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## SEELS: The Outcomes of Elementary and Middle School Students with Disabilities

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### Introduction

The U. S. Department of Education's Office of Special Education Programs (OSEP) commissioned a six-year study that generated information needed to assess the achievements of students with disabilities in their elementary and middle school years in multiple domains. The Special Education Elementary Longitudinal Study (SEELS) is documenting the characteristics, experiences and outcomes of a nationally representative sample of more than 11,000 students who were ages six through twelve and were receiving special education services in grades one through six when the study began in 2000. Project Forum at the National Association of State Directors of Special Education (NASDSE) produced this synthesis as part of its cooperative agreement with OSEP.

### Background

Reforms in the American education system, codified in The No Child Left Behind Act of 2001 (NCLB), emphasize the accountability of schools for the academic performance of all students. This emphasis on improved academic performance is consistent with the intention of both the Individuals with Disabilities Education Act (IDEA) 1997, enacted prior to NCLB and IDEA 2004, enacted after NCLB. An NCLB focus is on: "Improving educational results for children with disabilities is an essential element of our national policy of ensuring equality of opportunity, full participation, independent living and economic self-sufficiency for individuals with disabilities" [P.L. 107-110 Sec. 601(c)(1)] and "prepar[ing] them for employment and independent living" [P.L. 105-17 Sec. 601(d)(1)(A)].

SEELS examines a wide range of outcomes for students with disabilities. This Project Forum document synthesizes findings from one SEELS report, *Engagement, Academics, Social Adjustment, and Independence: The Achievement of Elementary and Middle School Students*

*with Disabilities*<sup>1</sup> and addresses the question of how students with disabilities are doing in the following four domains:

- school engagement;
- academic performance;
- social adjustment; and
- independence.

## **Methodology**

SEELS used several sources of information to measure outcomes and understand the instructional settings of students with disabilities. These include: the primary disability classification; parent telephone interview; in-person student assessment; questionnaire completed by the students' language arts teachers; questionnaire completed by the teachers who know the students' overall school program; and questionnaire completed about the characteristics of the students' schools. Because SEELS collects data from a variety of sources and a nationally representative sample of students with disabilities, its findings can inform policymakers about the many factors that affect students with disabilities.

## **Findings**

The findings from SEELS show that many factors contribute to outcomes for students with disabilities.

### **School Engagement**

SEELS examined different dimensions of school engagement. These included absenteeism, school motivation and classroom engagement. This section describes how individual and household characteristics of students and school program characteristics are related to school engagement.<sup>2</sup>

#### *Individual and Household Characteristics*

Of all students with disabilities, those with behavioral issues struggle the most with school engagement. For example, 28% of students with emotional disturbance (ED) have parents who believe that their child does not enjoy school, and these students have rates of absenteeism that are four to five days greater annually than for students with learning disabilities. Students with ED also have lower motivation for schooling than students with learning disabilities. Similarly, students identified with Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder (ADD/ADHD) receive lower classroom engagement ratings in both general and special education language arts classes than students who do not have ADD/ADHD.

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<sup>1</sup> The report, as well as other SEELS reports, can be downloaded at [www.seels.net](http://www.seels.net).

<sup>2</sup> Class behavior engagement is measured by asking the language arts teacher if a student completed tasks, persisted in tasks, worked independently, turned homework in on time, and took part in group discussions.

Other factors that influence whether students are engaged in school are age of identification, poor health, and racial and ethnic background, although these factors may only have relationships with certain kinds of school engagement. Students who were older when first identified as having a disability participate less in general education language arts classes and have lower motivation for schooling. Students whose parents report their health as being “excellent” miss nearly five fewer days of school per year than those whose health is rated as “poor.” On average, African-American and Hispanic students have higher motivation for schooling than do white students.

A student’s household income and family involvement are also related to school engagement. On average, students from higher-income families miss less school and are more engaged in their general education language arts classes than their lower-income peers. Family involvement at home is related both to absenteeism and to classroom engagement in general education settings. Students whose families are more highly involved in their children’s education at home miss three fewer days of school annually and have lower classroom engagement than do students whose families are less involved at home.

### *School Programs and Experiences*

Students’ needs for curriculum modifications and accommodations are related to several aspects of school engagement. Students who receive an unmodified curriculum have higher classroom engagement in special education language arts than do peers who receive substantial modifications. Similarly, several kinds of accommodations and supports provided to students with disabilities are negatively related to their classroom engagement. On average, students who receive social adjustment supports, such as mental health services or social work services, have lower classroom engagement in both special and general education settings. Students who receive more modifications for tests, instructions and assignments have lower classroom engagement in general education language arts classes. Although these kinds of academic and social supports could be expected to help students with disabilities feel more engaged and successful in these classes, it also is reasonable to believe that students who are struggling in class are the most likely to receive such supports.

Classroom activities are also related to aspects of school engagement. Frequent participation in both literature-oriented activities (e.g., literature, poetry, writing) and skill-building activities (e.g., phonics, vocabulary) is associated with higher classroom engagement in both general and special education classes.

School mobility has a negative relationship to some aspects of school engagement. Changing schools frequently, for reasons other than changing grade levels, appears to result in weaker social bonds with the school. Students who changed schools three times or more score worse on behavior ratings scales in general education classes than those who made no changes. In addition, students who change schools frequently are less educationally motivated.

## Academic Performance

The following section describes how individual and household characteristics of students and school program characteristics are related to academic performance.

### *Individual and Household Characteristics*

Some differences in academic performance are associated with disability category. Students with ED are closer to grade level in reading than are students with learning disabilities. They also score higher on the Woodcock Johnson III (WJIII)<sup>3</sup> passage comprehension test compared to students with learning disabilities. Having ADD/ADHD is associated with lower grades.

There was only one difference in academic performance among racial groups with disabilities. Compared with white students, African-American students are further from expected grade-level performance in mathematics. This would suggest that an achievement gap still exists among white and African-American students, despite similar performances on standardized tests. There were no differences in academic performance between Hispanic and white or African-American students with disabilities.

Household income is associated with better academic outcomes. Students from higher-income households show a consistent pattern of higher performance. On average, they receive better grades than peers from lower-income households; perform closer to grade level in both reading and mathematics; and have higher scores on the WJIII passage comprehension test.

Parental expectations and family involvement in both the home and school are significantly related to academic performance. Parental expectations that their children “definitely” will attend postsecondary school are associated with students having higher grades; being closer to grade level in reading and mathematics; and scoring higher on the WJIII passage comprehension test relative to students whose parents believe they “probably won’t” pursue postsecondary education. Higher levels of family involvement *at school* are associated with students receiving slightly higher grades. On the other hand, higher levels of family involvement *at home* are associated with lower grades and higher WJIII passage comprehension test scores. This negative relationship between greater family involvement at home and lower grades may be the result of parents being more likely to help with homework when students are receiving poor grades.

### *School Programs and Experiences*

Participation in general academic education classes by students with disabilities has increased over the past decades. It appears that students able to participate to a greater degree in general education have achieved some success. On average, students with disabilities who spend 75% of

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<sup>3</sup> The assessment contained research editions of four subtests of the WJIII assessment (Wookcock, McGrew, & Mather, 2001), including letter-word identification, passage comprehension, mathematics calculation and mathematics problem-solving. WJII allows for direct comparisons with a general population norm group assessed in 2000.

their class time in general education settings are closer to grade level in both reading and mathematics than peers who spend only 25% of their time there. Moreover, these same students score higher on both the WJIII passage comprehension and calculation tests.

Students' needs for curriculum modifications and accommodations are related to several aspects of academic performance. On average, students who are able to participate in an unmodified language arts curriculum are closer to grade level in both reading and mathematics and have higher achievement scores on the WJIII subtests than peers who require substantial curriculum modifications. There is a negative relationship between receiving accommodations and academic performance. Students who receive instructional or testing accommodations have lower grades; perform further from grade level in both reading and mathematics; and have lower test scores on WJIII passage comprehension and mathematics calculation than peers who receive no accommodations and presumably do not need them. Students who receive accommodations frequently have lower levels of achievement. Although an accommodation may raise a student's performance, it may not raise a student's performance to the level of a student who does not need accommodations. This situation would explain the findings above. Alternatively, students who receive more curriculum modifications and assessment accommodations may need them because of the nature and severity of their disabilities. This could partially explain why their achievement is lower. However, this principle does not appear to apply equally to all types of accommodations or supports. For instance, in contrast to findings for instructional and testing accommodations, students receiving presentation or communication accommodations do not demonstrate different academic performance than students receiving no accommodations.

Participation in certain classroom activities is associated with higher academic performance. Students with higher levels of participation in class and students who frequently participate in literature-oriented activities have higher grade-level performance in reading and mathematics and higher WJIII passage comprehension scores. In addition, frequent participation in literature-oriented activities is associated with higher test scores for mathematics calculation. When students miss class, they are assumed also to miss the opportunity to access new curriculum content and to participate in class activities. Those missed opportunities adversely affect learning. Higher levels of absenteeism are related to lower grades but also to higher test scores in passage comprehension. Many students with disabilities can be involuntarily absent from school because of health conditions. These students may still score well on standardized tests, but may receive poor grades because of lack of attendance.

## **Social Adjustment**

SEELS examined the social adjustment of elementary and middle school students with disabilities by examining their social skills, adjustment in the classroom and adjustment outside of school.

### *Individual and Household Characteristics*

There are several factors related to the social adjustment of students with disabilities. On average, students with ED are the most likely to have problems with social adjustment. Although

students with ED are no more or less likely than students with learning disabilities to see friends often or belong to groups (such as a club at school or a church organization); they are more likely than students with learning disabilities to be subject to disciplinary action at school. Similarly, students whose parents report they have ADD/ADHD are more likely than students with learning disabilities to be subject to disciplinary action at school.

African-American and Hispanic students have different patterns of social adjustment. Compared with their white peers, African-American students are more likely to be subject to disciplinary action. Hispanic students are less likely to belong to a school or community group compared with their white peers. Neither Hispanic nor African-American students differed from white students in their probability of seeing friends regularly.

Household income and family involvement are related to social adjustment. The higher a student's family income, the more likely he or she is to belong to a group and the less likely to be subject to disciplinary actions at school. Family involvement at school has a particularly strong relationship with the likelihood of students belonging to groups.

### *School Programs and Experiences*

Unlike academic performance, there are fewer relationships between school experiences and social adjustment of students with disabilities. On average, greater inclusion in general education classes is related to positive social adjustment among students with disabilities. Regardless of disability category, level of functioning and demographic characteristics, the greater proportion of the school day students with disabilities spend in general education classes, the more likely they are to participate in extracurricular group activities. Receiving social adjustment supports, such as mental health services or social work services, is associated with a higher likelihood of students with disabilities being subject to disciplinary action at school. This relationship may exist because having disciplinary problems at school may result in students receiving help with social adjustment issues. School mobility is again an important factor – the more times a student has changed schools other than because of grade promotions, the more likely he or she is to be subject to disciplinary action.

## **Independence and Locus of Control**

This section highlights a variety of factors affecting the independence of elementary and middle school students with disabilities, including skills that support and strengthen self-reliance; responsibilities that accompany an independent lifestyle; and activities associated with a growing sense of control (referred to as locus of control).

### *Individual and Household Characteristics*

Surprisingly, disability category and other disability-related characteristics generally are not related to the locus of control (i.e., feelings of internal or external control) for elementary and middle school students with disabilities. Only students with visual impairments differ on the locus of control scale from students with learning disabilities and the difference is modest. On

average, students with visual impairments score higher on the locus of control scale in an educational setting compared with their learning disabled peers. This suggests that students with visual impairments perceive themselves to be in control of their educational experiences to a greater degree than students with learning disabilities.

Household income is associated with students' locus of control. On average, students from higher income families are more likely than those from lower income families to have slightly higher locus of control scores.

### *School Programs and Experiences*

Only two school program factors have strong associations with students' locus of control—test modifications and grade retention. The number of modifications to tests is negatively associated with locus of control. On average, students who need and receive more modifications or accommodations in testing are less likely to feel in control of their educational experiences than students who receive fewer accommodations and modifications. Not surprisingly, students who have been retained at grade level tend to have lower locus of control scores.

### **Policy Recommendations**

Based on SEELS findings, Project Forum generated the following recommendations for school and local education agency (LEA) administrators:

- Be mindful of the levels of absenteeism for students with disabilities. Investigate why students with disabilities are absent from school and communicate these reasons to teachers.
- Consider a wide range of social and behavioral supports, including those focused on increasing social skills for students with emotional disturbances and students with ADD/ADHD.
- Encourage fair grading practices based on academics not behavior.
- Encourage family support and involvement in their child's education.
- Encourage families to hold high expectations for their child's achievement.
- Do not shy away from providing services, supports, modifications or accommodations for students with disabilities despite their associations with negative outcomes, since one does not necessarily mean that it causes the other.
- Encourage students and families to avoid changing school unless absolutely necessary.
- Promote enrollment of students with disabilities in general education settings.
- Consider providing more academic and behavioral supports for African-American students with disabilities and more opportunities for participation in school activities for Hispanic students with disabilities.
- Provide added support schoolwide for students with disabilities from low-income households.
- Encourage the use of literature in language arts instruction.

## Concluding Remarks

While individual and household factors contribute to shape outcomes for students with disabilities, curricula, instruction, services, accommodations, supports and other experiences of students at school all figure into their engagement and performance. Schools can and do make a difference for students, particularly in the realms of school engagement and academic performance in which they are active partners with families and students.

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## References

### Primary Reference

Blackorby, J. Wagner, M. Cameto, R., Davies, E., Levine, P., Newman, L., Marder, C. and Sumi, C. (2005). *Engagement, academics, social adjustment, and independence: The achievement of elementary and middle school students with disabilities*. Menlo Park, CA: SRI International.

### Secondary Reference

Woodcock, R. W., McGrew, K. S., & Mather, N. (2001). *Woodcock-Johnson III*. Itasca, IL: Riverside Publishing.