

How Are We Preparing Students With Emotional Disturbances for the Transition to Young Adulthood?

Findings From the National Longitudinal Transition Study–2

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The authors describe five principles they identified from the literature on exemplary practices to help students with emotional disturbances (ED) have positive secondary school experiences and successful trajectories into early adulthood. The five are relationships, rigor, relevance, attention to the whole child, and involving students and families in goal-driven transition planning. The authors evaluated implementation of these practices for middle and secondary school students with ED by using data from a nationally representative longitudinal study of students receiving special education services. The results suggest that exposure to best practices has improved since the 1980s and is similar to that for students with other disabilities, but significant opportunity for improvement remains. The authors also identify implications for school programming.

In the early 1990s, the National Longitudinal Transition Study (NLTS) provided the first national picture of the lives of high school youth with disabilities and their transition to early adulthood (Wagner et al., 1991; Wagner, D'Amico, Marder, Newman, & Blackorby, 1992). NLTS analyses showed tremendous variation in the experiences and achievements of youth, yet the outcomes for youth in the primary disability category of emotional disturbance (ED) were found to be “particularly troubling” (Wagner et al., 1991, p. 11-3). They demonstrated a pattern of disconnectedness from school, academic failure, poor social adjustment, and criminal justice system involvement, although there were more positive findings regarding other aspects of their lives, such as employment (Wagner, 1995). The negative outcomes for youth with ED were echoed in other con-

current longitudinal research involving youth with ED in school and mental health settings (e.g., Davis & Vander Stoep, 1997; Sitlington, Frank, & Carson, 1990) or youth with psychiatric disorders in the community (Vander Stoep et al., 2000).

NEW POLICIES, PROGRAMS, AND INTERVENTIONS

The social costs of these poor outcomes spurred development of (a) a national agenda to improve the outcomes for this particular population (Chesapeake Institute, 1994) and (b) specific interventions for them (e.g., Cheney, Martin, & Rodriguez, 2000; Lane, 2004). Students with ED also are likely to have benefited from subsequent policy and practice developments for students with other disabilities and at-risk students in the general population. Three federal initiatives addressing issues involving students with disabilities are

- amendments to the Individuals with Disabilities Education Act (IDEA) in 1990 and 1997,
- recent secondary and postsecondary support activities of the National Center for Special Education Research, Institute of Education Sciences, within the U.S. Department of Education, and
- the Office of Special Education Programs' sponsorship of the National Center for Secondary Education and Transition and the National Drop Out Prevention Center.

Two recent substantial federal efforts addressing the needs of the general population of at-risk students—the No Child Left Behind Act of 2001 (NCLB) and the Preparing America’s Future High School Initiative (U.S. Department of Education, 2005a, 2005b)—provide support for improving schools and hold schools accountable for student performance. Promising practices include those for (a) students with disabilities as a whole (e.g., Kincaid, 1996; Mathes & Fuchs, 1994), (b) at-risk students in the general population (e.g., Dynarski & Gleason, 2002; Schargel & Smink, 2001), and (c) school-wide interventions and reforms (e.g., Bill and Melinda Gates Foundation, n.d.; Lane & Beebe-Frankenberger, 2004), including the rapidly expanding use of positive behavior supports (Bradley, 2001; Horner & Sugai, 2005; U.S. Department of Education, 2002).

PRINCIPLES OF EFFECTIVE SECONDARY SCHOOL PROGRAMMING

Analyses of shared features of interventions for students with ED and other disabilities and at-risk populations have identified five principles that programs should embody to help youth complete high school and improve young adult outcomes (National Alliance for Secondary Education and Transition, 2004; National Council on Disabilities, 2004). Some of these best practices can be summarized as the “new three Rs”—relationships, rigor, and relevance (Bill and Melinda Gates Foundation, n.d.), whereas others involve addressing the needs of the “whole child” and engaging in goal-driven transition planning.

Relationships

Effective schools support the creation of meaningful relationships as the foundation for students’ engagement in their schooling. Research on factors related to dropping out point to disengagement from school (Finn, 1993; Grannis, 1994) that often begins early (Thurlow, Christenson, Sinclair, Evelo, & Thornton, 1995). Efforts that increase the likelihood of positive bonds at school include reducing school or class size, forming small learning communities, and providing mentoring programs at school. Improving relationships for youth with ED may also require supportive services, such as social skills or anger-management training, that help reduce the disability’s impact on forming relationships.

Rigor

Effective schools offer a challenging curriculum provided by well-prepared teachers in inclusive environments with the supports needed to help students succeed academically. The unique learning needs of students with ED often require individualization in their school programs (e.g., opportunities for individual instruction) and a variety of academic supports (e.g., tutoring; Ryan, Reid, & Epstein, 2004; Strayhorn & Bickel, 2002).

Relevance

Effective schools provide opportunities for “authentic learning” of content and skills that are relevant to students’ interests and future plans (Phelps, 2003), particularly regarding career preparation. Employment is prominent in the postschool transition goals of students with ED (Cameto, Levine, & Wagner, 2004). Thus, these young people need access to programs that teach workplace behaviors, occupational skills, and career awareness and that provide work exploration opportunities to help them identify career interests and proclivities and develop skills critical to a successful transition. The tendency of students with ED to be disengaged from school (Wagner, Marder, et al., 2003) makes considerations of relevance particularly important.

Address the Needs of the Whole Child

A focus on the whole child promotes consideration of any factors that (a) interfere with a child’s educational experience and (b) prepare a student for functioning as a person, community member, and citizen. Because students with ED have emotional and behavioral issues that interfere with their learning or that of students around them, interventions and supports are needed to help them control or cope with those issues. Attention to the complex array of needs of adolescents with ED is critical if they are to learn to make decisions that reflect an understanding of their own abilities, limitations, and preferences; creative problem-solving; and effective self-advocacy. Such opportunities are reflected in courses and extracurricular activities that allow students to explore interests and hone skills beyond the academic. A variety of skills that underlie adult functioning also can be developed through training in social skills, life skills, and self-advocacy. Furthermore, because youth with ED are at high risk for substance abuse, crime, and pregnancy (Davis, Banks, Fisher, & Grudzinskas, 2004; Vander Stoep et al., 2000) education related to these risk behaviors is important.

Involve Students and Families in Transition Planning

Transition planning should be goal-driven and involve drawing on and coordinating community resources. Federal special education legislation requires that students receiving special education services engage in planning transition services, that is, “a coordinated set of activities . . . to facilitate the child’s movement from school to post-school activities” (Individuals with Disabilities Education Improvement Act of 2004, section 602(34)(A)). Transition planning is to begin early (IDEA 1997 specifies age 14; IDEA 2004 specifies age 16); specify goals that reflect a student’s strengths, preferences, and interests; and identify a course of study and postschool service needs that support those goals. Best practices in transition planning call for it to be “person-centered” (Kincaid, 1996), encompass all relevant transition domains (i.e., employment, education, living situation, and community life adjustment), involve community-

based experiences and resources, and provide for service coordination (Bullis, Tehan, & Clark, 2000).

STUDY PURPOSE

This article provides a national picture of the extent to which these five dimensions of best practices characterize the secondary school programs and transition planning processes of students with ED. It describes findings for students with ED and compares them with findings for students who receive special education services in all other disability categories, drawing on data from the National Longitudinal Transition Study–2 (NLTS2). NLTS2 uses a nationally representative sample of middle and high school students receiving special education in all disability categories, including ED, and captures key characteristics of their school programs.

METHOD

The NLTS2 design, data sources, and data collection methods have been described previously (Wagner, Kutash, Duchnowski, & Epstein, 2005). For additional information, the reader is referred to the study's Web site (www.nlts2.org). A brief review of methods relevant to the current analyses is provided here.

Study Sample and Sample Weighting

The NLTS2 sample was drawn to generalize to students with disabilities as a whole and students in each federal special education disability category who were ages 13 years through 16 years and receiving special education services in seventh grade or above in the 2000–2001 school year. In a two-stage sampling process, study staff selected a random sample of school districts that served students in the NLTS2 age range from the universe of districts, stratified to represent different geographic regions, sizes (indicated by student enrollment), and levels of district wealth (indicated by student eligibility for free or reduced-price lunches). In all, 501 school districts contributed sample members to the analyses reported here. In the second sampling stage, staff randomly selected a designated number of students in each district from each disability category, including 1,077 students in the ED category (9.6% of the entire sample). These samples were weighted to represent students nationwide who had been classified with the particular disability and had received instruction in the kind of school district from which the sample was selected.

Data Sources and Collection Methods

Although NLTS2 is longitudinal, data from the four sources were collected during Wave 1. Table 1 lists the variables from these sources that we selected for analysis as being most relevant to the five dimensions of effective practices.

The Student's School Program Survey (SSPS) was mailed to the staff person, often a special educator, identified by school administrators as most knowledgeable about the overall school programs of specific NLTS2 students. The General Education Teacher Survey (GETS) obtained information on students' academic experiences in general education classrooms. It was mailed to the teacher of the first general education academic class in each student's school week for study members who took such classes. The first academic class in the week was chosen to capture information on a range of objectively selected classes. In addition to reporting on the classroom experiences of a specific student with disabilities, teachers also reported on their instructional practices with the class as a whole, illuminating the extent to which the students with disabilities had access to the general education curriculum. The School Characteristics Survey (SCS) was completed by a school staff person, often a principal, who could describe the school as a whole. School surveys first were conducted in spring 2002, when students were ages 13 through 18. Parent telephone interviews (PTI) were conducted for the first time in 2001 with parents/legal guardians of study members (referred to herein as *parents*); questionnaires that included a subset of items from the telephone interview were mailed to parents who could not be reached by phone. The response rate for the PTI was 81%; response rates for each school survey were 59% or 60%.

Analysis Procedures

Statistical analyses were largely descriptive. All findings for students with ED are reported. To provide a framework from which to view their findings, we also compared their data with those of same-age students in the other disability categories; only statistically significant differences between the two groups ($p < .05$) revealed through two-tailed F tests are mentioned. The method of calculating standard errors for NLTS2 involves multiplying them by a "safety factor" of 1.25, which effectively reduces the chance of Type I errors (Wagner, Kutash, Duchnowski, Epstein, & Sumi, 2005). Frequencies and means were weighted so that the values reported are population estimates for students nationally, not means and percentages for sample members. Sample sizes fluctuate because of different eligibility criteria for the data sources (e.g., not all students were in general education classes) and item nonresponse.

RESULTS

Relationship—Promoting Meaningful Interpersonal Bonds

School and Class Size. Compared with students with other disabilities, in the 2001–2002 school year, secondary-school students with ED attended schools that were significantly smaller (1,163 vs. 1,310 students, $F = 5.68$, $p < .05$), and they

TABLE I
NLT2 Variables Reflecting Five Dimensions of Best Practices for Students With ED

Dimensions	Instrument			
	SSPS	GETS	SCS	PTI
Relationship	Class size, class composition	Class size, class composition	School size, % attending neighborhood school	Getting along with teachers/peers, had caring adult at school
Supported rigor	Academic course-taking and setting, instructional accommodations, supports	Instructional groupings, teacher training, rating of training adequacy	—	Type of school attended
Relevance	Vocational course-taking, school-sponsored work experience, vocational services	—	—	—
Whole child	Nonacademic/nonvocational course-taking, risk-prevention program participation, mental health/behavior supports	—	—	Extracurricular activities, volunteer/community service activities
Student/family involvement in transition planning	Transition planning characteristics	—	—	Parent perception of planning process

Note. NLT2 = National Longitudinal Transition Study-2; ED = emotional disturbance; SSPS = Student's School Program Survey; GETS = General Education Teacher Survey; SCS = School Characteristics Survey; PTI = Parent telephone interviews.

were less likely to go to school in their own neighborhood (62.2% vs. 72.8%, $F = 12.63, p < .001$). General education academic classes taken by students with ED averaged 24 students, including 4 students with disabilities; an average of 1.5 adults in such classes resulted in a student/adult ratio of 16 to 1. Vocational education classes taken by students with ED, which were a mix of general and special education classes, were smaller and had a student/adult ratio of about 11 to 1. Special education classes averaged 9 students and 2 adults, for a student/adult ratio of 4.5 to 1.

Relationships at School. Parents of 40.9% of students with ED “strongly agreed” that “there is an adult at the school who knows [student] and cares about [him/her]”; 10.7% of students had parents who “disagreed” or “strongly disagreed,” suggesting a fairly high level of adult–student interpersonal connection from a parent’s perspective. Two thirds of students with ED were reported to get along with other students at school at least “pretty well,” and the same proportion was reported to get along with teachers that well. These rates were significantly lower, however, than those of students with other disabilities

(get along with students: 84.9%, $F = 32.84$; get along with teachers: 86.1%, $F = 39.72, p < .001$).

Rigorous, Inclusive, Supported Academic Programs

Schools Attended. Almost three fourths (74%) of students with ED attended a general education public school, which was a significantly lower rate than that for students with other disabilities (94.2%, $F = 72.49, p < .001$). More than one in eight (14.3%) students with ED attended a special school serving only students with disabilities, and 7.6% attended an alternative school for students who struggle in general education high schools, which are higher rates of attendance at these two kinds of schools than those for students with other disabilities (special school: 2.2%, $F = 42.59$; alternative school: 1.3%, $F = 19.01, p < .001$).

Course-Taking and Settings. In spring 2002, virtually all secondary school students with ED took some academic courses; in fact, most of their courses (59.8%) were academic.

Large majorities were taking language arts, mathematics, science, and social studies, whereas a foreign language course was much less common (see Table 2). With the exception of social studies, students with ED were as likely as students with other disabilities to be enrolled in each type of academic course; however, they were significantly less likely to be taking those academic courses in a general education setting. Conversely, compared with students with other disabilities, students with ED were as likely to be taking at least one special education academic course but were more likely to take all their courses in special education settings (15.6% vs. 8.3%, $F = 5.43, p < .05$).

Qualifications of General Education Teachers in Academic Subjects. Virtually all students with ED who took a general education academic class had a teacher who reported being fully credentialed to teach it. Teachers averaged 13.4 years of experience, including 9.4 years teaching students with disabilities. Only 27.7% of students with ED had teachers who reported receiving in the previous 3 years at least 8 hours of continuing professional development related to working with students with disabilities, and only 37% had teachers who reported receiving that level of training for behavior management. Consistent with this relatively low level of training on issues pertinent to students with ED, 37.9% of students with ED were taught by general education teachers who “disagreed” or “strongly disagreed” with the idea that they were adequately trained to teach students with special needs.

Individualized and Community-Based Instruction. According to their teachers, students with ED in general education academic classes experienced the same range of instructional

groupings as the class as a whole. Two thirds of students with ED received whole-class instruction “often”; instructional groupings that provided opportunity for individualizing instruction were much less common. Small group instruction was used “often” for 21.2% of students with ED, individual instruction from a teacher and individual instruction from another adult were provided “often” to 30.9% and 13.8%, respectively, of students with ED. Instructional experiences outside of classroom settings occurred “rarely” or “never” for about 9 in 10 students with ED in general education academic classes.

Academic Supports. Students with ED received a variety of supports, accommodations, and modifications to help them succeed academically; 52.6% of students with ED who took a general education academic class had a “somewhat modified” curriculum, and 9.9% had a “substantially modified” or “specialized” curriculum, according to teachers. Accommodations for students with ED most commonly involved more time for test taking (72.0%) or completing assignments (57.3%); 34.1% received more frequent feedback from teachers on their work, 11.7% received shorter or different assignments, 15.0% received slower-paced instruction, and 20.8% had modified grading standards. Tutoring was fairly rare; adult and peer tutoring each was provided to about 15% of students with ED.

Relevance to Students’ Life/Career Interests

On average, 12% of the coursework of students with ED was in vocational education. The majority of students with ED took at

TABLE 2
Academic Course-Taking and Instructional Settings for Students With ED and Students With Other Disabilities in Spring 2002

Courses ^a /setting ^a	Students w/ ED	Students w/ OD	F	n/N
	% (SE)	% (SE)		
Course				
Any academic subject	98.6 (.9)	98.6 (.5)	0.00	352/5,211
Language arts	96.1 (1.5)	95.1 (1.0)	0.31	349/5,143
Mathematics	93.1 (2.0)	92.5 (1.2)	0.07	349/5,127
Science	84.4 (3.0)	82.9 (1.7)	0.19	335/5,023
Social studies	93.2 (2.0)	87.4 (1.5)	5.38*	341/5,032
Foreign language	15.3 (2.9)	21.8 (1.8)	3.74	353/5,245
Setting				
General education class	58.0 (3.9)	70.6 (2.0)	8.26**	352/5,211
Special education class	62.4 (3.8)	57.7 (2.2)	1.15	352/5,211
Community-based or other	5.6 (1.8)	2.8 (.7)	2.10	352/5,211

Note. ED = emotional disturbance; OD = other disabilities. Statistically significant differences are in bold type.

^aStudent took one or more.

* $p < .05$. ** $p < .01$.

least one course in vocational education in the spring of 2002 (see Table 3), most often a single course and one that was occupationally specific (e.g., a course in a specific skill or trade, such as Web-page design or auto mechanics) rather than a prevocational education course (e.g., a course dealing with workplace behaviors). The majority of vocational education students with ED received that instruction in a general education class. Although there was no difference between students with ED and students with other disabilities in vocational course-taking, students with ED were less likely to take part in school-sponsored work-experience programs. Over their years in high school, more than half of students with ED had received a formal assessment of their career skills or interests, but fewer than half had received career counseling or any other vocational support.

Attention to the Whole Child

Students with ED had a variety of opportunities to develop important skills. More than a quarter of all coursework (28.2%) was nonacademic/nonvocational, and most students with ED took at least one nonacademic/nonvocational course (most commonly it was physical education; see Table 4). Although the percentage of nonacademic course-taking by students with ED was similar to that of students with other disabilities, students with ED were more likely to take a life skills or social skills class and less likely to participate in organized extracurricular group activities at school.

Students with ED received reproductive health education or services and substance abuse education or services at about

the same rates as those for students with other disabilities. Students with ED received emotional/behavioral services or supports at much higher rates than did students with other disabilities but at about the same rate as the latter received reproductive health or substance abuse education or services, despite emotional/behavioral issues being at the heart of their disability. In addition, school staff members more commonly reported an unmet need for conflict-resolution or anger-management training and for substance abuse education or services among students with ED than among students with other disabilities.

Student and Family Participation in Transition Planning

Transition planning occurred in the 2001–2002 school year for 89% of students with ED, despite a requirement in federal special education law at the time (IDEA 1997) that transition planning be done for all students who were receiving special education services and were at least 14 years old. Although 98% of students with ED with transition plans had begun receiving special education services by age 14, only 65.2% had transition planning in effect by age 14; 14.4% began transition planning at age 16 or older.

Among students with transition plans, there were few differences between students with ED and students with other disabilities. Most students had attended their most recent transition planning meeting, and most had a parent attend (see Table 5). However, about one third of students with ED attended their transition planning meeting without participating in discussions

TABLE 3
Career Preparation Activities of Students With ED and Students With Other Disabilities

Course taken/participation	Students w/ ED	Students w/ OD	F	n/N
	% (SE)	% (SE)		
Spring 2002 course taken				
Any vocational education subject	60.0 (3.9)	61.5 (2.2)	0.11	352/5,211
Prevocational education	31.1 (3.7)	34.7 (2.1)	0.72	353/5,245
Occupationally specific vocational education	51.3 (4.0)	52.3 (2.2)	0.05	353/5,245
General education vocational classroom	37.3 (3.8)	44.0 (2.2)	2.33	352/5,211
Special education vocational classroom	23.2 (3.4)	21.1 (1.8)	0.30	352/5,211
Participation since starting high school				
Formal assessment of career skills or interests	58.3 (4.5)	49.6 (2.6)	3.02	269/3,871
Career counseling	45.9 (4.6)	44.2 (2.5)	0.11	269/3,871
Job-search instruction	38.7 (4.5)	35.5 (2.4)	0.39	269/3,871
Job shadowing or work exploration	14.4 (3.2)	19.9 (2.0)	2.12	269/3,871
Job-placement support	14.3 (3.2)	8.9 (1.4)	2.39	269/3,871
Tech prep program	12.5 (3.0)	11.6 (1.6)	0.07	269/3,871
Student had school-sponsored work experience	17.1 (3.1)	25.7 (2.0)	5.43*	346/4,826

Note. ED = emotional disturbance; OD = other disabilities. Statistically significant differences are in bold type.

* $p < .05$.

TABLE 4
Emotional, Behavioral, and Skill-Building Supports for Students With ED and Students With Other Disabilities

Support	Students w/ ED	Students w/ OD	F	n/N
	% (SE)	% (SE)		
<i>In a given semester, student took more than one course in:</i>				
Any nonvocational/nonacademic subject	87.8 (2.6)	89.6 (1.4)	0.37	352/5,211
Fine arts	44.8 (3.9)	49.2 (2.2)	0.97	353/5,245
Physical education	71.4 (3.6)	71.7 (2.0)	0.01	353/5,245
Life skills/social skills	45.5 (3.9)	34.2 (2.1)	6.51*	353/5,245
Study skills	40.0 (3.9)	36.1 (2.1)	0.78	353/5,245
<i>In the past year, student participated in:</i>				
Organized extracurricular group activity at school	35.1 (2.5)	47.2 (1.8)	15.43***	773/7,849
Volunteer/community service activity	36.9 (2.4)	41.6 (1.7)	2.55	808/8,115
<i>During the 2001–2002 school year, student participated in or received:</i>				
Substance abuse education or services	44.9 (4.0)	38.0 (2.2)	2.28	347/5,123
Reproductive health education or services	51.0 (4.0)	51.0 (2.2)	0.0	348/5,130
Behavior management/support plan or program	55.0 (4.1)	7.8 (1.2)	122.07***	332/4,992
Behavior intervention services	49.6 (4.3)	8.7 (1.4)	81.80***	308/4,380
Mental health services	48.9 (4.4)	15.6 (1.8)	49.07***	297/4,258
Conflict-resolution/anger-management program	43.4 (4.0)	24.6 (2.0)	17.67***	348/5,124
<i>Of students not receiving services, percentage reported by school staff to be able to benefit from:</i>				
Substance-abuse education or services	67.0 (5.3)	50.6 (2.9)	7.37*	176/3,048
Reproductive health education or services	72.5 (5.2)	61.8 (3.1)	3.12	163/2,761
Conflict-resolution/anger-management program	78.3 (4.5)	47.1 (2.7)	35.35***	176/3,400

Note. ED = emotional disturbance; OD = other disabilities. Statistically significant differences are in bold type.

* $p < .05$. *** $p < .001$.

or decisions, a higher rate than that for students with other disabilities. Few youth in either group took a leadership role. Almost two thirds (64.7%) of students with ED had had instruction specifically on the transition planning process, but these individuals were no more likely to take a leadership role in transition planning meetings than students who had not had such instruction (14.3% vs. 8.6%, $F = 3.50$, ns). The majority of parents (60.6%) who attended planning meetings for their children with ED reported that they had been involved in decisions “about the right amount,” whereas 37.4% wanted more involvement. They had less positive views, however, regarding the usefulness of the transition planning process than did parents of students with other disabilities. One fourth of parents of students with ED reported that the transition planning process was “not very” or “not at all useful,” compared with 17.4% of parents of students with other disabilities ($F = 4.46$, $p < .05$).

The kinds and numbers of attendees other than students or family members were largely similar for students with ED and students with other disabilities, but students with ED were more likely to have a special education teacher and school counselor present (see Table 5). General education vocational teachers, re-

lated service personnel, and staff members of outside agencies did not commonly attend.

An important element of a student’s transition plan is the goals students have for the period immediately following high school. When school staff members were asked to report the “primary goal” that students had for that period, the results indicated that the goals of students with ED were not different from those of students with other disabilities. Most students had an employment-related goal (69.1%), with many having the goal of obtaining vocational training to support later employment (44.2%) or of attending a 2- or 4-year college (44.2%). About half (53.3%) wanted to live independently. Fewer than three fourths of students (72.8%) had a course of study specified in their transition plan that was linked to achieving their transition goals, however, and only about one third had a school program that school staff members reported as being “very well suited” to achieving their goals (32.6% = not very/not at all well suited).

A variety of needs for service after high school were identified during transition planning for students with ED and for students with other disabilities. Not surprisingly, students with

TABLE 5
Participants in Transition Planning for Students With ED and Students With Other Disabilities

Transition planning participation	Students w/ ED	Students w/ OD	F	n/N
	% (SE)	% (SE)		
<i>Most recent transition planning meeting attended by:</i>				
Student	83.6 (3.4)	87.9 (1.7)	1.30	275/3,993
Adult family member	83.7 (3.4)	85.0 (1.8)	0.11	275/3,993
<i>Student's role in transition planning meeting:</i>				
Was present but did not participate	32.3 (4.3)	22.7 (2.1)	4.02*	267/3,857
Provided some input	56.2 (4.7)	55.5 (2.6)	0.02	267/3,857
Took a leadership role	11.5 (3.0)	11.7 (1.6)	0.00	267/3,857
<i>Transition planning meeting also attended by:</i>				
Special education teacher	99.4 (.7)	97.2 (.8)	4.28*	275/3,993
General education teacher	56.5 (4.5)	58.9 (2.5)	0.22	275/3,993
General education vocational teacher	30.3 (4.2)	31.9 (2.4)	0.11	275/3,993
School counselor	71.4 (4.1)	60.1 (2.5)	5.54*	275/3,993
School administrator	58.5 (4.5)	55.2 (2.5)	0.41	275/3,993
Related services personnel	14.9 (3.2)	18.9 (2.0)	1.12	275/3,993
State Vocational Rehabilitation agency staff members	12.4 (3.0)	14.6 (1.8)	0.40	275/3,993
Staff members of other agency	5.6 (2.1)	5.5 (1.2)	0.00	275/3,993
Employer	2.9 (1.5)	1.8 (.7)	0.44	275/3,993

Note. ED = emotional disturbance; OD = other disabilities. Statistically significant differences are in bold type.

* $p < .05$.

ED were significantly more likely to have behavioral interventions or mental health services identified as a need (see Table 6). In line with the preponderance of employment-related transition goals among students with ED, a variety of employment-related programs or groups were contacted during the transition planning process. Representatives of postsecondary vocational schools and of other vocational training programs each were contacted for more than 20% of students with ED. Contacts with community mental health providers, other social service agencies, or the Social Security Administration were infrequent. The percentages of students for whom post-school vocational service needs were identified and for whom contacts with the state Vocational Rehabilitation agency were made were quite comparable, as were the percentages of those for whom mental health services needs were identified and those for whom contacts with mental health providers were made. In contrast, 2.5 times more students with ED had a college attendance goal than had a contact made with a college on their behalf.

DISCUSSION AND CONCLUSIONS

Views From Multiple Perspectives

These analyses provide many findings about the degree to which the school programs of secondary students with ED reflect the

five dimensions of best practices, yet interpreting these findings is not straightforward. Although many experts' thinking about the described dimensions of best practices has converged, there currently is no "gold standard" to establish the right "dose" for each dimension. Comparing findings for students with ED with those for students with other disabilities or students in the general population indicates whether they are exposed to best practices at least as much as the other two groups, and tracking changes over time indicates whether exposure to best practices has increased. Comparing the needs of students with ED, inferred from their known characteristics, to actual practice is another approach.

Comparison With Students With Other Disabilities. The current findings suggest that students with ED generally are as exposed to best practices as students with other disabilities. These two populations are similar in their mix of courses, levels of teachers' experience, and transition-planning activities. Several of the practice differences reflect appropriate attention to ED, such as receiving more services for mental health or behavior, more instruction in life skills or social skills, and more frequent identification of postschool mental health service needs. Other differences may reflect the social consequences of having an emotional or behavioral disorder: Fewer students with ED got along well with peers or participated actively in their transition planning.

TABLE 6
Transition Plan Service Needs and Contacts for Students With ED and Students With Other Disabilities

Needs/contacts	Students w/ ED	Students w/ OD	F	n/N
	% (SE)	% (SE)		
<i>Postsecondary service needs identified:</i>				
Postsecondary education accommodations	41.6 (4.7)	48.5 (2.6)	1.65	255/3,728
Vocational services	38.7 (4.6)	37.6 (2.6)	0.04	255/3,728
Behavioral intervention	20.8 (3.8)	4.5 (1.1)	16.98***	255/3,728
Mental health services	12.2 (3.1)	3.5 (1.0)	7.13**	255/3,728
Social work services	11.0 (3.0)	5.8 (1.2)	2.59	255/3,728
<i>Contacts made for student with:</i>				
State Vocational Rehabilitation agency	37.2 (5.4)	37.9 (3.0)	0.01	186/2,556
Job-placement agencies	29.1 (4.8)	23.2 (2.7)	1.15	201/2,439
Postsecondary vocational schools	23.4 (4.6)	24.4 (2.8)	0.03	186/2,185
Potential employers	24.4 (4.5)	19.1 (2.5)	1.06	204/2,426
Other vocational training programs	21.5 (4.6)	26.8 (2.8)	0.97	186/2,399
Other social service agencies	21.4 (5.4)	17.7 (2.8)	0.37	125/1,995
Colleges	17.7 (4.3)	24.9 (2.9)	1.99	177/2,071
U.S. military	15.1 (4.1)	15.0 (2.5)	0.00	174/1,836
Supported employment programs	12.6 (4.0)	14.4 (2.4)	0.15	153/2,157
Community mental health provider(s)	16.5 (4.4)	19.7 (2.0)	0.44	159/1,889
Social Security Administration	9.7 (3.7)	11.8 (2.4)	0.23	145/2,033

Note. ED = emotional disturbance; OD = other disabilities. Statistically significant differences are in bold type.
** $p < .01$. *** $p < .001$.

However, several differences between students with ED and students with other disabilities suggest that the school experiences of the former provide less opportunity for interaction with the general student population. Compared with students with other disabilities, individuals classified with ED were less likely to attend a general education school or a school in their neighborhood, spent less time in general education classes, and were less likely to engage in extracurricular group activities at school through which they could share in the generally prosocial norms of such groups. Thus, students with ED have more limited interactions with the general population, which may have ramifications for both formation of relationships and the rigor of coursework.

Comparisons With Students With ED in the 1980s. Two previous analyses by Wagner and colleagues (Wagner, Cameto, & Newman, 2003; Wagner, Newman, & Cameto, 2004) compared findings on identically measured variables for same-age students with ED represented in NLTS2 with those represented in NLTS, reflecting recent practices and those in the mid-1980s, respectively. Generally, these findings revealed that more recently, students with ED are more likely to be exposed to best practices than were their peers in the past. Rigor has improved through increased enrollment in academic courses that generally are needed to pursue postsecondary education (Wagner et al., 2004). No increase was found in course-taking in general

education settings rather than special education settings, however. Attending to the needs of the whole student has improved through increases in use of mental health and social work services (Wagner, Cameto, & Newman, 2003) and increased nonacademic/nonvocational course-taking (Wagner et al., 2004). Relevance has not improved in that vocational course-taking has not changed. Moreover, one relationship aspect is troublesome: Schools attended by students with ED have increased in size by an average of 206 students since the mid-1980s (Wagner et al., 2004).

Comparison With Students in the General Population. Although comparison data for the general student population are sparse, studies that were available indicated that students with ED are educated in much larger schools than is true for the general population (general population students: high school average = 751 students, students with ED: high school average = 1,465 students; Hoffman, 2003). In addition, schools attended by students with ED are less likely to be in their neighborhoods. One barrier to developing positive relationship among students with ED thus may simply be the size and location of their schools. The academic course-taking pattern of students with ED mirrored the heavy academic emphasis of high school students in the general population (Wagner, Newman, et al., 2003), but their rates of vocational course-taking were considerably lower (National Center for Education Statistics, 2001). Thus,

compared with the general population, students with ED may have adequate access to academically rigorous courses but less adequate access to certain kinds of experiences that could strengthen relationships or the relevance of school.

Comparison With Inferred Need. The essential disability for students with ED is a social one (e.g., Matthys, Walterbos, & Van Engeland, 1995; Wagner, Kutash, Duchnowski, Epstein, & Sumi, 2005), which tends to interfere with social participation and opportunities for socializing. Thus, students with ED would be expected to benefit from (a) added services and courses to facilitate their social capacities and (b) small learning environments or neighborhood school settings. Furthermore, although students with ED were more likely than peers with other disabilities to take social skills or life skills training and to receive a variety of mental health and behavior management services, in general, the majority did not receive them. This insufficiency of supports was evident by the fact that school staff members more commonly reported unmet needs for some types of these supports for students with ED than they did for students with other disabilities.

In terms of relationships, students with ED tended to attend smaller schools than did students with other disabilities, but these schools were larger than in the past and in comparison to schools attended by the general population. This may reflect the fact that students with ED are more likely than students with other disabilities to attend special or alternative schools rather than general education or neighborhood schools (Wagner, Newman, et al., 2003). Although attending smaller schools might enhance the likelihood of relationships, reducing students' access to the general population through placements in separate schools or classrooms may contribute to the stigma of ED and thus help to socially isolate this population. Furthermore, an earlier finding that students with ED change schools more often because they have been reassigned by their school district (Wagner, Kutash, Duchnowski, Epstein, & Sumi, 2005) indicates further unintended consequences of placement decisions that may add to the potential for disrupted relationships. In this study, evidence suggesting social isolation came from lower rates of (a) participation in extracurricular group activities and (b) closeness to peers and teachers at school.

Addressing the needs of the whole child also appears insufficient for the inferred need. Rates of attending substance-abuse or reproductive-behavior classes were comparable to those of students with other disabilities, despite the much higher risk for substance abuse and pregnancy among students with ED (Davis & Vander Stoep, 1997; Greenbaum, Prange, Friedman, & Silver, 1991; Vander Stoep et al., 2000), and teachers often indicated that the need for substance-abuse prevention was not being met.

Results regarding relevance and appropriate transition planning also indicated an apparent disconnect. The expressed desire of students with ED to work or obtain vocational training after high school does not appear to be sufficiently supported by schools. Students with ED were unlikely to access school-

sponsored work experience or to have vocational services identified as a need in their transition plans. In addition, transition planning apparently was not occurring for some students with ED as early as required by the law at the time, and it was a school-driven rather than the collaborative process that best practices support. Meetings were heavily weighted toward school professionals; students often were present but not participating, and a sizable group of parents wanted more involvement in transition decisions.

Overall, these findings from NLTS2 confirm that there clearly is room for improvement if we are to maximize the contribution that youth with ED can make to the communities in which they live and to their own well-being. Recently released findings of outcomes from NLTS2 further corroborate our conclusion that the measured practice improvements are insufficient. Although youth with ED in the current analyses attended academically demanding school programs, they had among the lowest grade point averages of students with disabilities (Wagner, Marder, et al., 2003). In addition, in their comparison of NLTS and NLTS2 youth out of high school for up to 2 years, Wagner, Newman, Cameto, and Levine (2005) found that rates for pursuing postsecondary education and employment had significantly improved for youth with disabilities as a whole but not for youth with ED. Thus, despite an increased exposure to best practices in the past 20 years, putting them largely on par with students with other disabilities, youth with ED have not benefited in the way that youth with other disabilities have.

Implications for Best Practices

Relationships. Schools need to provide better supports so that more students with ED can remain in their neighborhood schools and in general education classroom settings. Evidence has suggested that engaging in the primary prevention strategies inherent in school-wide positive behavior supports is feasible for any school and has the potential to create a more positive environment for relationships among all students (Martella, Nelson, & Marchand-Martella, 2003; U.S. Department of Education, 2002). A more targeted approach would involve more intensive supports—such as social skills training, conflict resolution, peer mentors, and supports to families—to help students with ED succeed and form relationships in general education settings and neighborhood schools. Individualized approaches that wrap supports around students to help them function better in the least restrictive settings could facilitate their success (e.g., Eber & Nelson, 1997).

Supported Rigor. The current findings that students with ED are in academically demanding school programs but have the lowest grade point averages of students with disabilities (Wagner, Marder, et al., 2003) indicate that this group is insufficiently supported in meeting academic demands. The most common academic support they receive is more time to take tests, which might help students better demonstrate what they have learned, but many students with ED struggle with chal-

allenges to learning itself, including attention problems, disruptive behavior, or emotional withdrawal. To address these types of challenges, supports such as tutoring, small-group instruction, and individual instruction could be more effective in helping them grasp how to learn better or to compensate for the distractions of their disability. Unfortunately, these types of supports were relatively uncommon. Furthermore, although teachers had many years of experience in teaching students with disabilities, they frequently reported being unprepared to teach students with ED and did not get a lot of training in this particular area. Incorporating a behavior focus within teacher training may increase secondary school teachers' confidence and ability to meet the needs of students with ED.

Relevance and Attention to the Whole Child. The disconnect between the vocational interests of students with ED and their preparation for entering the work world calls for ramping up efforts to create "multiple pathways" to high school completion through academically challenging career *and* technical education (James Irvine Foundation, 2005). Training school staff members in how to access mental health services for their students and in the particular risks for students with ED, and efforts to improve the coordination of services across agencies, may improve access to these much-needed supports.

Participatory and Appropriate Transition Planning. Although early transition planning is important for all students, it is particularly crucial for students with ED because they have higher drop-out rates than do students with other types of disabilities (Wagner, 2005). Schools need a monitoring process that helps ensure timely completion of transition plans. Moreover, person-centered planning and other best practices in transition have been well described (e.g., Kilburn & Critchlow, 1998; Kincaid, 1996) but clearly are not being widely implemented. Increasing accountability demands now being placed on high schools as part of NCLB may be a further disincentive to invest in nonacademic activities, such as high-quality transition planning. Nonetheless, it is critically important that students with ED not only participate in but also endorse the transition planning process. Much of the plan for postsecondary activities will rest squarely on their shoulders, because many of these young people will not access the services, such as case management, that can help guide them through the transition period (Davis, Geller, & Hunt, 2006).

Implications for Research

To date, improvements in best practices appear measurable but insufficient. This situation would benefit from two lines of research:

1. The evidence base for existing models for students with ED (Hoagwood, Burns, Kiser, Ringeisen, & Shoenwald, 2001) and their shared features need to be rigorously tested (Bickman, 2005).

2. Because known best practices, such as person-centered planning, are not widely implemented, we need to understand the barriers that are encumbering the translation of best practices to real-world settings (Hoagwood, 2002).

Together, these lines of research could measurably improve the outcomes of the next cohort of students with ED.

Limitations

Findings presented in this article can be generalized only to students who received special education services within the primary disability category of ED; students with emotional or behavioral problems who are not in special education are not represented in NLTS2. Also, assessing best school practices with students with ED is not the primary focus of NLTS2; rather, it investigates a broad range of experiences and outcomes for all categories of youth with disabilities. As a result, researchers using NLTS2 data cannot delve deeply into any single aspect of experience or into any particular disability group. If NLTS2 had focused more explicitly on assessing best practices in secondary schools, it would have included, for example, more detailed questions about students' relationships at school or how well they rated the match between their transition plan and their goals. Generally, large studies like NLTS2 are powerful in their ability to draw the "big picture," as has been indicated here, but are less well suited to explore more fine-grained questions.

Conclusions

The current results suggest that exposure to best practices for students with ED has improved since the 1980s and that this rate is similar to those of students with other disabilities. Nonetheless, given the lack of improvements in academic performance and postschool employment (Wagner et al., 2005) for youth with ED, we need greater implementation of best practices and additional research regarding practice efficacy with this population.

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