9. Summary: Changes over Time among Students with Disabilities By Jose Blackorby and Mary Wagner

The elementary and middle school years are periods of rapid change for students both with and without disabilities. Evidence of these changes is visible in students' physical, psychological, and social development. Further, the context and demands of the education system also change during this period and transition towards ever-greater independence and higher stakes. Skill acquisition increasingly gives way to content area learning, and the organization of schools and social networks shift significantly as students move toward the challenges of adolescence and secondary school.

One of the advantages of having a longitudinal design is that SEELS can document these changes at both the group and individual levels. This report describes changes from the first wave of data collection to the second (a 2-year period in the case of data collected from parents and a 1-year period for topics addressed through data provided by schools) in eight topical areas, including household characteristics, student functioning, activities in students' nonschool hours, parental expectations and supports, school and special education enrollment, school programs, parents' perceptions of schools and school programs, and students' school engagement and academic performance. Taken together, these chapters paint a picture of stability in many areas, but significant change in others. Also, modest changes at the group level mask considerable fluctuation in status for individuals in many areas. The following sections summarize the results for students overall as well as variations observed by student disability and demographic characteristics.

Household Characteristics

Students' households form their primary base of support as they develop, and the conditions of their households represent a significant influence on student success. In the aggregate, many household characteristics appear stable over time for students with disabilities, with no significant changes in the percentages of students in households with two parents, parents' marital status, or the employment status of their heads of household. However, there is greater fluctuation in these aspects of students' households among individual students with disabilities. For example, although there are no significant changes in living arrangements or employment or marital status among students with disabilities as a whole, substantial numbers of students' (6% to 15%) have experienced changes in at least one of those areas. Similarly, even though there has been a decline in students with disabilities living in households earning \$25,000 or less and an increase those with incomes of more than \$50,000, this includes 43% whose

household incomes have increased as well as 20% whose incomes have decreased from Wave 1 to Wave 2.

Students' Functioning

Many aspects of students' functioning are developmental in nature, so one might expect to observe changes in functioning among students with disabilities represented in SEELS. Indeed, analyses confirm these trends in a number of areas. Students increasingly are able to manage their self-care needs, exhibit higher levels of social skills, take on greater degrees of household responsibilities, and exhibit improved functional cognitive abilities. In contrast, consistent with the general population, difficulties with vision become more prevalent, resulting in an increased likelihood that students use corrective lenses.

Activities in the Nonschool Hours

Students spend most their time outside of school, and many significant events and experiences occur while at home or in the community. Between Waves 1 and 2 of SEELS, some out-of-school activities for students with disabilities have remained stable. For example, the frequency of seeing friends or participating in at least one extracurricular activity, particularly taking lessons or classes outside of school, have not changed. In other domains, however, a shift is observed from Wave 1 to Wave 2. Students have increased their use of the telephone and computers for social interactions as well as their participation in school-sponsored groups and in community service or volunteer activities.

Parents' Expectations and Involvement

Parents' expectations for their children's educational attainment and the educational supports they provide have been linked to positive outcomes, ranging from academic achievement to postsecondary educational attendance. In general, students with disabilities who were expected to graduate from high school, attend a postsecondary school, or graduate from a 2- or 4-year college in Wave 1 largely still are expected to do so 2 years later. However, the picture is different among students who were not expected to achieve these milestones. Their parents have become more pessimistic about their children's probability of graduating or attending postsecondary education.

With respect to family involvement, the frequency of parents talking with their children about school or having family rules related to doing homework have remained stable from Wave 1 to Wave 2. However, in Wave 2, parents of students with disabilities are less involved in helping with homework and reading with their children.

School Enrollment, Special Education Participation, and School Programs

Consistent with their peers in the general population, the majority of students with disabilities continue to attend regular public schools in their neighborhoods. However, between Waves 1 and 2, many students with disabilities have made the transition to a new school, as almost one-third of students are spending their first year in a new school in Wave 2. Students with disabilities represented in SEELS have made an average of 1.6 school changes since starting kindergarten.

By Wave 2, one in four students with disabilities have been declassified and no longer receive special education services; the declassification is particularly high among students with speech impairments. In part because of this declassification, the proportion of students with disabilities who receive any of the related services investigated in SEELS has decreased from 90% to 79%. However, most of this decline is concentrated in decreases in speech-language pathology services, consistent with the high declassification rate for the speech impairment category, and diagnostic medical services; most other related services were more stable.

SEELS measured changes in students' programs over a 1-year period, and the results show general stability in academic course taking and instructional settings. However, an increasing emphasis on academics is reflected in reductions in nonacademic courses in students' school schedules—art or music and physical education—and in their receiving study skills and social skills instruction.

Parents' Perceptions

Since its inception, IDEA has included provisions for parental involvement in the IEP development and in students' educational programs more broadly. Indeed, the system is considered to work best when it is a partnership between schools and families. This partnership is reflected, in part, in the satisfaction that parents report with various aspects of their children's education. In Wave 1, parents were generally positive about their children's schools, special education programs, teachers, and school discipline practices. In Wave 2, although still positive overall, there has been a distinct negative shift in each of the areas investigated. There have been decreases in the percentages of parents who report being "very satisfied" and increases in those who report being "dissatisfied" or "very dissatisfied."

School Engagement

Like their parents, students are generally positive in terms of their motivation for schooling, but there is evidence of overall declines in some measures of engagement. For example, student motivation for schooling, as indicated by such

things as looking forward to school, enjoying learning, and seeing school as a place to learn, are more negative in Wave 2 than in Wave 1. Students also are absent more frequently as they age. In contrast, students' behavior in class, such as completing homework on time or participating in class discussions, is comparable in the two school years. In both motivation and behavior ratings, the aggregate shifts mask the fact that many students improve, despite there being some who decline over time.

Academic Performance

Academic performance currently is the most important educational outcome, and growth in academic achievement will be required in most schools in order for schools to comply with the No Child Left Behind Act (NCLB). The 1-year period from Wave 1 to Wave 2 shows only modest change over the previous year in academic performance measures, although there is variation in grades and test scores, as well as considerable fluctuation at the individual level.

In Wave 2, teacher-given grades continue to suggest that students with disabilities are more likely to receive positive evaluations from teachers than negative ones. In contrast, in Wave 2, comparatively low standardized test scores in reading and mathematics mirror Wave 1 results closely and indicate that many students have difficulties in these core subject areas. However, it is important to note that fluctuation over the 1-year period is evident, with substantial numbers of student posting improved scores but comparable numbers posting lower ones.

Differential Changes across Disability Categories

This longitudinal look at changes in the experiences of students with disabilities once again stresses that students in specific disability categories both share features with each other and the general population, but also that they can differ from each other in dramatic ways.

Across the domains investigated, there are several in which the observed trend is comparable for students across the disability spectrum. For example, increases in functional cognitive and self-care skills and in school group memberships are observed for students in all disability categories. Further, students in all categories exhibit a trend toward lower motivation for schooling, as well as lower levels of parental satisfaction with general and special education, teachers, and the individualization of school programs. It is also interesting that, in the domain of academic achievement, although absolute differences in achievement continue to exist across disability categories, the likelihood of scores in reading or mathematics improving or declining over a 1-year period is comparable across disability categories.

From other perspectives, students in specific disability categories stand out from their peers. With regard to the important topic of declassification from special education, 24% of students with disabilities overall no longer require

services in Wave 2. Although from 1% to 11% of students in all other categories have exited the special education system by Wave 2, nearly half of students with speech impairments no longer receive special education or related services. Students with speech impairments also are among the most likely to increasingly join school-sponsored groups, to continue to be expected to graduate from high school, and to maintain more positive attitudes toward schooling.

Other students stand out from their peers in terms of an increasing disconnect from school. Students with emotional disturbances experience greater instability both at home and at school than peers in other disability categories. They also have a pattern of results that suggest decreaseing engagement in schooling over time, including higher absenteeism, lower absolute motivation for schooling, and increasingly higher rates of suspensions and expulsions than their peers in other disability categories. Further, the negative shift in parental perceptions regarding education and special education services is greatest among students with emotional disturbances. Despite this pattern of greater disengagement, academic indicators indicate that these students perform among the closest to general education norms in terms of grades and absolute achievement. Further, they are no more or less likely than others to see their reading and math scores improve or decline.

In the area of expectations for future educational attainment, there is also diversity across disability categories. Several groups of students have experienced greater shifts towards lower expectations over time. Students with mental retardation, traumatic brain injuries, autism, or multiple disabilities all have larger shares with parents who express doubt about the likelihood that they will complete secondary school or participate in postsecondary education. In contrast, students with visual or hearing impairments have experienced increases in parents' expectations of their attaining these milestones.

Differential Changes across Demographic Groups

Age/Grade

Many topics addressed in this volume include a developmental component, so it is logical to expect differences in rates of change for students of different ages. SEELS findings confirm this expectation in some areas but not in others. Some changes are most evident among the youngest group of students. For example, increases in self-care skills (independent dressing and feeding) are most common among the youngest students as are increases in participation in school sponsored group activities.

In several other areas, consistent with developmental expectations, changes over time are more prevalent among older students. They have the largest improvements in functional cognitive skills (i.e., counting change and looking up telephone numbers), increases in absenteeism, and increases in the use of the phone and computers for social interactions. Further, in Wave 2, fewer of them go directly home after school, and more of them participate in school-sponsored

group activities (with a corresponding drop in community-sponsored group activities). Also, older students are less likely to receive help with homework but are both more likely to have rules related to acceptable grades and more likely to have computers and use them for educational purposes. At school, they take fewer nonacademic classes as they age.

Household Income

Household income also is associated with differential change over time in several domains. For example, students from wealthier households have experienced greater increases in participation in school-sponsored activities, a greater likelihood of having a home computer, declines in receipt of services over time, and higher parental satisfaction with schools and teachers. In addition, students from lower-income households are more likely to experience instability in their schooling by having ,pre school changes as well as higher rates of being suspended or expelled.

Race/Ethnicity

Several changes from Wave 1 to Wave 2 occur differentially across racial/ethnic groups. For example, white children are most likely to see decreases in participation in after-school care and increased participation in both school-sponsored and community-sponsored group activities. In contrast, African-American students with disabilities are more likely than their white peers to have changed schools frequently and have been suspended or expelled, but have lower reductions in the receipt of related services as well as help with homework and reading at home. Finally, Hispanic students do not reflect the trend toward declining parental perceptions of schooling and teachers that is observed among white and African-American students.

Conclusion

The changes from Wave 1 to Wave 2 in various aspects of the characteristics and experiences of students with disabilities show a diversity of stability, change, and individual fluctuation. There has been stability in many household and student characteristics as well as aspects of school programs and outcomes. There have been improvements for some students that are sufficient for them to no longer require special education services. And there are many students whose test scores in reading and math have improved. Unfortunately, a sizable proportion of students have lost ground academically, many who have had considerable instability at home and at school, and many who are absent more frequently. Finally, the lower levels of student motivation for schooling and parents' satisfaction illustrate the challenge that schools face in engaging students and families as partners in working for student success as they move toward secondary school.