IDEA emphasizes the appropriate use of accommodations to support the education of students with disabilities. Accommodations are changes made to aspects of the educational process to enable students with disabilities to perform at levels consistent with their abilities (Elliott, Kratochwill, & Schulte, 1998; Haigh, 1999; Thurlow et al., 1995; Tindal et al., 1998; Ysseldyke et al., 1999). The many types of accommodations that are intended to meet the needs of individual students have been organized into four broad categories by the National Center on Education Outcomes (NCEO). Timing accommodations are changes in the time of day or amount of time given to students for a test or an assignment. Setting accommodations are physical adaptations in classrooms or testing situations. *Presentation* accommodations involve changes in how a lesson, curriculum, or assessment is provided to students; these accommodations can include modified tests, slower paced instruction, or the use of human aides, such as a reader or interpreter. *Response* accommodations address the manner that students respond in learning or assessment situations, such as the use of signing or a communication board, calculator, or spell-checker.

The use of accommodations has been controversial, particularly in testing situations. Concerns have been voiced about how to interpret scores from accommodated tests, particularly when an accommodation directly facilitates the educational task at hand, such as the use of a calculator in mathematics tests (DeStefano et al., 2001; Fuchs & Fuchs, 2001; Koretz & Hamilton, 2000; Thurlow & Wiener, 2001).

In addition, students with disabilities may be given a variety of other types of learning aids or supports, such as a particular kind of training (e.g., in study skills or self-advocacy), or access to a support program (e.g., behavior management).

SEELS asked the primary language arts teachers of students with disabilities about students' receipt of 24 types of accommodations and learning supports in their classes.

Number of Accommodations and Supports Provided to Students with Disabilities

- On average, students with disabilities in general education language arts classes are provided an average of six accommodations, whereas students in special education language arts classes are provided 10 accommodations, on average.
- Regardless of disability category, students are provided more accommodations or supports in special education than in general education settings (an average of eight to 10, compared with an average of four to nine; Exhibit 7-1). The range in the average number

of supports across disability categories is more than twice as great in general education classes as in special education settings.

Exhibit 7-1 Average Number of Accommodations and Supports Provided to Students with Disabilities, by Disability Category and Instructional Setting

		Speech/					Ortho-	Other			
Average number of	I	Language	Mental	Emotional	Hearing	Visual	pedic	Health		Traumati	c Multiple
accommodations and	Learning	Impair-	Retar-	Distur-	Impair-	Impair-	Impair-	Impair-		Brain	Disabili-
supports provided in:	Disability	ment	dation	bance	ment	ment	ment	ment	Autism	Injury	ties
General education	6.8	4.1	8.1	5.3	5.1	7.4	6.4	6.2	7.3	6.9	8.9
	(.3)	(.4)	(.6)	(.5)	(.4)	(.5)	(.4)	(.4)	(.5)	(.8)	(1.1)
Special education	9.3	9.7	9.7	10.0	8.2	9.3	10.5	9.4	9.1	10.4	9.6
	(.3)	(.7)	(.2)	(.3)	(.3)	(.6)	(.4)	(.4)	(.3)	(.7)	(.4)
Sample size											
General education	on 312	261	91	182	256	273	296	254	193	76	51
Special education	on 355	86	528	313	438	205	276	226	467	148	377
Standard errors are in parent	heses.										

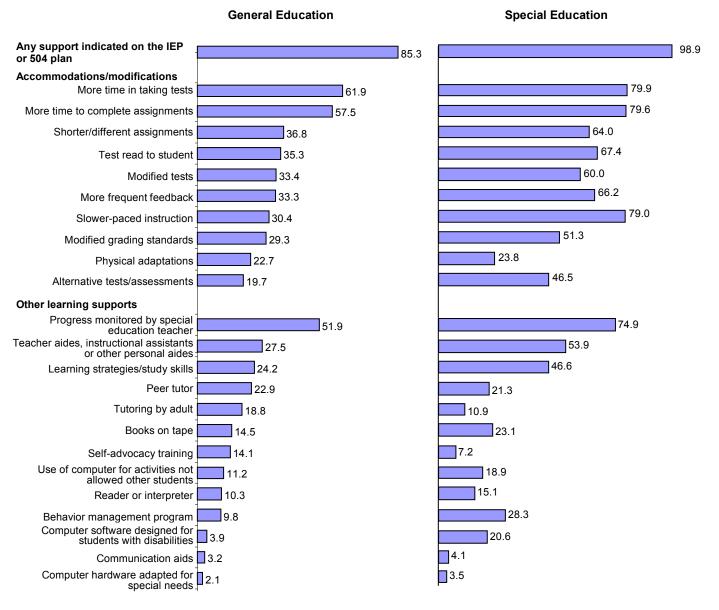
- The greatest difference between the average number of accommodations or supports provided in general education and in special education settings is among students with speech impairments or emotional disturbances; an average of about five more accommodations or supports are provided to students in these disability categories in special education settings. In contrast, the average difference in the two settings for students with mental retardation, visual impairments, autism, or multiple disabilities is less than two accommodations.
- No differences occur in the average number of accommodations and supports provided to students who differ in grade level or various demographic characteristics.

Types of Accommodations and Supports Provided to Students with Disabilities

Different types of accommodations are required to meet the variety of needs that students bring to the classroom. Teachers report that students with disabilities receive a wide variety of accommodations in the course of language arts instruction (Exhibit 7-2).

• Although the percentages of students who are provided the various types of accommodations vary widely within each type of instructional setting and across instructional settings, most types of accommodations, modifications, and learning supports are more common in special education settings than in general education settings (Exhibit 7-2).

Exhibit 7-2 Accommodations and Supports Provided to Students with Disabilities, by Instructional Setting



Percentage provided accommodation or support

• In general education settings, approximately 60% of students with disabilities are granted extra time to take tests or complete assignments, and approximately one-third are given shorter or different assignments, have tests read to them, take modified tests, receive feedback more frequently than other students or slower-paced instruction, and are graded using modified standards. Approximately

one-fifth are provided physical adaptations or are given alternative tests or assessments.

- The most common type of learning support other than accommodations or modifications for students with disabilities in general education classes is having their progress monitored by a special education teacher; approximately one-half receive this type of support. Approximately one-fourth have classroom or personal aides, are provided assistance with learning strategies or study skills, or receive self-advocacy training, and approximately 10% use a computer for activities not allowed for other students, have a reader or interpreter, or are in a behavior management program. Fewer than 10% are provided other types of learning supports.
- For students in special education settings, the most common types of accommodations or modifications, which are received by approximately 80% of students, are extra time on tests or assignments and slower-paced instruction. Between 60% and 70% of students receive shorter or different assignments, have tests read to them, take modified tests, or receive more frequent feedback. Approximately half are graded using modified standards or take alternative tests and assessments, and approximately one-fourth are provided physical adaptations.
- In special education settings, three-fourths of students have their progress monitored by a special education teacher, and approximately half have classroom or personal aides or receive help with learning strategies or study skills. Between 20% and 30% receive tutoring from a peer, use books on tape, are in a behavior management program, or use computer software designed for students with disabilities; 15% receive help from a reader or interpreter. Fewer than 10% receive other types of supports.

Types of Accommodations and Supports Provided to Students: Disability Category Differences

Accommodations and supports play a role in the education of nearly all students with disabilities, but the frequency with which they are provided varies across disability categories. This variation is shown in Exhibit 7-3 using the National Center on Educational Outcomes accommodation categories of response, presentation, setting, and timing.²

• Across all disability categories, the most common accommodations and supports relate to presentation. Virtually all students in special education settings receive them.

² See Appendix A for a description of how the 24 accommodations, supports, and learning aids were grouped into these four categories.

Exhibit 7-3 Accommodations and Supports Provided to Students, by Disability Category and Instructional Setting

Percentage receiving	l Learning	Speech/ _anguage Impair-	Mental Retar-	Emotional Distur-	Hearing Impair-	Visual Impair-	Ortho- pedic Impair-	Other Health Impair-		Traumatio Brain	c Multiple Dis-
accommodation/support in:	Disability	ment	dation	bance	ment	ment	ment	ment	Autism	Injury	abilities
General education											
Presentation	87.9	59.5	95.6	72.2	72.0	81.8	84.0	83.6	95.6	90.7	92.9
	(2.6)	(4.2)	(4.2)	(4.6)	(4.5)	(3.7)	(3.3)	(3.7)	(2.4)	(5.7)	(6.5)
Timing	86.4	45.2	84.1	61.9	50.9	73.9	73.9	78.5	78.6	80.7	76.2
	(2.7)	(4.2)	(5.3)	(4.9)	(5.0)	(4.2)	(3.7)	(4.0)	(5.0)	(7.7)	(10.7)
Response	71.0	43.3	81.2	50.1	43.0	60.7	60.8	63.8	71.8	62.3	82.8
	(3.6)	(4.2)	(5.6)	(5.1)	(5.0)	(4.7)	(4.4)	(4.7)	(5.5)	(9.5)	(9.5)
Setting	20.9	19.0	15.7	22.5	64.6	72.2	54.1	33.8	37.2	29.6	48.0
	(3.2)	(3.3)	(5.2)	(4.3)	(4.8)	(4.3)	(4.5)	(4.7)	(5.9)	(8.9)	(12.6)
Special education											
Presentation	98.9	95.3	98.2	97.1	96.0	96.4	98.5	96.0	96.6	96.4	98.3
	(.8)	(3.2)	(.8)	(1.3)	(1.6)	(2.5)	(1.1)	(2.0)	(1.3)	(2.7)	(1.1)
Timing	92.2	90.9	83.6	88.5	80.0	72.2	84.5	87.2	64.2	87.0	71.0
	(2.0)	(4.4)	(2.3)	(2.5)	(3.2)	(6.1)	(3.4)	(3.5)	(3.5)	(4.8)	(3.8)
Response	89.6	84.9	87.8	87.8	74.7	79.3	88.9	83.2	83.0	89.3	83.8
	(2.3)	(5.5)	(2.0)	(2.6)	(3.5)	(5.5)	(2.9)	(3.9)	(2.8)	(4.4)	(3.1)
Setting	21.3	22.7	20.5	26.5	35.8	49.4	46.1	32.5	29.5	36.4	35.5
	(3.1)	(6.4)	(2.5)	(3.5)	(3.8)	(6.8)	(4.6)	(4.9)	(3.3)	(6.9)	(4.0)
Sample size General educatior	1 312	261	91	182	256	273	296	254	193	76	51
Special education		86	528	313	438	205	290	226	467	148	377
Standard errors are in parent	heses.										

- Accommodations and supports related to timing and response are provided to more than 60% of students in most disability categories in general education settings and to more than 70% of students in most disability categories in special education settings.
- Adaptations related to setting are the least common type of adaptations for youth in most disability categories, regardless of instructional setting. Students' likelihood of receiving them varies widely, particularly in general education classes, which have a 56-percentage-point range in the likelihood of receiving such accommodations across the disability categories.
- In general education settings, students with mental retardation are among the most likely to be provided accommodations and supports related to presentation, timing, and response, whereas students with sensory impairments are the most likely to be provided adaptations related to setting (physical adaptations).
- In general education settings, students with speech impairments are among the least likely to be provided each kind of accommodation or

support. Students with hearing impairments also are among the least likely to be provided supports related to timing and response.

- The range in provision of each type of accommodation or support across the disability categories is smaller in special education than in general education settings.
- In special education settings, students with learning disabilities or speech impairments are the most likely to receive accommodations and supports related to timing, whereas students with autism are least likely to receive them. In contrast, students with learning disabilities, mental retardation, emotional disturbances, orthopedic impairments, or traumatic brain injuries are the most likely to receive supports related to response, whereas students with hearing impairments are the least likely to receive them.
- In both special education and general education settings, students with visual impairments are the most likely to be provided accommodations related to setting; however, students with hearing impairments fall in the middle of the range of the disability categories.

Types of Accommodations and Supports Provided to Students with Disabilities: Grade-Level and Demographic Differences

- In general education settings, students' likelihood of being provided accommodations for timing, presentation, and response increase with higher grade levels (Exhibit 7-4).
- In special education settings, students' likelihood of being provided accommodations is not higher at higher grade levels; however, students in ungraded classes are less likely to be provided accommodations related to timing or response than students at grade levels.
- In general education settings, students from households in the highest income group are less likely than students from lower-income households to be provided accommodations for timing, presentation, and response.

	Grade Level				Hou	sehold In	come	Race/Ethnicity			
Percentage receiving						\$25,001					
accommodation/	Un-		4th and	6th and	\$25,000	to	More than		African		
support in:	graded	1st to 3rd	5th	above	or Less	\$50,000	\$50,000	White	American	Hispanic	Asian
General education											
Presentation		69.7	75.2	84.1	79.9	83.9	67.4	75.3	77.7	82.0	82.3
		(4.0)	(3.5)	(3.1)	(4.1)	(3.7)	(4.2)	(2.3)	(5.7)	(5.9)	(17.0)
Timing		57.5	67.9	80.1	73.5	75.6	56.0	66.7	66.9	82.7	79.4
		(4.3)	(3.7)	(3.4)	(4.6)	(4.4)	(4.4)	(2.6)	(6.5)	(5.8)	(18.1)
Response		50.6	61.1	64.8	70.3	63.1	49.2	55.0	71.0	70.3	36.4
		(4.3)	(3.9)	(4.0)	(4.7)	(4.9)	(4.4)	(2.7)	(6.2)	(7.1)	(21.5)
Setting		24.5	20.8	22.9	24.1	19.7	24.3	21.4	30.3	17.7	28.6
-		(3.7)	(3.2)	(3.6)	(4.4)	(4.0)	(3.8)	(2.2)	(6.3)	(5.9)	(20.2)
Special education											
Presentation	91.6	97.7	98.6	98.1	97.9	98.5	97.7	97.6	98.3	99.3	96.4
	(3.5)	(1.3)	(0.9)	(1.0)	(1.1)	(1.2)	(1.6)	(.8)	(1.1)	(1.0)	(7.9)
Timing	63.9	85.9	89.3	92.2	88.5	89.9	84.4	87.7	91.3	83.2	86.7
	(6.0)	(3.0)	(2.3)	(2.0)	(2.4)	(2.8)	(3.8)	(1.8)	(2.4)	(4.9)	(14.3)
Response	75.5	88.0	88.4	87.9	86.6	91.1	84.7	86.0	89.5	90.6	88.6
	(5.3)	(2.8)	(2.4)	(2.4)	(2.6)	(2.7)	(3.8)	(1.9)	(2.7)	(3.8)	(13.4)
Setting	25.6	30.1	21.7	21.5	29.6	25.1	20.3	20.2	25.8	37.1	27.4
	(5.4)	(4.0)	(3.1)	(3.0)	(3.5)	(4.1)	(4.2)	(2.2)	(3.8)	(6.5)	(18.8)
Sample size		700	704	CO 4	400	400	700	4 004	070	014	40
General education	 357	736 888	794 1.067	694 1,070	469 1,089	493 761	760 734	1,681 2,034	279 846	211 457	46 60
Special education	307	000	1,007	1,070	1,009	101	1 34	2,034	040	407	00
Standard errors are in pare	ntheses										

Exhibit 7-4 Types of Student Accommodations and Supports Provided, by Grade Level, Income, Race/Ethnicity, and Instructional Setting

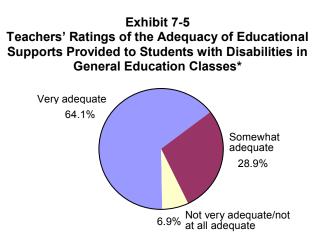
• Family income is not associated with the likelihood of receiving accommodations and supports for students in special education settings.

- Accommodations and supports related to presentation are about equally likely to be provided to students across racial/ethnic groups.
- Hispanic students with disabilities are more likely than white students to be provided accommodations related to timing and accommodations in general education classes and accommodations related to setting in special education classes. In addition, both Hispanic and African-American students are more likely than white students to be provided accommodations related to response.

Adequacy of Supports Provided to Students with Disabilities in General Education Classes

SEELS asked general education teachers with students with disabilities in their classes about the adequacy of the supports those students receive to help them succeed in class.

• The majority of students with disabilities in general education classes are provided adequate educational supports, according to their teachers (Exhibit 7-5); however, approximately one in 14 are reported not to be provided adequate support.



*Note: Percentages are percentages of students with level of support.

Differences in Adequacy of Supports

- According to general education teachers, students with speech impairments or traumatic brain injuries are the most likely to receive "very adequate" support in their classes, whereas students with mental retardation or multiple disabilities are the least likely to receive that level of support (Exhibit 7-6).
- Students from higher-income families are reported to receive "very adequate" educational supports in general education settings more often than peers from low income families (Exhibit 7-7).
- Hispanic students are less likely than white students to be reported to receive "very adequate" educational supports in general education settings.

Exhibit 7-6 Teachers' Ratings of the Adequacy of Educational Supports Provided to Students in General Education Classes, by Disability Category

Percentage whose											
teachers rate support		Speech/					Ortho-	Other			
provided to students in		Language	Mental	Emotional	Hearing	Visual	pedic	Health			Multiple
general education classes	Learning	Impair-	Retar-	Distur-	Impair-	Impair-	Impair-	Impair-		Traumatic	Dis-
as:	Disability	ment	dation	bance	ment	ment	ment	ment	Autism	Brain Injury	abilities
Very adequate	59.9	72.5	47.2	54.7	68.5	66.0	66.0	66.0	58.3	75.5	43.7
	(2.6)	(3.9)	(5.0)	(3.2)	(4.1)	(3.7)	(3.4)	(3.6)	(3.1)	(7.7)	(12.8)
Somewhat adequate	31.8	23.1	38.5	36.3	25.6	26.7	27.6	27.6	33.0	20.4	53.0
·	(3.8)	(3.7)	(7.0)	(5.0)	(4.4)	(4.2)	(4.1)	(4.1)	(6.1)	(8.0)	(12.9)
Not very/not at all	8.3	4.5	14.3	8.9	5.8	7.3	6.5	6.5	8.7	4.1	3.3
adequate	(2.2)	(1.8)	(5.0)	(3.0)	(2.3)	(2.5)	(2.3)	(2.5)	(3.6)	(3.9)	(4.6)
Sample size	304	251	91	173	258	270	288	242	188	75	49
Standard errors are in pa	rentheses.										

Exhibit 7-7 Teachers' Ratings of the Adequacy of Educational Supports Provided to Students with Disabilities in General Education Classes, by Income, Race/Ethnicity, and Instructional Setting

	Hou	sehold Inco	ome				
Percentage whose teachers rate support provided to students in general education classes as:	\$25,000 or Less	\$25,001 to \$50,000	Over \$50,000	White	African American	Hispanic	Asian/ Pacific Islander
Very adequate	51.8	63.8	70.9	69.2	55.5	47.6	71.4
	(5.2)	(4.9)	(4.1)	(2.5)	(7.0)	(7.9)	(20.0)
Somewhat adequate	35.3	29.7	24.6	25.8	31.9	40.5	26.3
	(5.0)	(4.7)	(3.9)	(2.4)	(6.5)	(7.8)	(19.5)
Not very/not at all adequate	12.9	24.6	4.6	5.0	12.6	11.9	2.3
	(3.5)	(2.5)	(1.9)	(1.2)	(4.6)	(5.1)	(6.7)
Sample size Standard errors are in parentheses.	461	491	744	1,648	279	204	47

Summary

Students with disabilities are provided a wide range of accommodations and supports in their language arts classes to help them succeed. Accommodations and supports are more commonly provided in special education than in general education settings, reflecting the greater severity of disability of many of the students in special education classes.

SEELS findings suggest that the types of accommodations provided to students reflect their needs and that the vast majority of students are provided support that teachers consider at least "somewhat adequate". The number of supports students are provided and the extent to which the support is fully adequate vary across disability categories. For example, in general education classes, students with speech impairments receive the fewest accommodations on average, yet they are most likely to be reported by their teachers as receiving support that is "very adequate." On the other hand, in these same settings, students with mental retardation or multiple disabilities receive the most accommodations, yet they are the least likely to be reported as having "very adequate" support by their teachers.

In addition to differences in the number and kinds of accommodations and supports provided to students with different kinds of disabilities, there also are differences among students with different household incomes and racial/ethnic backgrounds. Generally, white students and higher-income students are less likely to receive some kinds of accommodations, particularly in general education settings; however, they are more likely than their Hispanic or lowerincome peers to be reported as having "very adequate" support.

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