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A National Picture of Parent and Youth Participation in IEP and Transition Planning Meetings

Mary Wagner, PhD[1], Lynn Newman, EdD[1], Renée Cameto, PhD[1], Harold Javitz, PhD[1], and Kathryn Valdes[1]

Abstract

Two prospective longitudinal studies of nationally representative samples of students with disabilities—the Special Education Elementary Longitudinal Study and the National Longitudinal Transition Study–2—are used to provide a broad look at the participation of parents of 11- through 19-year-old students with disabilities in Individualized Education Plan/transition planning meetings and their satisfaction with their involvement in them. Students' attendance and the roles played in their transition planning meetings are also examined. Logistic regression analyses identify disability characteristics; demographics; aspects of parents' involvement, expectations, and perceptions; experiences in students' educational histories; and features of their instructional programs that help explain variations in parent and student participation, parent satisfaction, and student roles.

Keywords

IEPs, transition, parent involvement, self-determination, student engagement

The evolution of federal special education legislation since the 1975 passage of the Education for All Handicapped Children Act (EHA, P.L. 94-142) has seen a steady strengthening of the intent that parents be full partners with school staff in educational planning for their children and that youth with disabilities meaningfully participate in planning their own post–high school transition so that their preferences and goals guide the planning process. That landmark legislation made the Individualized Education Program (IEP) the cornerstone of special education needs identification, goal setting, service and setting definition, and student assessment (Fish, 2008; Goldstein & Turnbull, 1982), and school districts became responsible for scheduling and facilitating IEP meetings in ways that maximize the opportunity for parents to help determine these critical aspects of their children's education (Drasgow, Yell, & Robinson, 2001; Simpson, 1996). EHA also specified that students could participate in their IEP meetings, as appropriate (Gillespie & Turnbull, 1983).

With the 1997 amendments to what became the Individuals With Disabilities Education Act (IDEA), students ages 14 and older were not only to be allowed but also were actively invited to attend their IEP meetings; their interests and preferences were to shape decisions reached there; and their post–high school aspirations were to guide their course of study and transition services (Grigal, Test, Beattie, & Wood, 1997; Martin, Marshall, & Bale, 2004). The 2004 reauthorization of IDEA (Individuals With Disabilities Education Improvement Act) further strengthened the role of students in transition planning by requiring that (a) transition goals and services reflect students' strengths as well as their interests and preferences; (b) transition plans state postsecondary goals that reflect assessments related to employment, education, training, and, when appropriate, independent living; and (c) transition services, including an appropriate course of study, needed to help students achieve those goals (Bateman, n.d.) are specified.

A substantial body of research documenting how these legislative guidelines have played out in parents' and students' experiences with the processes of IEP development and transition planning has suggested that for some time, implementation of legislative requirements was slow (Martin et al., 2004; National Council on Disability, 2000). Early work suggested that parents could and would attend and speak up in IEP meetings (Goldstein, Strocland, Turnball,

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& Curry, 1980) but that few parents were directly involved in developing objectives, shaping educational programs, or deciding on assessment procedures (Lynch & Stein, 1982). Some have argued that truly meaningful participation continues to be more the exception than the rule (Heatherington et al., 2010; Spann, Kohler, & Soenksen, 2003), particularly among parents of older students (Harry, Allen, & McLaughlin, 1995) and those from cultural or language minorities (Geenen, Powers, & Lopez-Vasquez, 2001; Landmark, Zhang, & Montoya, 2007). School-related challenges or barriers to parents engaging actively in educational planning have been identified (Defur, Todd-Allen, & Getzel, 2001), and strategies for overcoming them have been recommended (Dabkowski, 2004; Defur et al., 2001).

Studies of student participation in educational planning have focused largely on participation in transition planning (Heatherington et al., 2010; Williams-Diehm, Wehmeyer, Palmer, Soukup, & Garner, 2008), which is mandated by law for students ages 16 or older and often occurs within the context of IEP meetings. Student participation in transition planning is an opportunity for students to learn and demonstrate self-determination skills, which are broadly conceived as "the ability to take primary control of one's own life and to do so in personally meaningful ways" (Pierson, Carter, Lane, & Glaeser, 2008, p. 115) and are demonstrated in a process whereby students "make choices, act on those choices, experience the results, and then make new choices" (Agran & Hughes, 2008, p. 69). Research suggests that students are increasingly attending IEP and transition planning meetings (Test et al., 2004) but that without direct instruction regarding meeting purposes and procedures, they participate relatively little (Martin et al., 2006; Mason, McGahee-Kovac, Johnson, & Stillerman, 2002). Nonetheless, reviews of research on transition-related best practices are united in asserting that research evidence supports student and/or family involvement as important elements of effective transition plans and programs (Greene, 2003; Hendricks & Wehman, 2009; Kohler, 1993; Landmark, Ju, & Zhang, 2010).

Although the body of research on family and student involvement in educational and transition planning is substantial, studies of small convenience samples that include youth in one or only a few disability categories predominate (e.g., Agran & Hughes, 2008; Fish, 2008; Landmark et al., 2007; Spann et al., 2003), and even studies of larger samples have limited generalizability (e.g., Virginia Department of Education, 1998). Furthermore, fairly limited data sources often preclude examining the wide array of potential correlates that could illuminate the factors associated with variations in family and student participation. Finally, few studies have gone beyond analysis of youth attendance at meetings to address the actual role that students play in their own transition planning. Clearly, a larger scale, broader, and more generalizable treatment of questions of family and student participation in IEP and transition planning processes is needed.

Two prospective longitudinal studies of nationally representative samples of students with disabilities—the Special Education Elementary Longitudinal Study (SEELS) and the National Longitudinal Transition Study–2 (NLTS2)—both funded by the U.S. Department of Education, provide data to address this need. We use data from SEELS and NLTS2 to answer the following questions for students with disabilities and their parents nationally:

1. What are the levels of attendance of parents and students in IEP and transition planning meetings?
2. How satisfied are parents with their involvement in decision making in those meetings?
3. What roles do students play in their transition planning meetings?
4. What factors are associated with variations in levels of attendance of parents and students in IEP and transition planning meetings, in parents' satisfaction with their involvement in those meetings, and with students' roles in transition planning meetings?

The first three questions are descriptive and use parent and/or school reports of (a) whether an adult in the household had gone to IEP and/or transition planning meetings in the current or prior school year, (b) whether students had attended such meetings, (c) parents' satisfaction with their level of involvement in decision making at the meetings, and (d) whether students were passive, relatively active, or leaders in their transition planning. We use these four factors as dependent variables in logistic regression analyses that identify factors associated with variations in them.

Our approach to identifying such factors builds on and extends Epstein's theoretical model of family–school relationships, which specifies overlapping spheres representing the shared influences of family, school, and community on children's learning and development (Epstein, 1987, 1992, 1994, 2001). In Epstein's model, forces related to the three spheres, as well as those involving time (e.g., children aging), influence the degree of overlap in spheres. In this study, we focus on two of the three spheres—family and school—as central to our research questions. We also expand the Epstein model by more explicitly acknowledging the role of the child in the family–school dynamic (Newman, 2004). This approach is consistent with the SEELS and NLTS2 conceptual frameworks (Wagner & Marder, 2003; Wagner, Marder, Blackorby, & Cardoso, 2002), which posit that school experiences, including those involving IEP and transition planning, are shaped not only by the characteristics of students and their households that are immutable (e.g., demographics, type of disability) but also by factors that have occurred in their past (e.g., being

Table 1. Independent Variables, by Analytic Model

Characteristic	Variables included in: Full model	Model constrained to $p \leq .20$	Model constrained to $p \leq .05$
Disability characteristics			
Primary disability category (compared with LD)			
Autism	All	All	All
Emotional disturbance	All	All	All
Hearing impairment	All	All	All
Mental retardation	All	All	All
Multiple disabilities/deaf–blindness	All	All	All
Other health impairment	All	All	All
Orthopedic impairment	All	All	All
Speech/language impairment	All	All	All
Traumatic brain injury	All	All	All
Visual impairment	All	All	All
Functional cognitive skills	SA, SP	SA, SP	SA, SP
Social skills	All	PI, SA, SP	PI, SP
Student demographics			
Age	All	PI, SA, SP	PI, SA, SP
Gender (male)	PI, SA, SP	SA	SA
Race/ethnicity (compared with Caucasian)			
African American	All	All	All
Hispanic	All	All	All
Other	All	All	All
Household demographics			
Household income (compared with ≤US$25,000)			
US$25,001–US$50,000	All	All	All
>US$50,000	All	All	All
Head of household education > high school	PA, PI, SP	PA, PI, SA	PI
Single-parent household	All	PA	
Parent involvement, expectations, and perceptions			
Involvement in education			
At home	All	All	All
At school	All	PA, PI, SP	PA, SP
Attended IEP/transition planning meeting		SA	SA
Belonged to group for parents of students with disabilities	PA, PI	PA	PA
Expectations for student's postsecondary education	All	All	PA, SA, SP
Satisfaction with student's teacher(s)	PA, PI	PA, PI	PA, PI
Student's educational history			
Ever suspended or expelled	All	PI	PI
Ever held back a grade	PA, PI, SA	PA, PI	PI
Number of school changes	PI, SA		
Student's instructional program/performance			
Percentage of instruction received in general education setting	SA, SP	SA, SP	SA, SP
Grade point average	SA, SP	SP	
Received transition planning instruction at school	SA, SP	SA, SP	SA, SP
Sample size			
PA	6,420	6,430	6,710
PI	5,270	5,370	5,490
SA	3,400	3,610	3,613
SP	3,320	3,370	3,390
Variation explained			
PA	.150	.151	.145
PI	.171	.170	.166
SA	.397	.401	.402
SP	.314	.310	.315

Note: *ns* have been rounded to the nearest 10, in conformance with Institute of Education Sciences standards for data privacy protection. LD = learning disability; SA = student attended transition planning meeting; SP = student actively participated in or led meeting; PI = parent said their involvement was about right; IEP = Individualized Education Program; PA = parent attended IEP/transition planning meeting. Abbreviations denote dependent variable.

held back a grade) and those that are fluid and can change over time (e.g., parents' expectations for their children's futures). The first column in Table 1 lists the factors related to students, families, and school experiences that research suggests could shape their involvement in and perceptions of IEP and transition planning that were included in the initial model specification for this study; the rationale for each factor's inclusion is summarized below.

1. Disability characteristics: All SEELS and NLTS2 analyses have highlighted the sometimes dramatic differences in the experiences of students who differ in the nature of their primary disability (e.g., Blackorby et al., 2005; Wagner, Newman, Cameto, Levine, & Marder, 2003). Research also suggests that students' cognitive and social skills are associated with some forms of parent involvement (Cheung & Pomerantz, 2011; El Nokali, Bachman, & Votruba-Drzal, 2010; Pierson et al., 2008; Topor, Keane, Shelton, & Calkins, 2010).
2. Student and household demographics: Research suggests several obstacles to participation in school processes by parents of racially, culturally, and language diverse students (Defur et al., 2001; Kalyanpur, Harry, & Skrtic, 2000; Smrekar & Cohen-Vogel, 2001) as well as lower rates of participation by lower income and single parents and parents of males (Grolnick, Apostoleris, & Rosen, 1995; Newman, 2005). Student age also has been asserted as a factor in parent participation, in that parents of older students are said to perceive increasing bureaucracy and a less individualized approach to the IEP process as students age (Crosnoe, 2001; Defur et al., 2001; Harry et al., 1995). Research related to developing self-determination in students with disabilities and practicing it in such contexts as transition planning meetings also has focused on student demographics (Cameto, Levine, & Wagner, 2004; Wehmeyer & Garmer, 2003).
3. Parent involvement, expectations, and perceptions: Research suggests that different forms of parent involvement are interrelated in that parents who are involved in one way in support of their children's education (e.g., at home) are more likely to be involved in other ways (e.g., at school; Henderson & Berla, 1994; Newman, 2005) and that parents' expectations for their children's educational futures also prompt increased parent involvement (Coots, 1998; Mutua & Dimitrov, 2001). A measure of parents' satisfaction with students' teachers was included in the analyses, reflecting research linking positive perceptions of school staff and parent participation in IEP meetings (e.g., Heatherington et al., 2010). Extrapolating from the research on parent involvement, we hypothesized that having parents who model educational involvement for their children, including attending school meetings themselves, would be associated with students' meeting attendance and engagement.
4. Student's educational histories and performance: Research suggests that parents' perceptions of students' abilities influence levels of parent involvement (Patel & Stevens, 2010) and that parents of at-risk students, those who have failed one or more classes and/or have numerous suspensions, are less likely to be involved (Griffin & Galassi, 2010). We hypothesized that having negative experiences in a student's educational past (i.e., being held back a grade or experiencing suspensions or expulsions or currently experiencing poor school performance might dissuade parents and/or students from attending IEP/transition planning meetings in an effort to avoid further involvement with school personnel with whom they may associate negative feelings.
5. School programs: Some research has demonstrated a link between parent involvement in IEP development and the degree of students' participation in general education settings (e.g., Underwood, 2010), a relationship we extended to include student involvement as well. Research also has highlighted the importance of providing instruction in transition planning to students as a way of increasing their ability to act in a self-determined way in that process (Heatherington et al., 2010; Mason et al., 2002; Mason, Field, & Sawilowsky, 2004).

Method

Participants

SEELS included a sample of more than 11,000 students who were ages 6 through 12 years and receiving special education services in Grades 1 through 6 or in ungraded programs in December 1999. NLTS2 had a similar sample design and sample size and included students who were ages 7 through 16 and receiving special education services in Grades 7 through 12 or in ungraded programs in December 2000. Sampling procedures for both studies involved first drawing a stratified random sample of school districts that served students in the eligible age ranges and then randomly selecting students from each district from each of the 12 special education disability categories that were applicable to the majority of students in the SEELS and NLTS2 age ranges (see Note 1). This sampling approach was designed to produce weighted population estimates that are nationally representative of all students receiving special education services in the targeted age range and of students in each

Table 2. Student Demographics, by Age Group

	SEELS (11–14 years old)			NLTS2 (15–19 years old)		
Demographic	%	*SE*	*n*	%	*SE*	*n*
Gender			3,790			6,860
Male	66.2	1.85		67.2	1.78	
Female	33.8	1.85		32.8	1.78	
Race/ethnicity			3,780			6,860
Caucasian	66.7	1.94		62.7	1.80	
African American	15.6	1.49		21.0**	1.52	
Hispanic	13.8	1.42		13.5	1.28	
Other	4.0	0.80		2.8	0.62	
Household income			3,740			6,060
US$25,000 and below	31.7	2.02		35.0	2.23	
US$25,001–US$50,000	26.1	1.18		28.8	1.46	
More than US$50,000	42.2	2.23		36.3	2.06	
Age (year)			3,790			6,860
11	18.1	1.34				
12	22.4	1.19				
13	28.9	1.48				
14	30.6	1.70				
15				7.6	0.81	
16				23.6	0.97	
17				22.6	0.98	
18				27.8	1.62	
19				18.4	1.19	
Grade level			3,790			5,880
1–5	19.4	1.62				
6–7	48.6	2.05				
8–9	29.2	1.90		6.9	1.02	
10				26.6	1.78	
11				30.2	1.85	
12 or above				34.4	1.92	
Ungraded	1.9	0.56		1.8	0.54	

Note: *ns* have been rounded to the nearest 10, in conformance with Institute of Education Sciences standards for data privacy protection. Sources: SEELS Wave 3 Parent Interview, 2004; NLTS2, Wave 2 Parent/Youth Interview/Survey, 2003.
**$p < .01$.

disability category. Full details of the studies' weighting strategy were previously published (Wagner, Kutash, Duchnowski, & Epstein, 2005).

SEELS sample members who were included in the analyses of parents' participation in and satisfaction with IEP/transition planning meetings were ages 11 through 14 and had a parent interview in the final data collection wave (2004). NLTS2 sample members included in the analyses of parent and youth participation were ages 15 through 19 during the second data collection wave (2003) and had a parent interview in that year. These data permit us to draw a national picture of the IEP—and transition planning—related experiences of students ages 11 through 19 and their families. Table 2 presents the demographics for these students.

About two thirds of students in both groups were male. Approximately one third of both groups were in the lowest income group (US$25,000 or less), somewhat more than one fourth were in the middle-income group (US$25,001–US$50,000), and 42.2% of SEELS students and 36.3% of NLTS2 students were from families with incomes higher than US$50,000. The racial/ethnic distributions of the two groups differed in that the NLTS2 group included a higher percentage of African American students than the SEELS group (21.0% vs. 15.6%). The mean age of the SEELS group was 12.7 years, with 48.6% being in Grade 6 or Grade 7. The NLTS2 group averaged 17.2 years of age, with 64.6% being in Grade 11 or above.

Data Sources

SEELS data were collected from parents and from school staff 3 times from 2000 through 2006. NLTS2 data were collected from parents in five waves, every other year from 2001 through 2009; from youth in Waves 2 through 5 via interviews and surveys and once, in either 2002 or 2004, through a direct assessment of their academic achievement or an alternate assessment of their functional performance; and from school staff in 2002 and 2004. The multiple instruments providing data for the analyses reported here are described below.

SEELS parent/guardian telephone interviews/surveys. Wave 3 interviews (2004) were attempted with a parent/guardian of each SEELS sample member for whom a working address and/or telephone number was available. Interviews were conducted in English or Spanish using computer-assisted telephone interviewing (CATI) techniques. Of the approximately 9,480 eligible Wave 3 sample members, approximately 7,130 were completed, a 75% response rate.

NLTS2 parent/guardian telephone interviews. The Wave 2 parent/guardian telephone interview, conducted in English and Spanish using CATI techniques, was attempted with all parents for whom working contact information was available. A Wave 2 interview was completed with parents of approximately 6,860 of the 8,210 eligible youth, a response rate of 83.5%.

SEELS and NLTS2 Students' School Program Surveys. Both studies included a student-specific questionnaire that was sent to a study coordinator recruited at each school, with directions to distribute it to "the person best able to answer questions about this student's overall school program." The survey was administered three times in SEELS and twice in NLTS2. Data for the analyses reported here were drawn from Wave 2 of SEELS and Wave 1 of NLTS2, both administered in 2002. Response rates of 59.2% and 55.9% were achieved for SEELS and NLTS2, respectively.

NLTS2 transcripts. Transcript data collection (2002–2009) involved eight waves of transcript requests. The request for the most recent transcript was accompanied by a cover sheet

that requested that the registrar or other school or district staff member indicate the following information, if not already included on the transcript: student's enrollment or exit status, grade level, instructional setting of course (special or general education), course content, vocational courses, and absentee information. At the close of transcript data collection processing in 2009, requests had been made for approximately 11,270 students' transcripts; 9,500 records with at least partial transcript information were returned (an 84.3% response rate).

School district rosters. Information about the primary disability category of SEELS and NLTS2 sample members came from rosters of students receiving special education services under the auspices of participating school districts and state-supported special schools. Data on the racial/ethnic background of sample members also were taken from this source when they were included on rosters; otherwise, parent-reported data were used.

Dependent Measures

Parents' and students' involvement in IEP and transition planning meetings. Parents were asked whether an adult in the household had gone to such meetings in the current or prior school year. The same question was asked of parents regarding students' attendance. If data were missing regarding parent attendance, responses were taken from the student's School Program Survey regarding whether the student's parents had attended the most recent IEP meeting. Missing parent data regarding student and parent attendance at transition planning meetings also were filled in with responses from the student's NLTS2 School Program Survey regarding who had participated in the student's transition planning.

Independent Measures

Disability characteristics. Disability category is included in logistic regression analyses as dichotomous variables for 9 of the 12 federally defined disability categories; 2 others—multiple disabilities and deaf–blindness—were combined into a single category because of the small sample sizes. The remaining category, learning disability (LD), was omitted from the models to serve as a comparison against which the participation, satisfaction, and student role of those in other categories can be compared.

Students' social skills were assessed by summing ratings on a 3-point scale that parents used to indicate how often (*never, sometimes, very often*) their child exhibited 11 behaviors that included both social skills and problem behaviors. Responses were recoded so that the more positive responses (e.g., *very often exhibiting social skills* and *never exhibiting problem behaviors*) had a value of 2 and were summed to create a scale ranging from 0 to 22. A measure of students' functional cognitive skills was developed by summing parents' responses on a 4-point scale (*not at all, not very well, pretty well, very well*) to indicate the child's ability to perform four common daily living tasks: reading common signs, telling time on an analog clock, counting change, and looking up telephone numbers and using the telephone. Scale scores ranged from 4 to 16.

Student and family demographics. School district rosters or parent interview/survey data yielded information on the *race/ethnicity* of sample members, which is included in logistic regression analyses as dichotomous variables for African American, Hispanic, and "Other," with the omitted comparison category being Caucasian. School district rosters or parent interviews/surveys also yielded data on the *age* or birth date of sample members; age in years at the time of the parent interview is included in the analyses. The parent-reported *gender* of the student is entered in analyses as a dichotomous variable for male.

Four family demographic factors also are included in analyses. Parent-reported most recent *annual household income* is included as two dichotomous variables for incomes of US$25,001 to US$50,000 and more than US$50,000, with the omitted category being incomes of US$25,000 or less. Parents also reported whether one or two parents resided in the household; a dichotomous variable indicates a *single-parent household*. Parent respondents also reported the *highest education level* of the person considered to be the head of household; from the 10 response categories, a dichotomous variable indicating an education greater than high school was created.

Parents' involvement, expectations, and perceptions. To assess *family involvement at home*, parents in both studies were asked how often they spoke to the child about his or her school experiences (1 = *not at all,* 4 = *regularly*) and how often they helped their child with his or her homework (1 = *never,* 4 = *5 or more times a week*). An additional age-appropriate item also was asked. In SEELS that involved how often parents read to their child (1 = *never,* 4 = *everyday*), and in NLTS2 that involved how often they spoke to him or her about plans after high school (1 = *never,* 4 = *regularly*). Responses were summed to create a scale ranging from 4 to 12.

To assess *family involvement at school*, parents were asked whether in the current school year they or another adult in the household had attended a general school meeting (e.g., back to school night), attended a school or class event (e.g., a play or sports event), or volunteered at school (e.g., chaperoned a class field trip). Those who said "yes" were asked about how many times that had happened and were provided with a 4-point scale (*1–2 times, 3–4 times, 5–6 times, more than that*). The sum of responses to those three items was included in the analyses. Finally, parents were asked whether they or another household member belonged to "any support groups for children with disabilities or their families," with responses included as a dichotomous variable.

Table 3. Participation in IEP/Transition Planning Meetings

Participation	SEELS (11–14 years old) %	*SE*	*n*	NLTS2 (15–19 years old) %	*SE*	*n*
Parent						
Attended most recent IEP meeting	90.0	1.78	2,800	87.1	2.02	4,540
Parent of child aged 14 or older attended most recent transition planning meeting year	43.0	4.48	860	68.6***	2.07	5,240
Perception of family's involvement in decisions about student's IEP and/or transition plan			2,030			4,670
Wanted to be more involved	27.8	2.87		29.3	2.68	
Involved about right amount	70.7	2.76		69.4	2.67	
Wanted to be less involved	1.5	.66		1.3	.49	
Student						
Attended most recent IEP meeting	49.6	1.86	1,360	82.9***	2.21	3,950
Student aged 14 or older attended most recent transition planning meeting	44.9	4.60	860	76.1***	1.95	5,109
Role in transition planning meeting			1,320			3,990
Participated very little or not at all	42.3	2.00		28.8***	2.32	
Provided some input	46.9	2.31		49.3	2.63	
Took leadership role	10.0	1.54		21.9***	2.04	

Note: *ns* have been rounded to the nearest 10, in conformance with Institute of Education Sciences standards for data privacy protection. IEP = Individualized Education Program; SEELS = Special Education Elementary Longitudinal Study; NLTS2 = National Longitudinal Transition Study–2.
Sources: SEELS Wave 3 Parent Interview, 2004, for 11- to 14-year-olds; NLTS2, Wave 2 Parent/Youth Interview/Survey, 2003, for 15- to 19-year-olds.
*** $p < .001$

Parents also were asked how likely they thought it was that their child would go on to postsecondary education, responding on a 4-point scale from *definitely will* to *definitely will not*. A measure of parents' satisfaction with their child's teachers, indicated on a 4-point scale (*very dissatisfied* to *very satisfied*), also was included.

Students' educational histories and performance. Parents were asked whether their child had ever been held back a grade and whether he or she had ever been suspended or expelled. Both factors are included as dichotomous variables for yes. A student's grade point average was calculated for NLTS2 students from courses reported on high school transcripts, when one was available. For other students, parents' reports of their child's overall grades, on a scale of A to F, were converted to a 4-point scale. When descriptive grades (e.g., excellent) were given instead of letter grades, these also were converted to a 4-point scale.

Students' instructional programs. A dichotomous variable was included in models reflecting school staff responses to the question, "Has this student received instruction specifically focused on transition planning (e.g., a specialized curriculum designed to help students assess options and develop strategies for leaving secondary school and transitioning to adult life)?" For NLTS2 students, general education participation was measured by calculating from transcript data the percentage of credits students earned from courses taken in general education settings; when transcript data were not available, the percentage of classes taken by a student that were reported in the Student's School Program Survey to be taken in a general education setting was used.

Data Analyses

Descriptive statistics depict characteristics of the sample (see Table 2) and parents' and students' levels of participation in IEP/transition planning meetings, parents' perceptions of their involvement, and students' roles in transition planning meetings (see Table 3). These statistics are weighted to represent population estimates for the two studies; two-tailed *F* tests were used to identify significant differences.

Logistic regression models estimated the adjusted association between independent variables and the four indicators of parental and student involvement in IEP/transition planning meetings that were described earlier. Analyses began with a large number of independent variables that research suggests would be appropriate to the research questions. Univariate regressions were run with each dependent measure, and the set of independent variables was culled to eliminate any variables that reduced the number of cases with values for a dependent variable by 10% or more cases or that did not reach statistical significance at $p \leq .25$. Exceptions were dichotomous variables for disability categories, racial/ethnic groups, and household income groups, which were retained in the logistic regression models to establish appropriate comparison groups.

The remaining independent variables, referred to as the full models, are listed in the first column of Table 1. Adjusted r^2s for the full models were .150 and .171 for the models explaining parent attendance at meetings and parents' satisfaction with their involvement in decision making in them. Adjusted r^2s for the full models explaining student attendance at meetings and their role in them were .397 and .314, respectively.

The full models were then reduced for the sake of parsimony in two stages, first restricting the set of independent variable to those reaching significance in the full model at $p \leq .20$. The variables included in those models are reported in the second column of Table 1. This variable reduction made only marginal changes in explained variation but boosted the sample size for each model. The final model included only variables reaching statistical significance in the reduced model at $p \leq .05$, which again made very small differences in explained variation and further increased the cases included in the analyses. The results of this final model are discussed below and presented in Tables 4 and 5. Regression coefficients, significance levels, odds ratios (ORs), and the associated 95% confidence intervals are reported. No data imputation was performed for missing data, which ranged from <0.1% to 6.9% in the parent models and from <0.1% to 10.0% in the student models. SAS logistic regression procedures eliminate any cases with missing values on any variable included in the analyses.

Results

Participation in and Perceptions of IEP/Transition Planning Meetings

The large majority of parents of students in both age groups—90.0% of 11- through 14-year-olds and 87.1% of 15- through 19-year-olds—reported having attended their child's most recent IEP meeting (Table 3). Significantly fewer parents had attended a transition planning meeting—parents of 43.0% of 14-year-olds and 68.6% of 15- through 19-year-olds did so ($p < .001$ for both comparisons with IEP meeting attendance). Furthermore, parents of older students were more likely to attend a transition planning meeting than parents of 14-year-olds (68.6% vs. 43.0%, $p < .001$). Parents' reported that satisfaction with their level of involvement in decision making about IEP/transition planning goals was similar for the two age groups. About 70% of parents reported that the level of involvement of their family was about the right amount; parents of 27.8% and 29.3% of the younger and older groups of students, respectively, indicated they had wanted to be more involved in IEP/transition planning decisions. Parents of less than 2% of students in either age group reported they wanted to be less involved than they actually were.

Among older students, 82.9% and 76.1% had attended their IEP and transition planning meetings, respectively, compared with 49.6% of 11- through 14-year-olds attending their most recent IEP meeting and 44.9% of 14-year-olds attending their transition planning meeting ($p < .001$ for both comparisons). Students who attended a transition planning meeting played a variety of roles there, with older students being more active participants than younger students. More than one fifth of 15- through 19-year-olds (21.9%) were reported to have taken a leadership role in their own meetings, compared with 10.0% of 14-year-olds ($p < .001$). Conversely, younger students were more likely to have been present but were likely to have limited participation compared with older students (42.3% vs. 28.8%, $p < .001$).

Logistic Regression Analyses Results for Parent IEP/Transition Planning Participation and Satisfaction

Table 4 presents the results of logistic regression analyses relating aspects of students' disabilities, demographics, and educational histories, and parents' involvement, expectations, and perceptions with their participation in IEP/transition planning meetings.

Disability characteristics. The likelihood of parents attending the most recent IEP/transition planning meeting differed with the nature of their children's disabilities. The odds of parents of students with autism attending such meetings were more than 3 times the odds of parents of students with LDs doing so ($p < .001$, OR = 3.88). The odds were more than twice as high for parents of students in the categories of multiple disabilities/deaf–blindness ($p < .008$, OR = 2.11), other health impairment ($p < .002$, OR = 2.91), and traumatic brain injury ($p < .024$, OR = 2.50) than for parents of students in the LD category, and parents of students in the orthopedic impairment category were 64% more likely than parents of students with LD to attend their child's most recent IEP/transition planning meeting ($p < .019$, OR = 1.89). In contrast to these differences in parents' attendance rates across disability categories, parents' assessments of their level of involvement in such meetings as being "about right" were largely unrelated to the nature of their children's disabilities, with one exception. Parents of students in the visual impairment category were significantly more likely than parents of students with LD to report their level of involvement in decision making to be about right ($p < .004$, OR = 1.63). Parents' satisfaction with their involvement was positively related to students' social skills ($p < .001$, OR = 1.04), whereas social skills were unrelated to parents' attendance at IEP/transition planning meetings.

Student demographics. Student age was negatively related to parents' reports of being satisfied with their level of involvement in IEP/transition planning meetings ($p < .005$, OR = 0.95). Parents of African American students were less likely than parents of Caucasian students to have attended the most recent IEP/transition planning meeting ($p < .001$,

Table 4. Logistic Regression Results for Parent Attendance at IEP/Transition Planning Meetings and Satisfaction With Level of Involvement

	Parent attended meeting(s)			Satisfied with involvement		
Characteristic	Coefficient	OR	95% CI	Coefficient	OR	95% CI
Disability						
Primary disability category (compared with LD)						
Autism	1.36***	3.88	[2.0, 7.3]	–0.04	0.97	[0.7, 1.3]
Emotional disturbance	0.37	1.45	[0.8, 2.5]	0.18	1.20	[0.9, 1.7]
Hearing impairment	0.24	1.27	[0.7, 2.1]	0.16	1.17	[0.9, 1.6]
Mental retardation	0.33	1.39	[0.8, 2.3]	–0.08	0.92	[0.7, 1.2]
Multiple disabilities/deaf–blindness	0.75**	2.11	[1.2, 3.7]	0.07	1.07	[0.8, 1.4]
Other health impairment	1.07**	2.91	[1.5, 5.7]	0.17	1.18	[0.9, 1.6]
Orthopedic impairment	0.65*	1.89	[1.1, 3.2]	0.22	1.24	[0.9, 1.7]
Speech/language impairment	–0.27	0.77	[0.5, 1.3]	–0.00	1.00	[0.7, 1.4]
Traumatic brain injury	0.92*	2.50	[1.1, 5.5]	0.28	1.32	[0.9, 1.9]
Visual impairment	0.36	1.43	[0.8, 2.4]	0.49**	1.63	[1.2, 2.3]
Student's social skills	NA			0.04***	1.04	[1.0, 1.1]
Student demographics						
Age	NA			–0.05**	0.95	[0.9, 1.0]
Race/ethnicity (compared with Caucasian)						
African American	–0.78***	0.46	[0.3, 0.6]	–0.78***	0.46	[0.4, 0.5]
Hispanic	–0.57**	0.56	[0.4, 0.8]	–0.63***	0.53	[0.4, 0.7]
Other	–0.52	0.59	[0.3, 1.2]	–0.64**	0.53	[0.4, 0.8]
Family demographics						
Household income (compared with ≤US$25,000)						
US$25,001–US$50,000	0.50**	1.66	[1.2, 2.3]	0.36***	1.43	[1.2, 1.7]
>US$50,000	0.75**	2.12	[1.5, 3.0]	0.65***	1.92	[1.6, 2.3]
Head of household education > HS	NA			0.06***	1.06	[1.0, 1.1]
Parent involvement, expectations, perceptions						
Involvement in education						
At home	0.14***	1.15	[1.1, 1.2]	–0.04**	0.96	[0.9, 1.0]
At school	0.22***	1.24	[1.2, 1.3]	NA		
Belonged to group for parents of students w/ disabilities	0.59***	1.80	[1.3, 2.6]	NA		
Expectations for student's postsecondary education	–0.15*	0.86	[0.8, 1.0]	NA		
Satisfaction with student's teacher(s)	0.16*	1.17	[1.0, 1.4]	0.60***	1.82	[1.7, 2.0]
Student's educational history						
Ever suspended or expelled	NA			–0.24**	0.79	[0.7, 0.9]
Ever held back a grade	NA			–0.13	0.88	[0.8, 1.0]
Intercept	0.54			–0.61		
Sample size	6,710			5,490		
Adjusted r^2	.145			.166		

Note: *ns* have been rounded to the nearest 10, in conformance with Institute of Education Sciences standards for data privacy protection. IEP = Individualized Education Program; OR= odds ratios; CI = confidence interval; LD = learning disability; HS = high school.
Sources: SEELS Wave 3 Parent Interview, 2004; NLTS2, Wave 2 Parent/Youth Interview/Survey, 2003.
*$p < .05$. **$p < .01$. ***$p < .001$.

OR = 0.46) and to have reported their level of involvement to be satisfactory ($p < .001$, OR = 0.46). A lower likelihood of satisfaction with their involvement also was found for both Hispanic parents ($p < .001$, OR = 0.53) and parents of other races/ethnicities ($p < .001$, OR = 0.53) compared with parents of Caucasian students. Parents of Hispanic students also were less likely to attend meetings than parents of Caucasian students ($p < .002$, OR = 0.59).

Family demographics. Parents whose annual household incomes were from US$25,001 to US$50,000 and those whose incomes were greater than US$50,000 were more likely to attend IEP/transition planning meetings ($p < .001$, OR = 0.166 and $p < .001$, OR = 2.12, respectively) than parents from lower income households. Both groups also were more likely to report satisfaction with their level of involvement ($p < .001$, OR = 1.43 and $p < .001$, OR = 0.192,

Table 5. Logistic Regression Results for Students' Attendance at Most Recent IEP/Transition Planning Meeting and Role in It

	Attended meeting(s)			Actively participated or led transition planning meeting		
Characteristic	Coefficient	OR	95% CI	Coefficient	OR	95% CI
Disability						
Primary disability category (compared with LD)						
Autism	–1.04***	0.35	[0.2, 0.7]	–0.71***	0.49	[0.3, 0.7]
Emotional disturbance	0.45	1.57	[0.6, 4.3]	–0.16	0.86	[0.6, 1.3]
Hearing impairment	0.14	1.15	[0.5, 2.7]	–0.07	0.94	[0.6, 1.4]
Mental retardation	–0.16	0.85	[0.4, 1.8]	–0.33	0.72	[0.5, 1.0]
Multiple disabilities/deaf–blindness	0.06	1.06	[0.5, 1.2]	–0.30	0.74	[0.5, 1.1]
Other health impairment	0.86	2.35	[0.9, 6.3]	–0.08	0.92	[0.7, 1.3]
Orthopedic impairment	0.15	1.16	[0.5, 2.5]	–0.13	0.88	[0.6, 1.3]
Speech/language impairment	0.03	0.97	[0.4, 2.2]	–0.56**	0.57	[0.4, 0.8]
Traumatic brain injury	0.15	1.16	[0.4, 3.3]	–0.31	0.73	[0.5, 1.1]
Visual impairment	0.35	1.42	[0.6, 3.5]	0.40	1.49	[1.0, 2.3]
Functional cognitive skills	0.13***	1.14	[1.9, 1.2]	0.12***	1.13	[1.1, 1.2]
Student's social skills	NA			0.11***	1.11	[1.1, 1.2]
Student demographics						
Age	0.21***	1.23	[1.1, 1.4]	0.13***	1.14	[1.1, 1.2]
Gender (male)	–0.18	0.84	[0.6, 1.2]	NA		
Race/ethnicity (compared with Caucasian)						
African American	–0.31	0.74	[0.5, 1.1]	–0.26*	0.77	[0.6, 1.0]
Hispanic	–0.23	0.80	[0.5, 1.2]	–0.48***	0.62	[0.5, 0.8]
Other	0.17	1.19	[0.5, 2.7]	–0.39	0.67	[0.4, 1.1]
Family demographics						
Household income (compared with ≤US$25,000)						
US$25,001–US$50,000	0.01	1.01	[0.7, 1.5]	0.17	1.19	[1.0, 1.5]
> US$50,000	–0.16	0.85	[0.6, 1.2]	–0.24*	0.79	[0.6, 1.0]
Parent involvement, expectations, perceptions						
Involvement in education						
At home	0.15***	1.16	[1.1, 1.2]	0.18***	1.20	[1.1, 1.3]
At school	NA			0.04**	1.04	[1.0, 1.1]
Attended IEP/transition planning meeting	2.76***	15.82	[9.5, 26.3]	NA		
Expectations for student's postsecondary education	0.29**	1.33	[1.1, 1.6]	0.30***	1.34	[1.2, 1.5]
Student's instructional program and performance						
Percentage of instruction received in general education setting	0.01**	1.00	[1.0, 1.0]	0.01***	1.01	[1.0, 1.0]
Received transition planning instruction	1.71***	5.52	[4.1, 7.5]	0.56***	1.75	[1.5, 2.1]
Intercept	–7.91***			–7.96***		
Sample size	3.610			3,390		
Adjusted r^2	.040			.315		

Note: *ns* have been rounded to the nearest 10, in conformance with Institute of Education Sciences standards for data privacy protection. IEP = individualized education program; OR= odds ratios; CI = confidence interval; LD = learning disability.
Sources: SEELS Wave 3 Parent Interview, 2004; NLTS2, Wave 2 Parent/Youth Interview/Survey, 2003.
*$p < .05$. **$p < .01$. ***$p < .001$.

respectively) than parents with incomes of US$25,000 or less. The likelihood that parents found their involvement in IEP/transition planning meetings to be satisfactory also was higher in families with a better educated head of household ($p < .001$, OR = 1.06).

Parents' involvement, expectations, and perceptions. All factors in this category were statistically significantly related to the likelihood of parents attending IEP/transition planning meetings. Positive associations were noted with the level of parents' involvement in their children's education at home ($p < .001$, OR = 1.15) and at school ($p < .001$, OR = 1.24), with their belonging to a support group for families of children with disabilities ($p < .001$, OR = 1.80) and with their satisfaction with their children's teachers

($p < .033$, OR = 1.17). A negative relationship was found between meeting attendance and parents' expectations that their children would pursue postsecondary education ($p < .028$, OR = 0.86). Only parents' involvement in their children's education at home and their satisfaction with their children's teachers attained a level of significance to be included in the parent satisfaction with involvement model. Parents who were more involved at home were less likely to be satisfied with their meeting involvement ($p < .027$, OR = 0.96), and those who were more satisfied with their students' teachers were more likely to be satisfied with their meeting attendance ($p < .001$, OR = 1.82).

Students' educational histories. Measures of whether students had ever been held back a grade or suspended or expelled from school did not reach a level of statistical significance to be retained in the parent attendance model. However, whether students' behavior had ever resulted in suspension or expulsion was negatively related to parents satisfaction with their involvement in IEP/transition planning meetings ($p < .002$, OR = 0.79); grade retention was not statistically significantly related to satisfaction with meeting involvement.

Logistic Regression Analysis Results for Students' IEP/Transition Planning Meetings Participation and Role

The results of logistic regression analyses that explain variation in the attendance at the most recent IEP/transition planning meeting of 15- through 19-year-olds represented in NLTS2 and the likelihood that they took an active role in or led the transition planning meeting are presented in Table 5.

Disability characteristics. Youth in only one primary disability category differed statistically significantly from youth with LD in their likelihood of attending their most recent IEP/transition planning meeting; students with autism were less likely than those with LD to do so ($p < .001$, OR = 0.35). Youth with autism also were less likely than those with LD to actively participate in or lead their transition planning meeting ($p < .001$, OR = 0.49), as were students with speech/language impairments ($p < .005$, OR = 0.56). Having higher functional cognitive skills was positively related to meeting attendance and to taking an active role in the transition planning meeting ($p < .001$ for both relationship, OR = 1.14 and 1.13, respectively). Having higher social skills also was positively associated with taking a stronger role in the transition planning meeting ($p < .001$, OR = 1.11).

Student demographics. Older students were more likely than younger students to attend their IEP/transition planning meeting ($p < .001$, OR = 1.23) and to take an active role in or lead it ($p < .001$, OR = 1.14). Although African American students were less likely than their Caucasian peers to take a strong role in their transition planning meeting ($p < .024$, OR = 0.77), as were Hispanic students ($p < .001$, OR = 0.62), there were no significant relationships between race/ethnicity and meeting attendance. Neither were there statistically significant gender effects.

Family demographics. Of the three family demographic factors considered in the original full model, only having an annual household income greater than US$50,000 was statistically significant and only in the student participation model ($p > .024$, OR = 0.79).

Parents' involvement, expectations, and perceptions. Youth whose parents were actively supportive of their educations at home were significantly more likely to attend their IEP/transition planning meeting ($p = .001$, OR = 1.16) and to take a strong role in transition planning ($p < .001$, OR = 1.20). Having parents who were actively involved at school was unrelated to students' meeting attendance but was positively associated with the likelihood of them taking an active or a leadership role in transition planning ($p < .010$, OR = 0.104). Having parents who attended IEP/transition planning meetings also was a statistically significant factor in students' attendance ($p < .001$, OR = 2.76). Finally, when parents had high expectations for students pursuing postsecondary education, students were more likely to attend transition planning meetings ($p < .002$, OR = 1.33) and to be active participants or leaders in them ($p < .001$, OR = −1.34).

Students' educational histories. Having negative experiences in students' educational histories in terms of grade retention or suspensions/expulsions was not associated with variation in the likelihood that students attended their most recent IEP/transition planning meeting or took a strong role in transition planning; these measures were not included in the final student models.

Students' instructional programs. Students who spent more of their instructional time in general education settings were more likely to attend their most recent IEP/transition planning meeting ($p < .008$, OR = 1.01) and to participate actively or lead them ($p < .001$, OR = 1.01). Receiving instruction in transition planning also was positively associated with meeting attendance ($p < .001$, OR = 5.52) and taking a strong role in the most recent meeting ($p < .001$, OR = 1.75).

Discussion

Participation in IEP/Transition Planning Meetings

Data from SEELS and NLTS2 provide the first-ever national picture of the participation of students with disabilities and their parents in IEP and transition planning meetings. Parents' satisfaction with their levels of involvement in decision making in those meetings and the roles taken by secondary school students in transition planning meetings also are described.

We found that across the age range of 11 through 19 years, the large majority of parents attended their child's most

recent IEP meeting, and among those who had attended a meeting, about 7 in 10 parents reported their level of involvement in decision making to be "about right," whereas most others wanted to be more involved. About half of 11- through 14-year-olds were reported to have attended IEP meetings, much lower than the parent attendance rate, whereas older students were almost as likely to attend IEP and transition planning meetings as their parents. When they attended such meetings, almost half of the students were reported to have provided "some input," regardless of age.

Logistic Regression Analysis Results

Disability characteristics. These analyses are among the first to involve samples that encompass students from each of the 12 federal special education disability categories so that differences across categories could be identified. Furthermore, because logistic regression analysis techniques were used, differences associated with type of disability, independent of other factors that differ across categories, such as race/ethnicity, gender, and income (Wagner et al., 2002; Wagner, Marder, et al., 2003), also could be isolated. Using the attendance of parents of students with LD as the comparison condition, parents of students in six other disability categories were more likely to attend IEP/transition planning meetings, independent of other differences between them included in the analyses. Other dependent measures showed fewer independent variations associated with type of disability. These variations raise questions regarding possible disparities in parent representation in IEP meetings for students with some types of disabilities.

Independent of disability type, analyses confirm that cognitive and social skills matter, although in different ways. Although students' functional cognitive skills did not reach a level of significance to be included in the final parent models, they were statistically significant factors in student models, as were social skills in the case of students' taking an active role in transition planning, consistent with prior work relating higher social skills with self-determination behaviors (e.g., Pierson et al., 2008). School staff should be alert to the need to take particular care that the views of students who are less skilled in these areas are solicited and actively considered in transition planning.

Student and family demographics. Not surprisingly, student age is an important factor in understanding variations in the likelihood of students attending IEP/transition planning meetings and of them participating actively or taking a leadership role in the meetings. Although parent attendance did not differ significantly with student age, consistent with earlier research (Newman, 2005), the likelihood of parents being satisfied with their involvement was significantly higher among parents of younger students, also consistent with other research that reports parent "burnout" after years of dealing with special education procedural requirements (e.g., Defur et al., 2001; Harry et al., 1995).Racial/ethnic differences also were apparent in these findings, as in other research (Geenen et al., 2001; Landmark et al., 2007; Newman, 2005), highlighting the lower rates of participation and satisfaction of parents of non-Caucasian students and the lower rates of active transition planning involvement of their students.

Significant income effects were noted in both parent models, favoring parents with higher incomes; single parents also were less likely to report being satisfied with their involvement when they did attend. Income also had a significant positive association with students taking a strong role in meetings they attended. These findings suggest that school staff must take extra steps in ensuring that the benefits of parent and student representation and student self-determination in IEP and transition planning procedures accrue to all students, regardless of demographic differences.

Parents' involvement, expectations, and perceptions. Results reinforce the importance and value of parents' involvement in their children's educations. Furthermore, they confirm other analyses that demonstrate that the variety of forms of parent involvement is interrelated (Newman, 2005). Parents with higher levels of involvement in supporting their children's education at home and at school and those who belonged to support groups for parents of children with disabilities were significantly more likely to attend IEP/transition planning meetings. Several forms of parent involvement, including attending meetings also were statistically significant predictors of students attending meetings and participating actively in them. However, greater involvement at home was negatively associated with parents being satisfied with their involvement in decision making around IEPs and transition planning.

These findings raise the possibility that measures of students' functional cognitive and social skills are not completely controlling for severity of disability. Students who need more help with homework (a component of parental involvement at home) and whose behavior at school occasions the need for meetings at school (a component of parental involvement at school) and students whose parents do not hold high expectations for postsecondary education also are likely to be students with relatively lower cognitive and social skills. These factors all relate to a higher likelihood that parents will be active in the IEP/transition planning process, yet some also relate to a lower likelihood of satisfaction with that involvement.

Another form of parent support for their children's education, having high expectations that they will pursue education after high school, related to parents and students attending meetings but in opposite directions. Parents with expectations for their student's postsecondary school attendance were less likely to attend IEP/transition planning meetings, whereas students who had parents with higher expectations were more likely to attend their IEP/transition planning meetings and to play a strong role in them.

Students' educational histories. Having negative school-related experiences (i.e., grade retention, suspension/expulsion, poor grades) in a student's educational history was largely unassociated with the dependent variables addressed here, suggesting that schools can maintain parents' and particularly students' participation after such occurrences. The exception is that parents' whose child's behavior had resulted in suspension or expulsion were less likely to report being satisfied with their involvement when they attended IEP/transition planning meetings. Programs that encourage school–parent partnerships in supporting students with behavior problems show some promise in engaging parents and benefiting students (e.g., Ruffolo, Kuhn, & Evans, 2006).

Students' instructional programs. Only student models included variables measuring the percentage of students' instructional programs that they experienced in general education settings and whether they had received instruction focused on transition planning. Both factors were strongly and positively associated with meeting attendance and active participation in them. General education settings offer an opportunity for students to exercise self-determination skills in advocating for needed supports, skills reinforced through instruction in transition planning procedures, and how to participate meaningfully in them. Schools should look for ways to incorporate transition-related instruction for all students with disabilities and opportunities for them to learn and practice self-determination skills in all instructional settings. This is particularly important for students transitioning to postsecondary school, where the receipt of services and accommodations hinges on students' decision to disclose a disability, a decision that is related to students' self-determination and self-advocacy skills (Barnard-Brak, Sulak, Tate, & Lechtenberger, 2010; Belch, 2004; Getzel & Thoma, 2008).

Limitations

The findings reported here make a unique contribution to the knowledge base about parents' and students' participation in two forms of educational planning that are hallmarks of federal special education law—IEP and transition planning meetings. The inclusiveness of the SEELS and NLTS2 samples and the breadth of factors for which data are available enable a broader exploration of influences on these forms of parent and student participation and of parents' satisfaction with their involvement and of students' roles. However, two limitations should be noted. Parents' participation is largely self-reported, with no corroboration of their actual attendance at IEP/transition planning meetings. Moreover, student's attendance and role is adult reported, either by parents or school staff; it is unknown whether students' descriptions of their own role in transition planning meetings would jibe with adult descriptions.

Conclusions and Implications

Federal legislation intends for parents to be equal partners with school staff in educational planning for their children and, for students ages 14 or older (at the time data were collected, now ages 16 or older), to participate in transition planning and for their goals and preferences to drive that process and the resulting transition goals and activities. The findings reported here indicate that the federal intention is not being equally realized for students served under IDEA and their families. For example, rates of IEP/transition planning meeting participation were higher for parents of students with some kinds of disabilities than others, with some levels of income than others, and from some racial/ethnic backgrounds than others. Parents of students who had demonstrated challenging behavior at school or who had poor social skills also found participating in IEP/transition planning meetings to be less than satisfactory.

These findings raise questions about whether schools are doing enough to engage the diversity of children and parents who are part of their communities. For example, in 2001 and 2002, respectively, only about half of students represented in SEELS and NLTS2 went to schools where informational material about school policies and programs and about student performance expectations was translated into multiple languages. In addition, only 43% and 12% of SEELS and NLTS2 students, respectively, went to schools that had specific services or supports to encourage parental involvement at school (NLTS2, 2002; SEELS, 2002). We strongly hope that those numbers would be higher today, given the rapid increase in student diversity nationwide, but we have no assurance of that.

Furthermore, parent and student participation could benefit by school staff asking how the often-bureaucratic procedures of IEP/transition planning processes and meetings may be presenting specific obstacles to lower income members of their school communities (perhaps related to meeting times and locations), or to those who are less well educated (perhaps related to special education jargon or seemingly arcane procedures), or who are non-White yet often facing White-majority school staffs. And how welcoming are schools to parents whose children struggle academically and/or behaviorally? Findings presented here that parents of students with negative events in their educational histories or with factors associated with behavior issues are as likely as others to attend IEP/transition planning meetings but are less likely to be satisfied with their inclusion in decision making are troubling. The students whose parents come to meetings to represent may be the ones who most need and could benefit from a strong parent–school alliance in support of their educational success, yet that alliance seems elusive.

Finding ways to address obstacles to parents' involvement at school is particularly important in light of the

benefits associated with it. Findings consistently show that parents' who are more highly involved in supporting their children's educations and who have high expectations for their children's educational future also are more likely to take advantage of the forms of school participation addressed in these analyses, as are their students. Moreover, research demonstrates that greater involvement of parents of students with disabilities is associated with better student outcomes of many kinds, including better school engagement, academic performance, social adjustment, and independence (Newman, 2005).

Parent involvement also appears to spur students' attendance at their IEP/transition planning meetings and their active participation in transition planning, forms of student involvement that are necessary if the legislative intent of those processes being driven by student goals and preferences is to be realized. School factors also appear to play an important part in these forms of student involvement. Independent of the form of their disability, their skill level, their demographics, or other factors in the models, students who spent a greater percentage of their instructional time in general education classrooms were more likely to participate actively in the IEP/transition planning processes. Furthermore, students whose schools provided instruction specifically focused on providing students with the knowledge and skills to participate effectively in their own transition planning were more likely to put the knowledge and skills to work by attending IEP/transition planning meetings and taking an active role in them. Yet in 2002, only 65% of secondary school students with disabilities received such instruction (Cameto et al., 2004). Hopefully, this percentage has increased, but we think it is safe to say that opportunities still exist for schools to provide students with this critical form of support. The upcoming reauthorization of IDEA may also provide an opportunity to underscore the importance of giving students with disabilities the concrete tools needed to help shape their own transition path.

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Note

1. When students were sampled for the two studies, the 12 federal special education disability categories applicable to students older than age 9, those who are the focus of the analyses reported here, are learning disability, speech/language impairment, mental retardation, emotional disturbance, hearing impairment, visual impairment, orthopedic impairment, other health impairment, autism, traumatic brain injury, multiple disabilities, and deaf–blindness (P.L. 105-17, the Individuals With Disabilities Education Act Amendments of 1997).

References

Agran, M., & Hughes, C. (2008). Asking student input: Students' opinions regarding their individualized education program involvement. *Career Development for Exceptional Individuals, 31*, 69–76.

Barnard-Brak, L., Sulak, T., Tate, A., & Lechtenberger, D. (2010). Measuring college students' attitudes toward requesting accommodations: A national multi-institutional study. *Assessment for Effective Intervention, 35*(3), 141–147. doi: 10.1177/1534508409358900

Bateman, B. D. (n.d.). *Legal requirements for transition components of the IEP*. Retrieved from http://www.wrightslaw.com/info/trans.legal.bateman.htm

Belch, H. (2004). Retention and students with disabilities. *Journal of College Student Retention: Research, Theory & Practice, 6*(1), 3–22.

Blackorby, J., Wagner, M., Cameto, R., Davies, E., Levine, P., Newman, L., . . . Sumi, C. (2005). *Engagement, academics, social adjustment, and independence: The achievements of elementary and middle school students with disabilities*. Menlo Park, CA: SRI International. Retrieved from http://www.seels.net/info_reports/engagement.htm

Cameto, R., Levine, P., & Wagner, M. (2004). *Transition planning for students with disabilities*. Menlo Park, CA: SRI International.

Cheung, C., & Pomerantz, E. M. (2011). Parent's involvement in children's learning in the United States and China: Implications for children's academic and emotional adjustment. *Child Development, 82*, 932–950.

Coots, J. J. (1998). Family resources and parent participation in schooling activities for their children with developmental delays. *Journal of Special Education, 31*, 498–520.

Crosnoe, R. (2001). Academic orientation and parental involvement in education during high school. *Sociology of Education, 74*, 210–230.

Dabkowski, D. M. (2004). Encouraging active parent participation in IEP team meetings. *Teaching Exceptional Children, 36*, 34–39.

Defur, S. H., Todd-Allen, M., & Getzel, E. E. (2001). Parent participation in the transition planning process. *Career Development for Exceptional Individuals, 24*, 19–36.

Drasgow, E., Yell, M. L., & Robinson, T. R. (2001). Developing legally correct and educationally appropriate IEPs. *Remedial and Special Education, 22*, 359–373.

El Nokali, N. E., Bachman, H. J., & Votruba-Drzal, E. (2010). Parent involvement and children's academic and social development in elementary school. *Child Development, 81*, 988–1005.

Epstein, J. L. (1987). Toward a theory of family-school connections: Teacher practices and parent involvement. In K. Hurrelmann, F. Kaufmann & F. Losel (Eds.), *Social intervention: Potential and constraints* (pp. 121–136). New York: de Gruyter.

Epstein, J. L. (1992). School and family partnerships. In M. Alkin (Ed.), *Encyclopedia of educational research* (6th ed., pp. 1139–1151). New York: Macmillan.

Epstein, J. L. (1994). Theory to practice: School and family partnerships lead to school improvement and student success. In C. L. Fagnano & B. Z. Werber (Eds.), *School, family, and community interaction: A view from the firing lines* (pp. 39–52). Boulder, CO: Westview Press.

Epstein, J. L. (2001). *School, family, and community partnerships: Preparing educators and improving schools*. Boulder, CO: Westview Press.

Fish, W. W. (2008). The IEP meeting: Perceptions of parents of students who receive special education services. *Preventing School Failure, 53*, 8–14.

Geenen, S., Powers, L., & Lopez-Vasquez, A. (2001). Multicultural aspects of parent involvement in transition planning. *Exceptional Children, 67*, 265–282.

Getzel, E. E., & Thoma, C. A. (2008). Experiences of college students with disabilities and the importance of self-determination in higher education settings. *Career Development for Exceptional Individuals, 31*(2), 77-84. doi: 10.1177/088 5728808317658

Gillespie, E. B., & Turnbull, A. P. (1983). It's my IEP: Involving students in the planning process. *Teaching Exceptional Children, 16*, 26–29.

Goldstein, S., Strocland, B., Turnball, A. P., & Curry, L. (1980). An observational analysis of the IEP conference. *Exceptional Children, 4*, 278–286.

Goldstein, S., & Turnbull, A. P. (1982). Strategies to increase parent participation in IEP conferences. *Exceptional Children, 48*, 360–361.

Greene, G. (2003). Best practices in transition. In G. Greene & C. A. Kochhar-Bryant (Eds.), *Pathways to successful transition for youth with disabilities* (pp. 154–196). Upper Saddle River, NJ: Pearson Education.

Griffin, D., & Galassi, J. P. (2010). Parent perceptions of barriers to academic success in a rural middle school. *Professional School Counseling, 14*, 87–100.

Grigal, M., Test, D., Beattie, J., & Wood, W. (1997). An evaluation of transition components of individualized education programs. *Exceptional Children, 63*, 357–372.

Grolnick, W. S., Apostoleris, N. H., & Rosen, S. (1995, April). *Socioeconomic and family predictors of parent involvement: A multidimensional approach*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Harry, B., Allen, N., & McLaughlin, M. (1995). Communication versus compliance: African American parents' involvement in special education. *Exceptional Children, 61*, 364–377.

Heatherington, S. A., Durant-Jones, L., Johnson, K., Nolan, K., Smith, E., Taylor-Brown, S., & Tuttle, J. (2010). The lived experiences of adolescents with disabilities and their parents in transition planning. *Focus on Autism and Other Developmental Disabilities, 25*, 163–172.

Henderson, A. T., & Berla, N. (1994). *A new generation of evidence: The family is critical to student achievement*. Columbia, MD: National Committee for Citizens in Education.

Hendricks, D., & Wehman, P. (2009). Transition from school to adulthood for youth with autism spectrum disorders: Review and recommendations. *Focus on Autism and Other Developmental Disabilities, 24*, 77–88.

Kalyanpur, M., Harry, B., & Skrtic, T. (2000). Equity and advocacy expectations of culturally diverse families' participation in special education. *International Journal of Disability, Development and Education, 47*, 119–136.

Kohler, P. D. (1993). Best practices in transition: Substantiated or implied? *Career Development for Exceptional Individuals, 16*, 107–121.

Landmark, L. J., Ju, S., & Zhang, D. (2010). Substantiated best practices in transition: Fifteen plus years later. *Career Development for Exceptional Individuals, 33*, 165–176.

Landmark, L. J., Zhang, D. D., & Montoya, L. (2007). Culturally diverse parents' experiences in their children's transition: Knowledge and involvement. *Career Development for Exceptional Individuals, 30*, 68–79.

Lynch, E. W., & Stein, R. (1982). Perspectives on parent participation in special education. *Exceptional Education Quarterly, 3*, 56–63.

Martin, J. E., Marshall, L. H., & Bale, P. (2004). A 3-year study of middle, junior high, and high school IEP meetings. *Exceptional Children, 70*, 285–297.

Martin, J. E., Van Dycke, J. L., Christensen, W. R., Greene, B. A., Gardner, J. W., & Lovett, D. L. (2006). Increasing student participation in their transition IEP meetings: Establishing the self-directed IEP as an evidenced-based practice. *Exceptional Children, 72*, 299–316.

Mason, C. Y., Field, S., & Sawilowsky, S. (2004). Implementation of self-determination activities and student participation in IEPs. *Exceptional Children, 70*, 441–451.

Mason, C. Y., McGahee-Kovac, M., Johnson, L., & Stillerman, S. (2002). Implementing student-led IEPs: Student participation and teacher reactions. *Career Development for Exceptional Individuals, 25*, 171–192.

Mutua, N. K., & Dimitrov, D. (2001). Parents' expectations about future outcomes of children with MR in Kenya: Differential effects of gender and severity of MR. *Journal of Special Education, 35*, 172–180.

National Council on Disability. (2000). *Back to school on civil rights*. Washington, DC: Author.

National Longitudinal Transition Study-2. (2002). *Table 79, School strategies to promote parent involvement* (Items NSC1C9 1–20). Retrieved from http://www.nlts2.org/data_tables/tables/3/NSC1C9frm.html

Newman, L. (2004). *Factors associated with family involvement in the education of secondary-school-age students with disabilities: A national perspective* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database.

Newman, L. (2005). *Family involvement in the educational development of youth with disabilities*. Menlo Park, CA: SRI International.

Patel, N., & Stevens, S. (2010). Parent-teacher-student discrepancies in academic ability beliefs: Influences on parent involvement. *School Community Journal, 20*, 115–136.

Pierson, M. R., Carter, E. W., Lane, K. L., & Glaeser, B. C. (2008). Factors influencing the self-determination of transition-age youth with high-incidence disabilities. *Career Development for Exceptional Individuals, 31*, 115–125.

Ruffolo, M., Kuhn, M., & Evans, M. (2006). Developing a parent-professional team leadership model in group work: Work with families with children experiencing behavioral and emotional problems. *Social Work, 51*, 39–47.

Simpson, R. L. (1996). *Working with parents and families of exceptional children and youth: Techniques for successful conferencing and collaboration* (3rd ed.). Austin, TX: PRO-ED.

Smrekar, C., & Cohen-Vogel, L. (2001). The voices of parents: Rethinking the intersection of family and school. *Peabody Journal of Education, 76*, 75–100.

Spann, S. J., Kohler, F. W., & Soenksen, D. (2003). Examining parents' involvement in and perceptions of special education services: An interview with families in a parent support group. *Focus on Autism and Other Developmental Disabilities, 18*, 228–237.

Special Education Elementary Longitudinal Study. (2002). *Table 79, School strategies to promote parent involvement* (Items sc2C9 1–20). Retrieved from http://www.seels.net/search/tables/10/sc2c9frm.html

Test, D. W., Mason, C., Hughes, C., Konrad, M., Neale, M., & Wood, W. (2004). Student involvement in individualized education program meetings. *Exceptional Children, 70*, 391–412.

Topor, D. R., Keane, S. P., Shelton, T. L., & Calkins, S. D. (2010). Parent involvement and student academic performance: A multiple mediational analysis. *Journal of Prevention & Intervention in the Community, 38*, 183–197.

Underwood, K. (2010). Involving and engaging parents of children with IEPs. *Exceptionality Education International, 20*, 18–36.

Virginia Department of Education. (1998). *1997 Project UNITE Individual Transition Plan. Information summary* (Unpublished data). Richmond, VA: Author.

Wagner, M., Kutash, K., Duchnowski, A. J., & Epstein, M. H. (2005). The Special Education Elementary Longitudinal Study and the National Longitudinal Transition Study-2: Study designs and implications for children and youth with emotional disturbance. *Journal of Emotional and Behavioral Disorders, 13*, 25–41.

Wagner, M., & Marder, C. (2003). Introduction. In M. Wagner, C. Marder, P. Levine, R. Cameto, T. W. Cadwallader, & J. Blackorby (Eds.), *The individual and household characteristics of youth with disabilities: A report from the National Longitudinal Transition Study-2* [*NLTS2* (pp.1-5)] Menlo Park, CA: SRI International.

Wagner, M., Marder, C., Blackorby, J., & Cardoso, D. (2002). *The children we serve: The demographic characteristics of elementary and middle school students with disabilities and their households*. Menlo Park, CA: SRI International.

Wagner, M., Marder, C., Levine, P., Cameto, R., Cadwallader, T. W., Blackorby, J., . . .Newman, L. (2003). *The individual and household characteristics of youth with disabilities. A report from the National Longitudinal Transition Study-2 (NLTS2)*. Menlo Park, CA: SRI International. Retrieved from http://www.nlts2.org/reports/2003_08/index.html

Wagner, M., Newman, L., Cameto, R., Levine, P., & Marder, C. (2003). *Going to school: Instructional contexts, programs, and participation of secondary school students with disabilities*. Menlo Park, CA: SRI International.

Wehmeyer, M. L., & Garmer, N. W. (2003). The impact of personal characteristics of people with intellectual and developmental disability on self-determination and autonomous functioning. *Journal of Applied Research in Intellectual Disabilities, 16*, 255–265.

Williams-Diehm, K., Wehmeyer, M. L., Palmer, S. B., Soukup, J. H., & Garner, N. W. (2008). Self-determination and student involvement in transition planning: A multivariate analysis. *Journal on Developmental Disabilities, 14*, 25–36.