



## A National Look at the Academic Achievement of Children with Emotional Disturbances

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Expanding the Research Base  
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SRI International

## SEELS is not...

- A cute logo of an individual seal...




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## SEELS is not...



- About a particularly industrious aquatic mammal...





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## SEELS is...

- Part of the National Assessment of Special Education
- An important study for the Office of Special Education Programs (OSEP)
- Conceptually and logistically complicated
- Important for informing legislation
- Important for improving schools and services for students with disabilities





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## Overview of SEELS

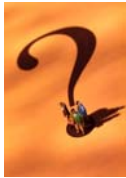

- Unit of analysis is the **student**.
- **Generalizes nationally** to students receiving special education ages 6 to 12 as a group, each disability category and each single-year cohort separately.
- Is **conceptually comprehensive**; requires multiple data collection approaches.
- **Longitudinal**. Has followed students for 5 years; total study = 6 years.
- Serves **multiple audiences** and analytic purposes.



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## Study Questions

- Who are the **students and families** receiving special education in elementary and middle school?
- What are their **out-of-school experiences**?
- What are their **educational and service experiences**?
- What **results** do they experience in the academic, social, and independence domains?
- How do results **relate** to variations in student and family characteristics, non-school factors, and schools and school programs?

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## Students We're Describing Today

- Students with “emotional disturbance” as their primary special education disability classification
  - Ages 6 to 13 in 2000
  - As described by parents in 2000 and measured in direct assessments and school staff surveys in 2001 and 2002.



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## IDEA Definition of Emotional Disturbance

- A condition exhibiting one or more of the following characteristics, displayed over a long period of time and to a marked degree that adversely affects a child's educational performance:
  - An inability to learn that cannot be explained by intellectual, sensory, or health factors
  - An inability to build or maintain satisfactory interpersonal relationships with peers or teachers
  - Inappropriate types of behavior or feelings under normal circumstances
  - A general pervasive mood of unhappiness or depression
  - A tendency to develop physical symptoms or fears associated with personal or school problems



From ERIC Digests. (1998). IDEA's definition of disabilities. ERIC Digest E560.

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## Academics Often Take a Back Seat in Addressing the Needs of Students with ED

- Yet:
  - Their grades typically are poorer than those of students with disabilities as a whole.
  - More than one-third have been held back a grade at least once.
  - Most take general education courses in high school and are expected to keep up; fewer than two-thirds do.
  - They drop out of high school at the highest rate of any disability group.
- We need a better understanding of their early academic performance to help them improve these outcomes.



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## Today's Agenda

- Describe the academic abilities of students with emotional disturbances—How do they do in school?
- Describe their self-reported motivation for schooling and “locus of control”—their attribution of success and failure to themselves or to external factors.
- Identify aspects of students, their households, and their school experiences that relate to better academic performance—who succeeds; who doesn't?



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## Data Used Today



- Parent Interview
  - Demographics, household characteristics, nonschool factors, family involvement, child personal/social adjustment
- Teacher Survey
  - Grading procedures, instructional practices, discipline, accommodations and modifications, support, teacher background



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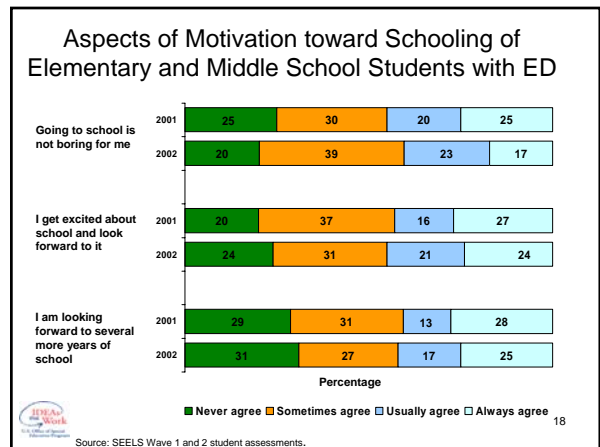
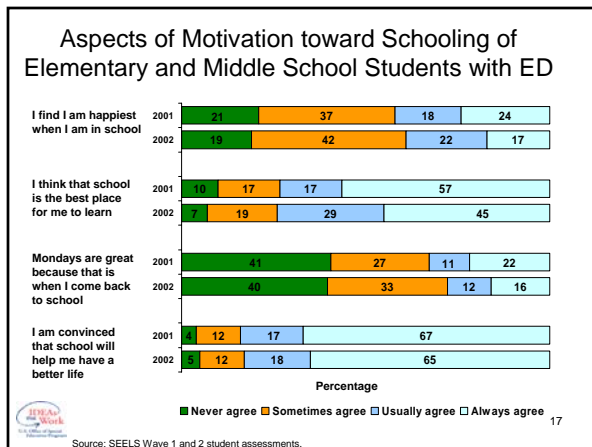
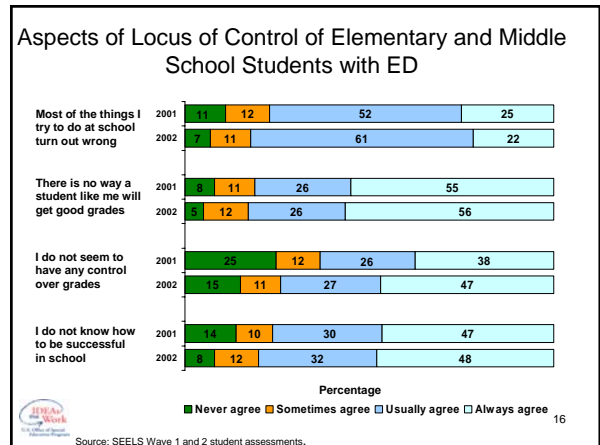
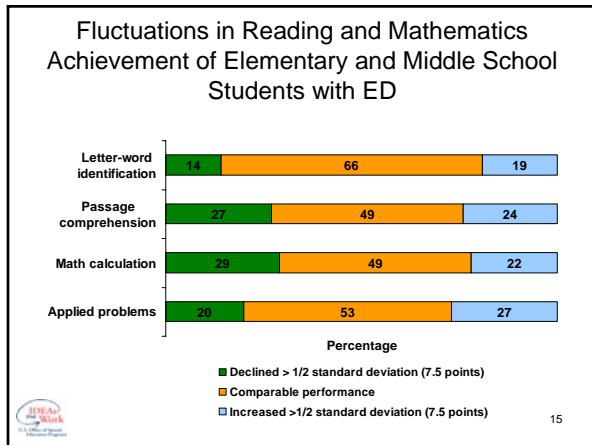
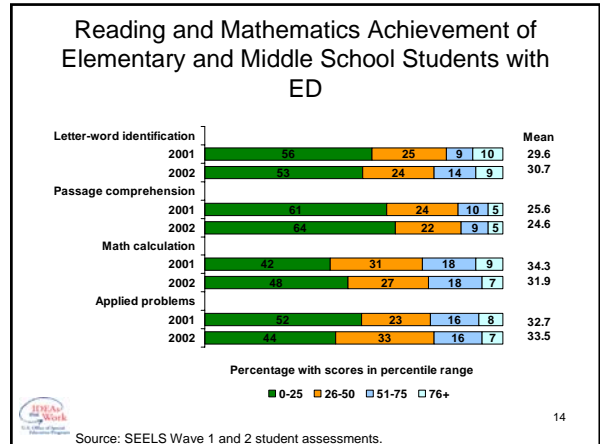
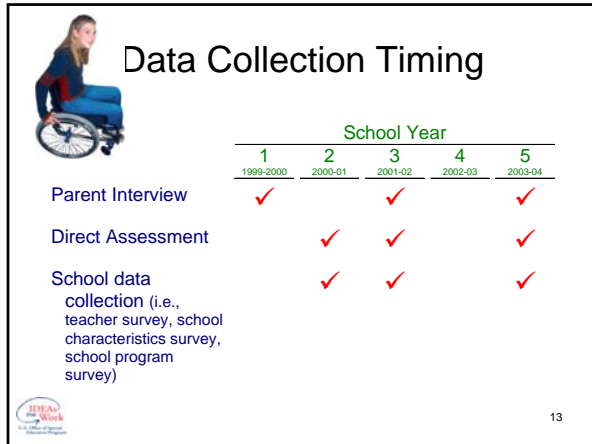
## Direct Assessment

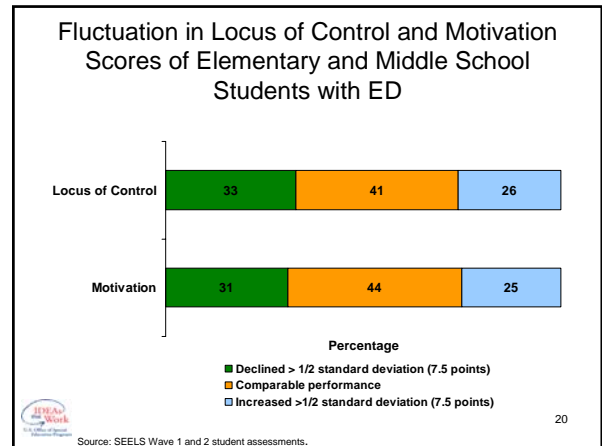
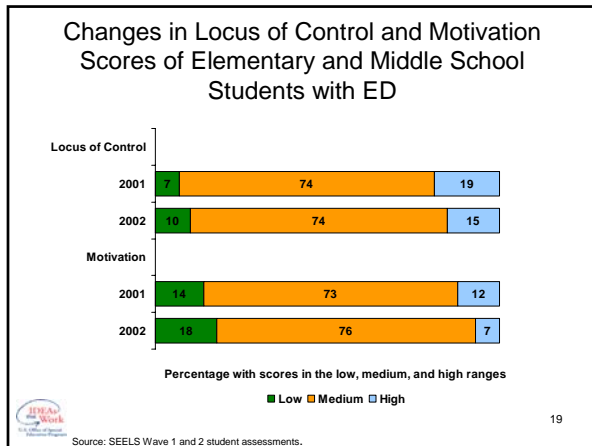


- Woodcock-Johnson Research Edition
  - Letter-word identification
  - Passage Comprehension
  - Calculation
  - Applied Problems
- Phonological Processing - CTOPP
  - Rapid Letter Naming
  - Segmenting
- Oral Reading Fluency
  - 2 passages
- Self-Concept - SSCS
  - General
  - Academic
  - Social
- Student Attitude Measure
  - Locus of Control
  - Motivation for schooling
- Friendships - Asher
- Open end: What is your favorite thing about school?



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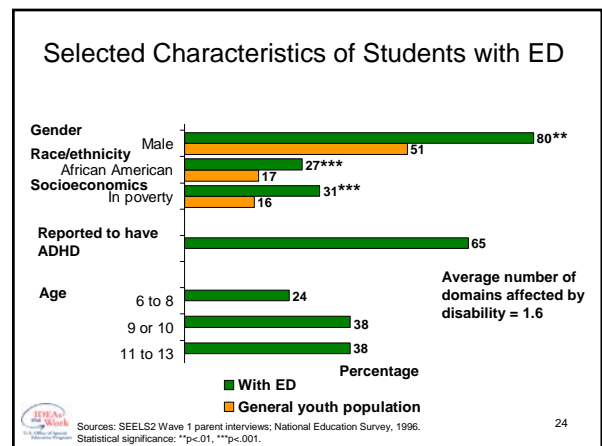
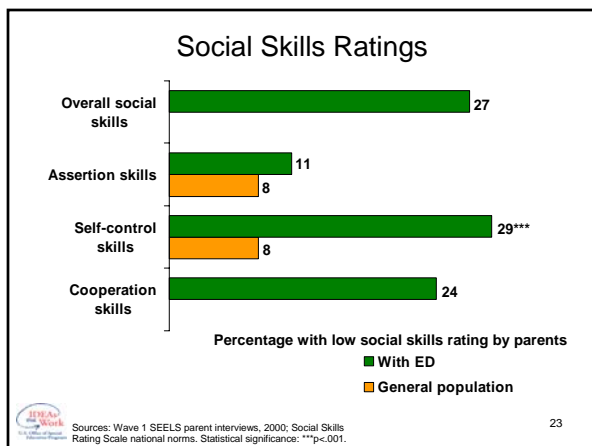
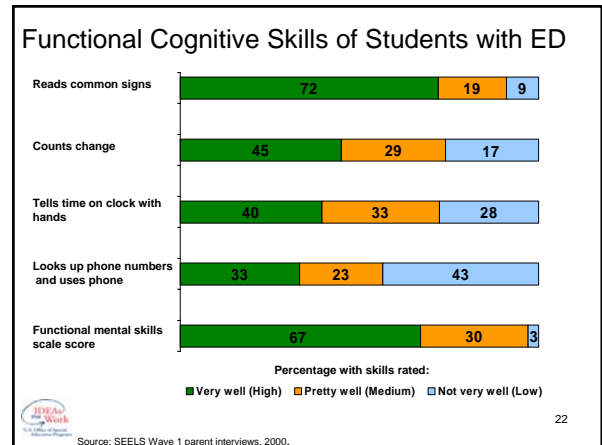


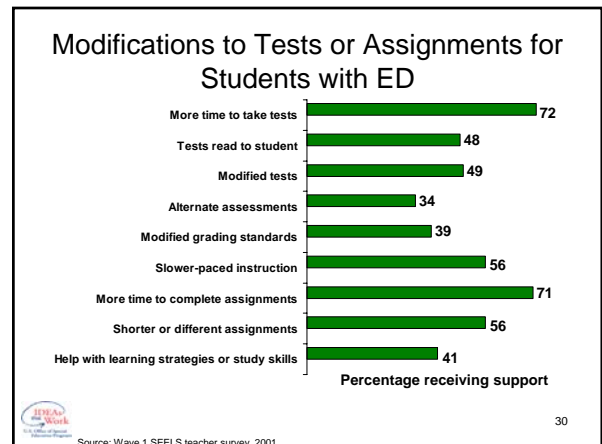
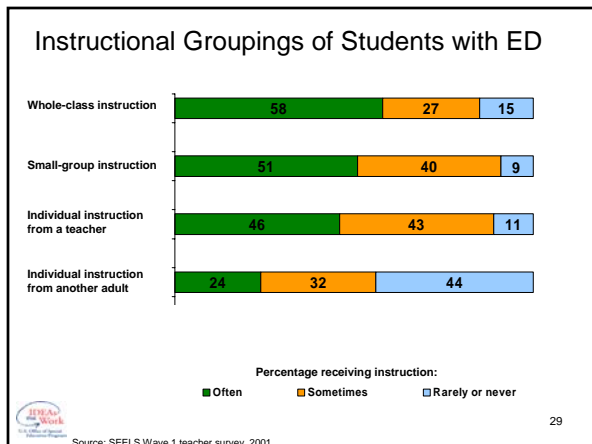
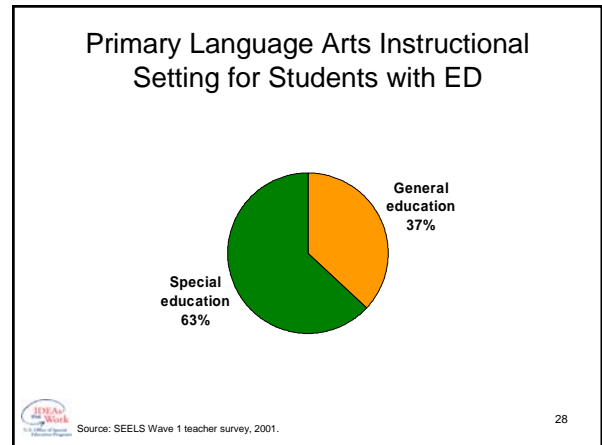
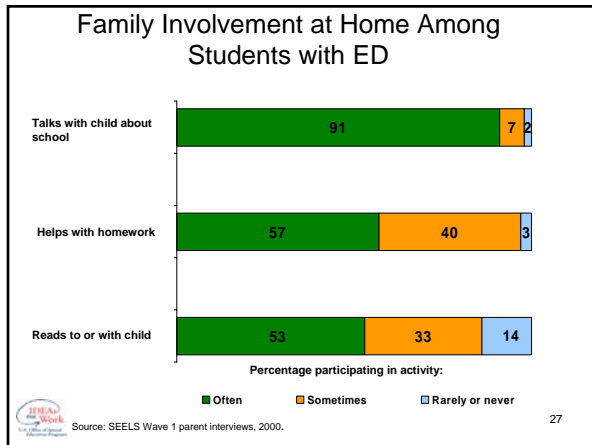
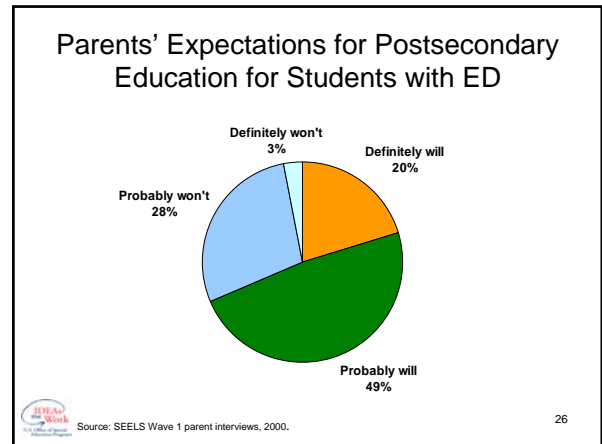
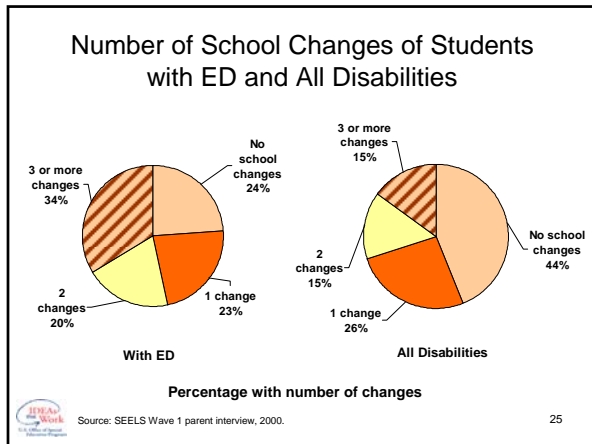


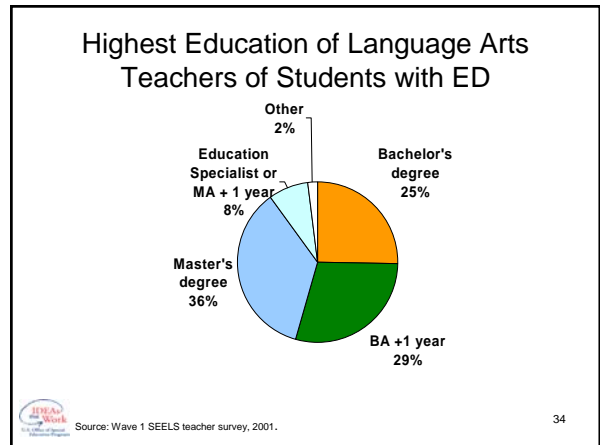
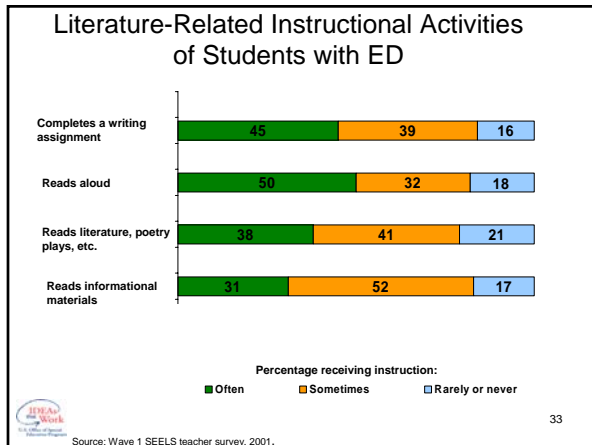
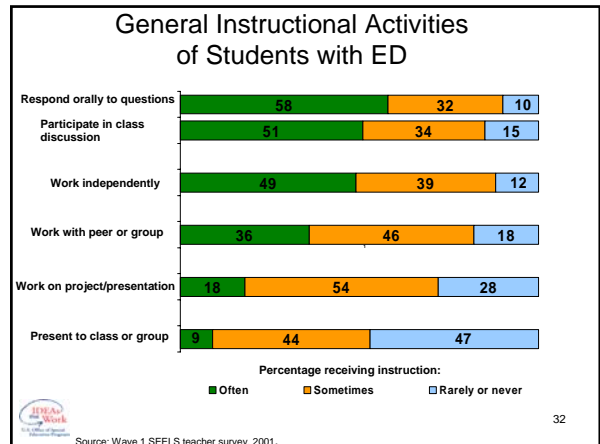
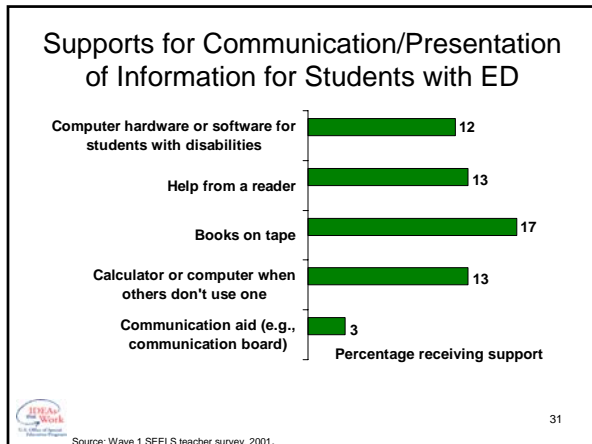
### Factors Thought to Shape Performance

Disability/Functioning	Individual and Household Characteristics	Parent Support	School Factors
ADD/ADHD	Age	Expectations for postsecondary education	Instructional setting
Number of domains affected by disability	Gender	Family involvement at home	Receives tutoring
Functional cognitive skills	Race/ethnicity		Number of modifications to tests/assignments
Social skills	Household income		Number of supports for communication/presentation of information
	Mobility		Instructional groupings
	Student's locus of control		Instructional activities
	Student's motivation		Teacher's education
	Student has been retained at grade level at least once		

Source: SEELS Wave 1 parent interviews, 2000.








- ### Analysis Approach
- Examining the influence of locus of control and school motivation and experiences in 1 year on academic performance the following year.
  - Multiple regression analysis shows the independent relationship of each factor in the model to academic performance, holding constant the effects of all other factors in the analysis.
  - Notation:
    - + Contributes to academic performance
    - Detracts from academic performance
- Statistical significance: \*p<.10, \*p<.05, \*\*p<.01, \*\*\*p<.001.

### Individual Factors Related to Academic Outcomes

Independent Variable	Direct Assessment Score in Reading	Direct Assessment Score in Math
Has ADD/ADHD	-*	
Functional cognitive skills		+†
Social skills		
Number of domains affected by disability	-*	-*
Age		
Gender—being male	+***	
Race/ethnicity—being African American	-***	-*
Number of school changes	-†	
Child has been retained at grade level	-*	
Locus of control		
Motivation for schooling		

### Household Factors Related to Academic Outcomes


Independent Variable	Direct Assessment Score in Reading	Direct Assessment Score in Math
Household income		
Parents expectations for college		
Family involvement at home		




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### School Factors Related to Academic Outcomes


Independent Variable	Direct Assessment Score in Reading	Direct Assessment Score in Math
Takes language arts in special education class		
Receives tutoring		
Number of instructional modifications		+‡
Number of presentation/communication modifications		
Teacher's education		
Frequency of whole class instruction		
Frequency of small group instruction		
Frequency of individual instruction	+*	
Participation in general instructional activities		
Participation in literature-related activities	+***	+‡




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- ### What Have We Learned?
- The majority of students with ED have significant deficits in reading and math that, as a group, do not show change in a 1-year period:
    - Half or more are in the lowest quartile in reading; only about 1 in 7 are in the top half.
    - About half are in the lowest quartile in math; about one-fourth are in the top half.
  - Overall scores mask considerable fluctuation in performance for individual students:
    - About one-fourth of students with ED improve in reading comprehension and math calculation in 1 year, and an equal proportion have declining scores.
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- ### What Have We Learned?
- Most students with ED have little sense that they can positively affect their performance in school.
  - Nonetheless, most understand school is important to their future but fewer feel positively about being in school.
  - Individual motivation and locus of control scores are more likely to go down in a 1-year period than up.
  - Although many students with ED have a weak internal locus of control and some are not strongly motivated toward school, these factors are not associated with academic performance for students in the SEELS age range.
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- ### What Makes a Difference?
- Students with ED whose disabilities have broader functional consequences have poorer academic performance; having ADHD presents its own academic challenges.
  - Although many students with ED have social skills deficits, skill differences are not independently related to academic performance.
  - Being African American is negatively associated with reading and math performance, independent of income, which is unrelated.
  - Boys with ED read better than girls.
  - Students with ED change schools more than other categories of students, and do so more often because they are reassigned by their schools. Mobility shows a negative relationship with reading performance that could strengthen over time if a pattern of mobility persists.
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- ### What Makes a Difference?
- Family expectations and support for education are not independently associated with academic performance for students in the SEELS age range.
  - Few characteristics of students' school programs in 1 year are significantly related to their performance the next year.
  - Those that are related usually are negatively related—i.e., those who need help because of poor performance are the ones getting help (e.g., individual instruction from a teacher, more academic modifications or accommodations).
  - The exception is that more frequent participation in literature-based activities is positively related to better reading ability. The direction of influence is unclear.
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For more information...



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[www.seels.net](http://www.seels.net)

