverty; 21% are living in poverty in Wave 2,² a significantly higher rate than among children in the general population (16%, U. S. Department of Commerce, 2002).
- These relatively modest shifts in aggregate household incomes fail to reveal considerably greater change on the part of individual households (Exhibit 2-4).

² Please see Appendix A for a description of the calculation of poverty status, using federal poverty thresholds, household income, and household size.

Exhibit 2-4
Changes in Household Incomes of Students with Disabilities, by Income Level

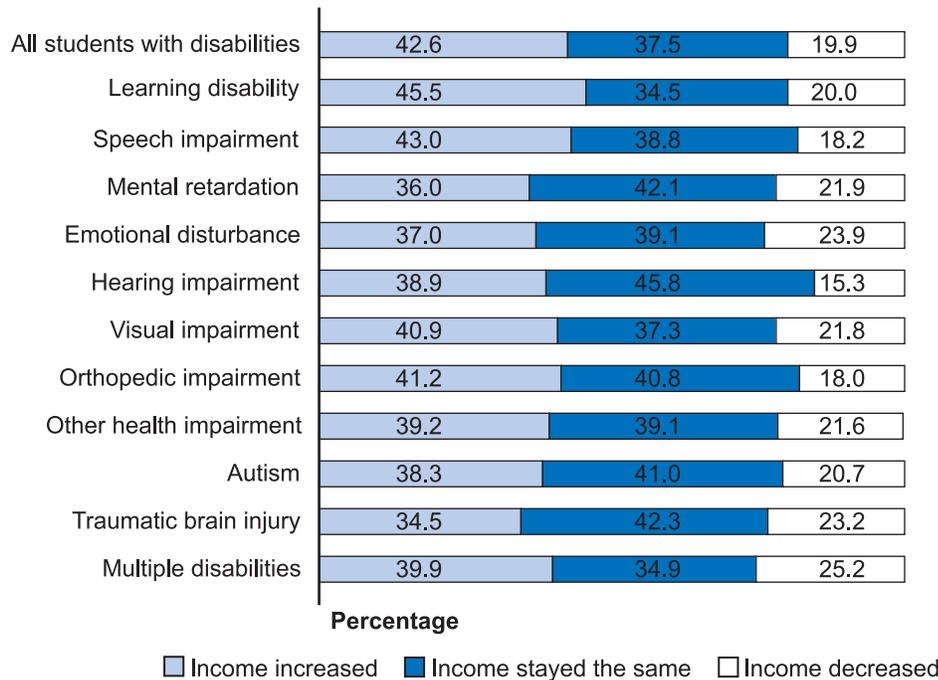
	Wave 1 Income		
	\$25,000 or Less	\$25,001 to \$50,000	More than \$50,000
Percentage with Wave 2 income of:			
\$25,000 or less	75.1	11.8	1.7
\$25,001 to \$50,000	23.2	61.8	10.7
More than \$50,000	1.7	26.4	87.5

Source: SEELS parent interviews, Waves 1 and 2.

- One-fourth of students who in Wave 1 lived in households with incomes of \$25,000 or less have experienced a large enough increase in household income to move into the middle or highest income categories (23% and 2%, respectively). They have had a corresponding decline in the percentage living in poverty, from 67% to 55%.
- Even more students in the middle income category show changes in household income; 26% have moved into the highest income group, whereas about half as many (12%) have had household income decreases and have joined the lowest income group. In all, 8% of households who were in the middle income category in Wave 1 are among the ranks of families in poverty in Wave 2.
- Twelve percent of students who were in the highest income group in Wave 1 have dropped from that category, with most joining the middle income group; 1% has become families living in poverty.
- Overall, only 38% of students with disabilities have parents who report a household income in Wave 2 that is within the same \$5,000 range as in Wave 1 (Exhibit 2-5).³ Forty-three percent of students with disabilities live in households that have had increases in income; 20% have had decreases in the annual income of their households.

³ The extent of income change was calculated from parents' reports of their household income on a scale that increased by \$5,000 increments (e.g., income was \$15,001 to \$20,000, \$20,001 to \$25,000, etc.). A household is considered to have no change in income if the household income reported for Wave 1 and Wave 2 was in the same \$5,000 income category. A decrease is recorded if the income category reported in Wave 2 was lower than Wave 1 and, conversely, an increase was coded if the income category in Wave 2 was higher than Wave 1.

Exhibit 2-5
Changes in Household Incomes, by Disability Category



Source: SEELS parent interviews, Waves 1 and 2.

- Students with learning disabilities are the most likely to have experienced increases in the incomes of their households (46%).
- In contrast, 37% or fewer of students with mental retardation, emotional disturbances, or traumatic brain injuries show income increases. Students with emotional disturbances or traumatic brain injuries also are the most likely to have experienced decreases in household income (24% and 25%), many more than students with hearing impairments, who are least likely to be living in households whose incomes have declined (15%).
- Students with mental retardation, emotional disturbances, traumatic brain injuries, or multiple disabilities are the most likely to be living in poverty in Wave 2 (24% to 33%, compared with 20% of students with learning disabilities, for example).
- Changes in income have not been accompanied by changes in benefit program participation.

Students' Functioning

Children with disabilities demonstrate no changes in many aspects of their functioning in a 2-year period. For example, 81% of students with disabilities have normal hearing in Wave 2, 89% have normal use of their arms and hands for gross motor functioning, the same percentage have normal use of their legs and feet, and two-thirds of students are reported to carry on a conversation as well as other children their age, all levels of functioning that are unchanged over a 2-year period. However, some changes are noted:

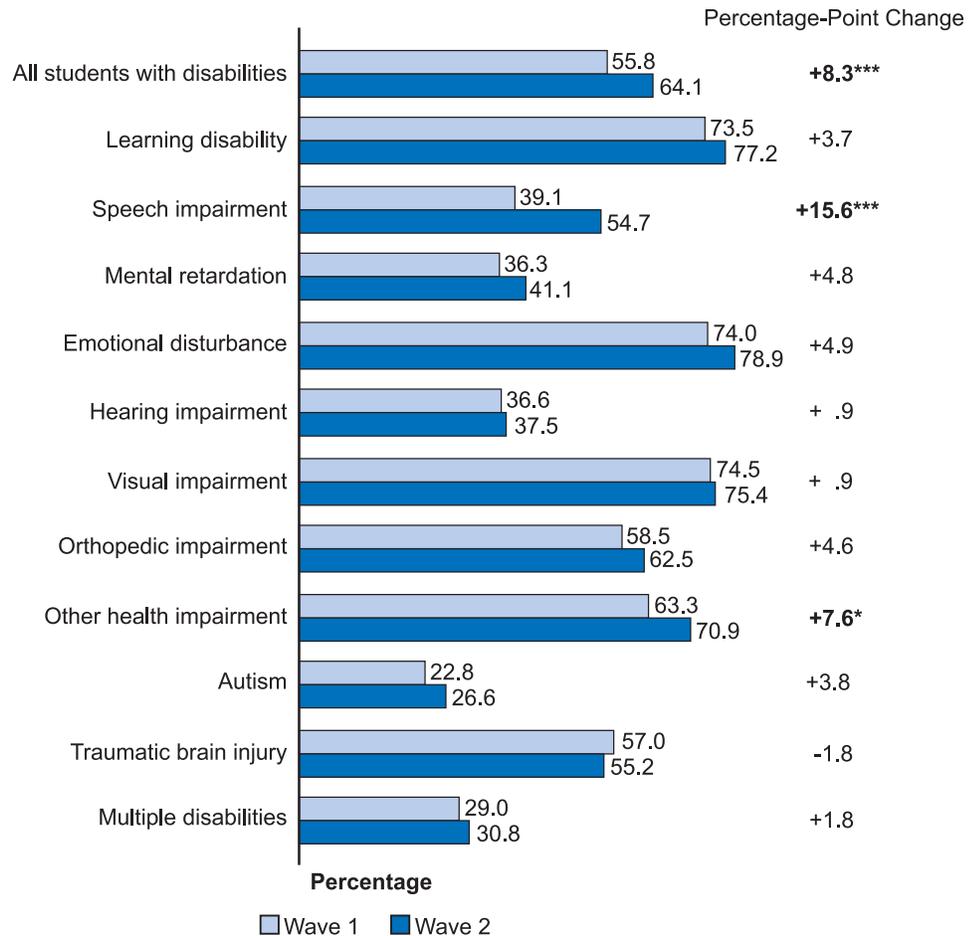
Use of Glasses or Contact Lenses

- Students are more likely to wear glasses or contacts as they age. There has been a 7-percentage-point increase overall in students using corrective lenses, resulting in 37% of students doing so in Wave 2. However, sizable increases are noted for students in only two disability categories—those with speech or hearing impairments (10 percentage points). These differential changes across categories do little to change the wide range in children's use of glasses or contact lenses, from 20% of students with autism to 67% of those with visual impairments.

Clarity of Speech

- Consistent with expectations due to maturation, the clarity of speech of students with disabilities has improved overall and among those in two disability categories (Exhibit 2-6). Overall, 64% of students with disabilities in Wave 2 are reported to speak as clearly as other children their age, an 8-percentage-point increase since Wave 1. Improvements are noted for students with speech or other health impairments (16 and 8 percentage points).
- Even with these changes, however, only 55% of students with speech impairments are reported in Wave 2 to speak as clearly as other children their age. Clear speech is even more problematic for students with mental retardation, hearing impairments, autism, or multiple disabilities, among whom from 27% to 41% are reported to speak as clearly as same-age peers in Wave 2.

Exhibit 2-6
Changes in Clarity of Children’s Speech, by Disability Category



Source: SEELS parent interviews, Waves 1 and 2.

Statistically significant difference in a two-tailed test at the following levels:

* $p < .05$; *** $p < .001$.

Differential Changes in Use of Glasses/Contacts and Clarity of Speech

These changes in the use of corrective lenses and children’s clarity of speech have occurred among younger children:

- An 11-percentage-point increase in the likelihood that children wear glasses is noted among students with disabilities who were ages 7 through 9 in Wave 1, with no significant change among older students. Despite their larger increase in use of glasses or contact lenses, younger students still lag older students in doing so (33% of Wave 1 7- through 9-year olds use them by Wave 2, vs. 41% of 10- through 12-year-olds).
- The youngest students are the only age group to demonstrate an increase in clarity of speech (11 percentage points), yet they are not as likely to be

reported to speak as clearly as others their age as are older students (55% of 7- through 9-year olds vs. 76% of 10- through 12-year olds in Wave 2).

Regarding gender difference, the increase in the likelihood of wearing glasses is similar for boys and girls (8 and 6 percentage points, respectively). However, girls are more likely to wear glasses than boys (35% vs. 28% in Wave 1; 44% vs. 34% in Wave 2). Boys and girls also show similar, 8-percentage point increases in the clarity of their speech.

Changes in the use of glasses or contacts and in clarity of speech have occurred differentially across income and racial/ethnic groups.

- Eight-percentage-point increases in the likelihood of wearing glasses are noted among students from both the middle income group (those in households earning \$25,001 to \$50,000) and the highest income group (in households earning more than \$50,000). These changes result in similar rates of wearing glasses or contacts across the three income groups in Wave 2 (36% to 39%).
- In contrast, students from the lowest and highest income households show increases in their reported clarity of speech (9 and 13 percentage points, respectively). However, students from wealthier households still are more likely to be reported to speak as clearly as same-age peers than are students from the lowest income group (68% vs. 60%).
- Changes in the use of corrective lenses and in clarity of speech have occurred entirely among white students with disabilities, who show a 9-percentage-point increase in the likelihood of wearing glasses and an 8-percentage point increase in being reported to speak as clearly as other children their age. This increase in the clarity of their speech results in white students with disabilities being more likely than their African-American peers to be reported by parents to speak as clearly as other children their age in Wave 2 (65% vs. 56%), a difference that was not apparent in Wave 1.

Daily Living and Social Skills

Additional changes as children age are noted in parent ratings of their children's self-care skills,⁴ their functional cognitive skills,⁵ their social skills,⁶ and the

⁴ Parents were asked how well their children with disabilities could dress and feed themselves on their own without help. For each skill, parents responded on a 4-point scale, ranging from 1 ("not at all well") to 4 ("very well"). Summing the two responses produces a scale that ranges from 2 to 8.

⁵ Parents were asked how well their children with disabilities could: "read common signs, such as 'stop' or 'danger,'" "tell time on a clock with hands," "look up telephone numbers and use the phone," and "count change." For each skill, parents responded on a 4-point scale, ranging from 1 ("not at all well") to 4 ("very well"). Summing the four responses produces a scale that ranges from 4 to 16.

⁶ Parents were asked how often their children with disabilities perform 11 social activities from the Social Skills Rating System (Gresham & Elliott, 1990). (Please see Appendix A for a list of these items.) Parents responded to each activity on a 3-point scale ranging

frequency with which they do various household tasks,⁷ all indicating increasing ability with age (Exhibit 2-7).

Exhibit 2-7
Changes in Daily Living and Social Skills

	Scale Score ^a		
	High	Medium	Low
Percentage rated by parents on:			
Self-care skills			
Wave 1	75.5	22.2	2.3
Wave 2	79.9	18.0	2.1
Percentage-point change	+4.4*	-4.2*	
Functional cognitive skills			
Wave 1	24.5	63.0	12.5
Wave 2	42.1	49.4	8.5
Percentage-point change	+17.6***	-13.6***	-4.0**
Social skills			
Wave 1	19.7	68.4	12.0
Wave 2	22.4	68.9	8.8
Percentage-point change			-3.2*
Household responsibilities			
Wave 1	2.4	36.2	61.4
Wave 2	4.0	44.6	51.4
Percentage-point change	+1.6*	+8.4***	-10.0***

Source: SEELS parent interviews, Waves 1 and 2.

^a The self-care scale has a range of 2 to 8. Low is a score of 2 through 4, medium is a score of 5 through 7, and high is a score of 8. The functional cognitive skills scale ranges from 4 to 16. Low scores are 4 through 8, medium scores are 9 through 14, and high scores are 15 and 16. The social skills scale ranges from 0 to 22, with low defined as 0 through 14, medium as 15 through 19, and high as 20 through 22. The household responsibilities scale ranges from 3 to 12. Low includes scores of 3 through 6, medium includes scores of 7 through 10, and high includes scores of 11 and 12.

Statistically significant difference in a two-tailed test at the following levels:

*p<.05, ***p<.001.

- Functional cognitive skills have increased the most with age; 42% of students are rated “high” on the functional cognitive skills scale in Wave 2, an increase of 18 percentage points over ratings in Wave 1. There have been corresponding decreases in students who score in the medium and low ranges of the scale.
- Self-care skills have increased by 4 percentage points, so that in Wave 2, 80% of students score high. There has been a similar decrease in students

from 0 (“rarely or never”) to 2 (“very often”). Summing the responses produces a scale that ranges from 0 to 22.

⁷ Parents were asked how often their children with disabilities: “fix their own breakfast or lunch,” “clean up their own room or living area,” and “do laundry.” For each activity, parents responded on a 4-point scale ranging from 1 (“rarely or never”) to 4 (“almost always”). Summing the responses produces a scale that ranges from 3 to 12.

who score in the medium range on the scale but no change in the percentage with low self-care skills.

- Students' social skills have changed only modestly, showing a 3-percentage-point decrease in students having low social skills scores; 9% of students have low social skills scores in Wave 2.
- There has been a 10-percentage-point decrease in students scoring in the low range of the household responsibilities scale, with corresponding increases in students who score in both the medium and high ranges. Nonetheless, more than half of students remain in the low range of the scale in Wave 2, when they are 9 to 15 years old.

Differential Changes in Daily Living and Social Skills across Disability Categories

A change in at least one daily living or social skills score is apparent for all disability categories (Exhibit 2-8). For example:

- Functional cognitive skills have increased markedly for students in all categories except visual impairment, with significant increases ranging from 5 to 24 percentage points for students with autism and hearing impairments, respectively. These changes have widened the differences across categories in students having high functional cognitive skills. A 26-percentage-point difference was apparent in Wave 1 between students with mental retardation and those with speech impairments (5% vs. 31%), a difference that widened to 40 percentage points in Wave 2 (13% vs. 53%).

Exhibit 2-8
Changes in Daily Living and Social Skills, by Disability Category

	Learning Disability	Speech/ Language Impairment	Mental Retardation	Emotional Disturbance	Hearing Impairment	Visual Impairment	Ortho- pedic Impairment	Other Health Impairment	Autism	Traumatic Brain Injury	Multiple Disabilities
Percentage rated “high” on:											
Self-care skills (8)											
Wave 1	81.1	86.3	52.5	65.7	77.3	44.2	35.0	58.1	32.5	45.7	32.6
Wave 2	85.4	88.4	58.9	71.9	80.0	52.8	41.3	65.2	37.7	62.6	39.3
Percentage-point change										+16.9*	
Functional cognitive skills (15 or 16)											
Wave 1	24.1	31.4	5.3	27.0	22.0	18.9	23.0	26.2	8.2	11.2	7.7
Wave 2	42.9	52.6	13.3	41.4	45.8	26.1	33.1	40.5	13.4	27.3	14.1
Percentage-point change	+18.8***	+21.2***	+8.0***	+14.4***	+23.8***		+10.1**	+14.3***	+5.2*	+16.1*	+6.4*
Percentage rated “low” on:											
Social skills (0 through 14)											
Wave 1	10.5	6.8	19.2	26.8	10.5	12.0	8.6	16.8	35.9	18.8	24.2
Wave 2	7.2	5.0	16.3	17.3	7.7	11.0	10.0	10.7	29.7	15.0	25.0
Percentage-point change				-9.5**				-6.1*			
Household responsibilities (3 through 6)											
Wave 1	55.8	60.5	71.5	67.7	56.9	69.2	77.5	70.6	84.8	70.7	79.9
Wave 2	45.0	50.8	62.2	54.8	48.2	59.7	73.3	61.7	77.4	56.3	75.9
Percentage-point change	-10.8**	-9.7*	-9.3*	-12.9**	-8.7*	-9.5*		-8.9*	-7.4*		

Source: SEELS parent interviews, Waves 1 and 2.

Note: The percentages of students scoring high are reported for the self-care and functional cognitive skills scales because that is the range in which the greatest change has occurred. The percentages scoring low on the social skills and household responsibilities scales are reported for the same reason.

Statistically significant difference in a two-tailed test at the following levels: *p<.05, **p<.01, ***p<.001.

- The only sizable increase in high self-care skills scale scores is noted for students with traumatic brain injuries. With a 17-percentage-point increase, 63% of students scored high in self-care skills in Wave 2. Nonetheless, these students still are less likely to score high on self-care skills (46%) than students with learning disabilities or speech or hearing impairments, among whom 80% or more have high self-care skills in Wave 2. Students with autism are most challenged in their self-care skills; 38% have high scores on this scale in Wave 2.
- The decrease in students with low social skills that is noted for students with disabilities as a whole results from sizable decreases only among students

with emotional disturbances or other health impairments (10 and 6 percentage points, respectively). Despite this improvement among students with emotional disturbances, they and students with autism or multiple disabilities are the most likely to be reported to have low social skills (16% to 30% in Wave 2), notably more than the 10% or fewer who have low social skills in the categories of learning disabilities or speech, hearing, or orthopedic impairments. Yet the differences across categories are somewhat narrower in Wave 2 (24 percentage points) than in Wave 1 (29 percentage points).

- Decreases in low scores on the household responsibilities scale are apparent for eight of the 12 disability categories, ranging from 7 percentage points among students with autism to 13 percentage points among those with emotional disturbances. Students with learning disabilities are the least likely to have low scores in both waves (56% and 45%) and students with autism are the most likely (85% and 77%).

Differential Changes in Daily Living and Social Skills across Demographic Groups

Changes in the various kinds of functional skills have occurred differentially across age groups (Exhibit 2-9).

- The improvement in self-care skills is noted entirely among the youngest students (a 7-percentage-point increase in high scores), although that group continues to lag behind older students in Wave 2 (77% scoring high vs. 87% of the oldest age group).
- In contrast, the improvement in social skills has occurred only among the oldest students (a decline in low scores of 11 percentage points), with there being no difference across the age groups in the percentages with low scores in Wave 2.

Exhibit 2-9
Changes in Daily Living and Social Skills

	Age In 2000		
	7 to 9	10 to 12	13 or 14
Percentage rated “high” on:			
Self-care skills (8)			
Wave 1	70.2	78.9	79.9
Wave 2	77.2	80.6	86.9
Percentage-point change	+7.0*		
Functional cognitive skills (15 or 16)			
Wave 1	15.5	30.2	31.6
Wave 2	33.4	46.5	57.3
Percentage-point change	+17.9***	+14.3***	+25.7***
Percentage rated “low” on:			
Social skills (0 through 14)			
Wave 1	11.6	11.6	15.8
Wave 2	8.9	9.4	5.2
Percentage-point change			-10.6*
Household responsibilities (3 through 6)			
Wave 1	71.4	54.9	54.8
Wave 2	62.4	44.2	44.1
Percentage-point change	-9.0**	-10.7***	

Source: SEELS parent interviews, Waves 1 and 2.

Note: The percentages of students scoring high are reported for the self-care and functional cognitive skills scales because that is the range in which the greatest change has occurred. The percentages scoring low on the social skills and household responsibilities scales are reported for the same reason.

Statistically significant difference in a two-tailed test at the following levels:

*p<.05, **p<.01, ***p<.001.

- Functional cognitive skills have improved across the age span, with a particularly large increase of 26 percentage points among the oldest group. In Wave 2, significantly greater proportions of students in each succeeding age cohort have high functional cognitive skills scores (33% to 57%).
- Low scores on the household responsibilities scale have declined by 9 and 11 percentage points for the youngest and middle age cohorts, respectively. Nonetheless, the youngest group continues to have the most members with low scores in Wave 2 (62% vs. 44% of the other age groups).

Change in daily living and social skills also have occurred among income and racial/ethnic groups at different rates.

- Patterns of change across income and racial/ethnic groups for the various functional skills mirror those across disability and age groups in that changes in self-care skills are limited in the number of groups affected (Exhibit 2-10). Self-care skill improvements are noted only for the lowest income group and for white students (7- and 5-percentage-point increases in high scores, respectively).

Exhibit 2-10
Changes in Daily Living and Social Skills,
by Household Income and Race/Ethnicity

	Household Income			Race/Ethnicity		
	\$25,000 and Less	\$25,001 to \$50,000	More than \$50,000	White	African American	Hispanic
Percentage rated (by parents) “high” on:						
Self-care skills (8)						
Wave 1	67.7	80.1	78.8	76.8	73.7	74.7
Wave 2	74.6	83.3	81.7	81.8	75.4	76.9
Percentage-point change	+6.9*			+5.0*		
Functional cognitive skills (15 or 16)						
Wave 1	21.2	22.3	32.6	25.5	18.5	27.2
Wave 2	34.1	42.2	52.2	46.0	34.5	34.1
Percentage-point change	+12.9***	+19.9***	+19.8***	+20.5***	+16.0***	
Percentage rated (by parents) “low” on:						
Social skills (0 through 14)						
Wave 1	17.5	11.7	5.6	11.0	13.7	13.9
Wave 2	13.6	7.0	5.6	7.6	11.6	10.3
Percentage-point change		-4.7*		-3.4*		
Household responsibilities (3 through 6)						
Wave 1	63.7	61.3	60.8	62.5	58.9	60.4
Wave 2	54.8	48.8	51.4	52.6	45.7	52.9
Percentage-point change	-8.9*	-12.5**	-9.4*	-9.9***	-13.2**	

Source: SEELS parent interviews, Waves 1 and 2.

Note: The percentages of students scoring high are reported for the self-care and functional cognitive skills scales because that is the range in which the greatest change has occurred. The percentages scoring low on the social skills and household responsibilities scales are reported for the same reason.

Statistically significant difference in a two-tailed test at the following levels: *p<.05, **p<.01, ***p<.001.

- White students are the only racial/ethnic group to experience an improvement in social skills (a 3-percentage-point decline in low scores), an improvement shared only with the middle of the three income groups (5 percentage points).
- Improvements in functional cognitive skills are more widespread, reaching all income groups (13- to 20-percentage-point increases) and both white and African-American students (20 and 16 percentage points). Nonetheless, low-income students are less likely than wealthier peers to have high functional cognitive skills scores in both waves (21% vs. 33% in Wave 1, 34% vs. 52% in Wave 2), as are African-American students with disabilities relative to white youth (18% vs. 26% in Wave 1, 34% vs. 46% in Wave 2).

- Household responsibilities scale score increases also are apparent regardless of income (9- and 12-percentage-point declines in low scores), and among both white and African-American students (10 and 13 percentage points).

Summary

This chapter has examined changes in characteristics of both the households of students with disabilities and in aspects of their own functioning.

Changes in Household Characteristics

Two years is a short period of time, and modest expectations are appropriate regarding the changes in students with disabilities or the households that would be observed in that time period. Consistent with these modest expectations, many aspects of students' households appear stable over time. As a group, students with disabilities have not experienced significant changes in such aspects of their households as living with two parents, their parents' marital status, or the employment status of their heads of household.

However, additional analyses of these characteristics of students' households point out the importance of balancing an examination of change in the aggregate with changes in the experiences of individual students. Despite there being no significant change in living arrangements or employment or marital status among students with disabilities as a whole, 15% of students have experienced changes in their living arrangements with parents, including 5% of students with disabilities who were living with two parents in Wave 1 but no longer are in Wave 2. Similarly, 15% of students with disabilities have parents whose marital status has changed, including 6% who have become separated, divorced, or widowed since Wave 1. And 12% of students with disabilities have heads of households who have had a change in employment status, including 6% whose heads of household have joined the ranks of the unemployed.

Income changes are apparent both among students with disabilities as a whole and to an even greater extent among individual students' families. There has been a 6-percentage-point decline in students with disabilities living in households earning \$25,000 or less and a 5-percentage-point increase in their living in households with incomes of more than \$50,000. However, almost two-third of students are in households with income changes of \$5,000 or more, including 43% whose household incomes have increased and 20% whose incomes have decreased.

These changes in household circumstances have not accrued equally to students in different disability categories. The greatest stability in most household characteristics is apparent for students with autism, whereas students with emotional disturbances or traumatic brain injuries are the most likely to have experienced changes in living arrangements with parents, their parents' marital status, and the employment status of their heads of household. They also are the most likely to have had decreases in the incomes of their households.

Students' Functioning

SEELS findings reveal both increases and decreases in different aspects of students' functioning over time. For example, eye sight apparently has deteriorated for some students, resulting in an increased likelihood that students use corrective lenses. On the other hand, there have been improvements in parents' ratings of students' self-care and social skills, their functional cognitive abilities, and their household responsibilities.

Looking at skill changes across the SEELS age range highlights the different developmental tasks that are appropriate at different ages. For example, improvements in self-care skills occurred entirely among the youngest children, some of whom are still mastering such activities as independent dressing and feeding. On the other hand, the largest improvements in functional cognitive skills is noted for the oldest group of students, who show the greatest gains in mastering such tasks as counting change and looking up telephone numbers.

The pattern of changes in daily living and social skills across disability categories also points up the variation in the skills that are particularly challenging to students who differ in their primary disabilities. For example, self-care skill improvements are notable only among students with traumatic brain injuries, some of whose injuries may require them to relearn such fundamental skills as dressing or feeding themselves. Similarly, a shift in social skills scores out of the low range to the middle range is only apparent among students with emotional disturbances or other health impairments, many of whom have attention deficit or attention deficit/hyperactivity disorder (ADHD) as their primary disability, categories of students for whom social skills and behavior are fundamental to their disabilities.

In contrast, improvements in basic functional cognitive skills are quite widespread across the disability categories, indicating appropriateness of such developmental tasks as acquiring literacy and mathematical functioning for all students. Similarly, increases in household responsibilities are noted for students in most categories, illustrating their burgeoning independence and responsibility, regardless of disability.

The changes in the characteristics of students with disabilities and their households that are noted here are provide a useful context for understanding the changes in students' experiences both in and out of school that are described in the following chapters.