The Postsecondary Educational Plans of Rural Youth With Disabilities and Their Nondisabled Peers

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Margaret P.Weiss, PhD¹, Bryan C. Hutchins, MA¹, and Judith L. Meece, PhD¹

Abstract

A national sample of students with disabilities and their nondisabled peers in rural high schools responded to a survey about their postsecondary plans and how they were preparing for them. The study included 3,318 11th- and 12th-grade students from 73 randomly selected schools. Findings indicate that 78.5% of students with disabilities and 90.7% of their nondisabled peers plan to continue their education after high school. Only 4.5% of students with disabilities were enrolled in a college preparatory program. A greater percentage of students with disabilities participated in career exploration activities such as job mentoring, internships, and cooperative education programs than expected, and they found teachers and school staff important sources of information. Implications of these findings are discussed.

Keywords

transition, rural schools, postsecondary, disabilities

Moving from high school to adulthood is a major transition for adolescents, particularly those with disabilities. As Test, Fowler, White, Richter, and Walker (2009) state, it "traditionally signifies a time of many challenges and changes, filled with hopes and dreams of successfully leaving high school and moving into employment and/or postsecondary education" (p. 160). Preparing for this transition requires goal setting, planning, and taking action because, increasingly, jobs that provide greater advancement opportunities, higher potential earnings, and a broader range of benefits require some form of postsecondary education (Mellard, 2005; Rusch, Hughes, Agran, Martin, & Johnson, 2009; Zhang & Benz, 2006). The most recent Condition of Education (Planty et al., 2009) states,

In 2007, young adults ages 25–34 with a bachelor's degree earned 29 percent more than young adults whose highest educational attainment was an associate's degree and 55 percent more than young adults whose highest educational attainment was a high school diploma or its equivalent. (p. 40)

Those who obtained a bachelor's degree also earned 96% more than those who did not earn a high school diploma or its equivalent. Adults without a high school diploma earned, on average, US\$23,000 per year.

Though progress has been made, students with disabilities continue to have less positive postsecondary outcomes than their nondisabled peers, including lower rates of postsecondary education enrollment and higher rates of unemployment (e.g., Newman, Wagner, Cameto, & Knokey, 2009; Rojewski, 1999; Wagner, Newman, Cameto, & Levine, 2006). However, several recent reviews have identified predictors and practices that, if provided for in high school, may lead to more successful outcomes.

According to Benz, Lindstrom, and Yovanoff (2000), participation in vocational education classes and paid work experiences during junior and senior years; competence in functional academic, community living, personal/social, vocational, and self-determination skills; participation in transition planning; and graduation from high school were all predictors of better postsecondary employment and education outcomes. In a more recent review, Test et al. (2009) found that inclusion in general education, paid employment/ work experience, participation in vocational education

¹University of North Carolina at Chapel Hill, USA

Corresponding Author:

Margaret P. Weiss, George Mason University, 4400 University Dr., MSTF2 Fairfax, VA, USA 22030 Email: mweiss9@gmu.edu classes, and transition planning were moderately correlated with postsecondary education participation. These predictors are well matched with the critical needs of students in postsecondary education, as identified by Webb, Patterson, Syverud, and Seabrooks-Blackmore (2008). These needs include self-determination strategies, social and interpersonal strategies, academic preparation, accommodations, and assistive technology. In this review, studies of effective practices were examined in each area but implementation on a broad scale was questioned.

Postsecondary Education Preparation for Students in Rural Areas

Preparing for postsecondary education is particularly relevant for rural high school students, especially those with disabilities, because these students often must leave their communities to attend schools of higher education. Recent research has shown that students in rural schools have postsecondary aspirations that are similar to those in urban and suburban settings, including graduating from college and earning advanced degrees (Meece et al., 2010). However, these students are also likely to have lower levels of educational and occupational attainment (Hardré & Sullivan, 2008; Roscigno & Crowley, 2001) and to experience a great deal of conflict about the need to leave the community to pursue more professional opportunities (Burnell, 2003; M. K. Johnson, Elder, & Stern, 2005).

Several reasons may explain these outcomes: (a) a restricted range of adult employment opportunities in the community (e.g., Albrecht, Albrecht, & Albrecht, 2000; Elder & Conger, 2000), (b) limited family resources to pay for higher education (e.g., Ley, Nelson, & Beltyukova, 1996; Lichter & Johnson, 2007), and (c) limited high school resources, including a narrow school curriculum, a shortage of teachers with advanced degrees, and limited access to career counseling and college preparatory programs (e.g., Nye, Hedges, & Konstantopoulos, 2000; Provasnik et al., 2007). The lack of funding resources often found in rural schools can be particularly detrimental to students with disabilities who may require special programs or additional types of instruction (Smith, Beyer, Polloway, Smith, & Patton, 2008). Several studies have suggested that students with disabilities in rural areas have elevated levels of school dropout and inauspicious postsecondary outcomes as compared with their nondisabled or urban peers (deBettencourt, Zigmond, & Thorton, 1989; Dunn & Shumaker, 1997; C. Johnson, 2008). Lower levels of educational and occupation attainment may be devastating for rural students in general, given that 1.5 million rural workers lost jobs between 1997 and 2003, and "looking ahead, the data show that workers with only

a high school education, regardless of the industry in which they work, are especially vulnerable" (Glasmeier & Salant, 2006, p. 1).

Purpose of the Study

Given the rural context and the relationship of specific preparation activities to more successful outcomes, we wanted a better understanding of the ideas and activities toward postsecondary education of rural students with and without disabilities in their junior and senior years of high school. Specifically, this study was guided by three aims:

- 1. To identify the future educational plans of rural 11th- and 12th-grade students with disabilities.
- 2. To examine the participation in programs and activities related to these goals.
- 3. To identify the sources from which these students received the most helpful information about post-secondary options.

Method

The current study is part of a broader national investigation to examine students' aspirations and related topics in rural high schools across the United States. Data were collected during the 2007–2008 school year.

Participating Schools

Seventy-three schools from across 34 states agreed to participate in this study. According to the urban-centric locale system used by the U.S. Census Bureau, 8 schools (11.0%) were classified as small town schools (locale codes 31, 32, and 33), 3 schools (4.1%) were rural fringe (locale code 41), 19 schools (26.0%) were rural distant (locale code 42), and 43 (58.9%) schools were rural remote (locale code 42), and 43 (58.9%) schools were rural remote (locale code 43). In addition, 19 schools (26%) qualified for Rural Low-Income Schools Program (RLIS) and 22 schools (30.1%) qualified for Small, Rural School Achievement Program (SRSA). In all, 36 schools had 50% or more students who were eligible to receive free or reduced lunch and 15 schools had 50% or more students who were identified as ethnic minority.

Consent Procedures

As agreed on by the university Institutional Review Board (IRB), recruitment and consenting procedures followed participating districts' local policies. In some districts, active consent procedures were used. In these schools, students were allowed to participate only if they returned signed parental consent forms (unless they were legally emancipated). In other districts, passive consent procedures were used and consent forms were sent home to notify

Characteristic	n	%
Gender		
Male	1,560	47
Female	1,758	53
Race		
White	2,256	68
African American/Black	199	6
Hispanic	332	10
Other	498	15
Students with disabilities	272	8
Learning disability	170	63
Emotional/behavioral disorder	17	6
Autism	3	I
Deaf	2	I
Blind	3	I
Mental retardation	12	4
Orthopedic impairment	8	3
Other health impaired	8	3
Speech/language	6	2
Traumatic brain injured	2	I
Multiple disabilities	41	15

 Table 1. Characteristics of Participants

parents of the study. Parents were to return a signed form if they did not want their children to participate. All participating students completed assent forms.

Participants

Our analysis included only 11th and 12th graders in order to focus on students about to make the transition to postsecondary options. The sample consisted of 3,318 students; 57% of these students were in 11th grade and 43% in 12th. See Table 1 for demographic characteristics of the sample, including disability type. This study was conducted in 34 states, and the definitions and identification procedures for students with disabilities were specific to the participating districts within the guidelines established by Individuals With Disabilities Education Act (IDEA, 2004).

Data Collection Procedures

Data were collected in a group administration format using a standardized protocol (e.g., Estell, Farmer, Cairns, & Cairns, 2002; Farmer, Estell, Bishop, O'Neal, & Cairns, 2003). Consented participants were gathered in the school's cafeteria and were assigned seats such that no student was directly beside or across from another student. They were informed about confidentiality, told that they were not required to participate, and that they could withdraw from the study at any time. The instructions and individual survey items were read aloud by a trained administrator. Small-group or individual sessions were conducted with students whom teachers identified as having reading or spelling difficulties. Students who participated in the study received a special pencil.

Measures

Educational plans. Students were asked, "Are you planning to continue your education beyond high school?" Response choices included "no," "yes," and "not sure." We used all response categories for analysis and treated each as categorical data.

Academic program enrollment. We asked students, "What type of high school program are you enrolled in?" Responses included general high school program; college preparatory, academic, or specialized academic; vocational, technical, or business and career; agricultural education; other specialized high school program (such as fine arts); alternative, stay-in-school, or dropout prevention program; and I don't know. This item was adapted from the Educational Longitudinal Study (ELS; U.S. Department of Education, 2002). For analysis, the categories of vocational, technical, or business and career; agricultural education; other specialized high school program; and alternative were collapsed into one vocational category.

Information about postsecondary options. We asked students, "Where have you gotten information that was *most helpful* for your plans after high school?" This question included 13 response choices ranging from relatives and friends to school staff, college sources, and community members. There was also a "none of the above" option. Students could mark all that apply.

Postsecondary preparation activities. For this question, students were asked, "During the past year, how often have you done each of the following activities?" There were 10 items and students indicated whether they had never done them (1), done them once or twice (2), done them three to five times (3), or done them more than five times (4). These items were adapted from ELS:2002 and included two categories: career exploration and career counseling.

Career exploration activities consisted of the following five items: (a) taken part in cooperative education, (b) had an internship, (c) gone on job shadowing or work-site visits, (d) had job mentoring, and (e) taken part in schoolbased enterprise.

Career counseling consisted of the following five items: (a) talked about what you will do after high school with one of your teachers or another adult at school, (b) received instruction or counseling on how to find a job, (c) studied about different kinds of jobs and their requirements in class, (d) talked with a guidance counselor or other advisor about college, and (e) talked with a guidance counselor or other advisor about possible jobs and careers.

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	Yes, I want to continue my	No, I don't want to continue	
Disability status	education	my education	l am not sure
No disability	2,737 (2070)**	147 (155)*	32 (53.5)**
	90.7%	4.9%	4.4%
Disability	208 (237)**	22 (13.6)*	35 (I3.79) ^{≉∗}
	78.5%	8.3%	13.2%

Table 2. Future Educational Plans

Note:Values are observed count. Expected count in parentheses. *p < .05. **p < .001.

In addition, students were asked about their plans to take the Scholastic Aptitude Test (SAT) or the American College Test (ACT). Students could respond to a range from "Yes, I have taken the test" to "I have never heard of this test." All responses were treated as categorical and included in the analysis.

Results

We report results by research aim. All question responses were analyzed by disability status (i.e., students with disabilities and students without disabilities) first. Responses to questions about academic programs and college entrance exams were further analyzed by educational plan.

Educational Plans

Students responded to the question "Are you planning to continue your education beyond high school?" with either "no," "yes," or "not sure." There was a significant overall relationship between disability and educational plan, $\chi^2(2,$ n = 3,281 = 46.96, p < .001. All cell-specific relationships were significant. Of the students with disabilities, 78.5% reported they wanted to continue their education, but this was less than expected by chance (Fisher's exact probability \leq .001) and less than the 90.7% of nondisabled students. Students with disabilities were more likely than expected to report that they were not going to continue their education (Fisher's exact probability $\leq .05$). They were also more likely to report they were not sure whether they wanted to continue their education (13.2%; Fisher's exact probability $\leq .001$). See Table 2 for all expected and observed counts.

Academic Programs

Disability status. Overall, there was a significant relationship between disability and academic program, $\chi^2(3, n = 3,128) = 107.26, p < .001$. There were several cell-specific relationships. Students with disabilities were less likely than expected to be enrolled in the college preparatory program (4.5%; Fisher's exact probability $\leq .001$) and were more likely to be enrolled in a vocational program (12.3%) or to not know in which program they were enrolled (25.5%; Fisher's exact probability \leq .001 for each).

Educational plan and disability status. We completed additional analyses of academic program by educational plan and disability status. There was a significant overall relationship between disability and academic program for students who wanted to continue their education, $\chi^2(3, n =$ $(2806) = 78.30 \ p < .001$, and for those who were not sure, $\chi^2(3, n = 2806) = 14.66 \ p < .05$. There were several cellspecific relationships. Students with disabilities who did plan to continue their education were less likely than expected to be in a college preparatory program (5.8%) and more likely than expected to be in a vocational program (13.2%; Fisher's exact probability \leq .001 for each). These students were also more likely to respond "I don't know my academic program" (21.1%; Fisher's exact probability \leq .001). For students with disabilities who were not sure of whether they wanted to continue, 53.1% responded that they did not know their academic program, almost twice the percentage of students without disabilities and greater than expected by chance (Fisher's exact probability \leq .001). Table 3 includes all expected and observed counts.

Sources of Most Helpful Information

Students were asked from whom they received the most helpful information about their postsecondary options. Students with disabilities were more likely than expected to indicate teachers, $\chi^2(1, n = 3,210) = 15.58$, p < .001; principals and other school staff $\chi^2(1, n = 3,210) = 5.519$, p < .05; and none of the above $\chi^2(1, n = 3,210) = 11.03$, p < .001, provided the most helpful information about postsecondary options. College search guides, publications, or websites, $\chi^2(1, n = 3,210) = 10.12$, p < .001, and visits to college, $\chi^2(1, n = 3,210) = 5.9$, p < .05, were reported as helpful significantly less often than expected. There were no other significant results. See Table 4 for observed and expected values.

Career Exploration Activities

Students were asked the frequency with which they participated in five activities. Each item required a response

Educational plan	Disability status	General high school program	College preparatory program	Vocational high school program	l don't know
	No disability	1,735 (1729)	703 (658.5)**	78 (9 .8)**	269 (305)**
		60.1%	24.4%	6.2%	9.3%
	Disability	140 (145.6)	II (55.4)**	30 (16.1)**	62 (25.7)**
		57.6%	4.5%	12.3%	25.5%
Yes, I want to continue my education	No disability	1,563 (1563.4)	688 (651) ^{**}	157 (169.6)**	208 (231.2)**
		59.7%	26.3%	6.0%	8%
	Disability	4 (3.5)	I I (47.3)**	25 (12.3)**	40 (16.7)**
	-	60%	5.8%	13.2%	21.1%
No, I do not want to continue my education	No disability	84 (84.1)	4 (3.5)	(.3)	31 (31.2)
		64.6%	3.1%	8.5%	23.8%
	Disability	13 (12.9)	0 (.5)	2 (1.7)	5 (4.8)
		65%	0%	10%	25%
l'm not sure	No disability	78 (71.1)*	7 (5.5)	10 (10.3)	25 (33.2)**
		65%	5.8%	8.3%	20.8%
	Disability	12 (18.9)*	0 (1.5)	3 (2.7)	I7 (8.8)**
		37.5%	0%	9.4%	53.1%

Table 3. Academic Program Enrollment

Note: Values are observed count. Expected count in parentheses.

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

using a scale of 1 (never) to 4 (five or more times). There were significant relationships between participation and disability status for all activities: a cooperative education experience, $\chi^2(3, n = 2,869) = 16.96, p < .001$; an internship, $\chi^2(3, n = 2,869) = 26.46, p < .001$; job mentoring, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, $\chi^2(3, n = 2,869) = 32.97, p < .001;$ job shadowing, \chi^2(3, n = 2,869) = 32.97, p < .001; job shado n = 2,869 = 10.07, p < .05; and a school-based enterprise, $\chi^{2}(3, n = 2,869) = 10.93, p < .05$. We identified several cellspecific relationships within these items. In all cases, students with disabilities were less likely to have never participated in these activities than expected by chance. For all activities except participating in a school-based enterprise, students with disabilities were more likely to respond that they had participated once or twice than expected by chance. Nondisabled peers were more likely than expected to report that they had *never* participated in all five of the activities. See Table 5 for expected and observed counts.

Career Counseling Activities

Students were asked the frequency with which they participated in five career counseling activities, including talking with a teacher or another adult at school about what to do after high school, receiving instruction on how to find a job, studying about different kinds of jobs, talking with a guidance counselor or other advisor about possible jobs or careers, and visiting a college campus. There was only one significant relationship between participation and disability status on receiving instruction on how to get a job, $\chi^2(3, n =$ (2,912) = 11.72, p < .05. Specifically, students with disabilities were more likely to report they participated more than five times (Fisher's exact probability $\leq .001$) and less likely to report that they never participated (Fisher's exact probability $\leq .05$; see Table 6).

College Entrance Exams

Disability status. Students were asked whether they had taken or planned to take the SAT and the ACT. There was a significant relationship between disability status and response, $\chi^2(4, n = 3,096) = 58.20, p < .001$. Cell-specific relationships indicated that students with disabilities were less likely than expected to have already taken both tests (17.8% SAT; 15.5% ACT) and more likely than expected to respond that they had not thought about it (25.1% SAT; 19.4% ACT; Fisher's exact probability \leq .001 for each).

Educational plan and disability status. We further analyzed college entrance exam results by educational plan. There was a significant overall relationship for participation in exams by educational plan and disability status when students indicated that they wanted to continue their education, SAT $\chi^2(4, n = 160) = 55.59, p < .001; ACT \chi^2(4, n = 2,858)$ = 72.53, p < .001. Cell-specific results indicated that students with disabilities who planned to continue their education were less likely than expected to have responded, "Yes,

Table 4. Career Exploration Activities

Activity	No. of times	No disability	Disability
Cooperative education	Never	1,513 (1,487.1)**	97 (122.9)**
		57.1%	44.3%
	l to 2	726 (750.9)**	87 (62.1)**
		27.4%	39.7%
	3 to 5	261 (260.5)	21 (21.5)
		9.8%	9.6%
	More than 5	150 (151.5)	14 (12.5)
		5.7%	6.4%
Internship	Never	2,124 (2,094.5)**	I44 (I73.5) ^{≉∗}
		79.6%	65.2%
	l to 2	385 (402.6)**	5I (33.4)**
		14.4%	23.1%
	3 to 5	103 (109.9)*	16 (9.1)*
		3.9%	7.2%
	More than 5	56 (61)*	10 (5)*
		2.1%	4.5%
Job mentoring	Never	2,005 (1,969.7)**	l 27 (l62.3)**
		75.4%	58%
	l to 2	450 (473)**	62 (39)**
		16.9%	28.3%
	3 to 5	129 (138.6)*	21 (11.4)*
		4.9%	9.6%
	More than5	74 (76.7)	9 (6.3)
		2.8%	4.1%
Job shadowing	Never	1,668 (1,646.2)*	4 (35.8)*
, ,		62.6%	51.8%
	l to 2	749 (765.8)*	80 (63.2)*
		28.1%	36.4%
	3 to 5	161 (163.5)	16 (13.5)
		6%	7.3%
	More than 5	88 (90.5)	10 (7.5)
		3.3%	4.5%
School-based enterprise	Never	1,765 (1,747.7)*	24 (4 .3)*
		66.4%	57.7%
	l to 2	610 (614.3)	54 (49.7)
		22.9%	25.1%
	3 to 5	179 (185)	21 (15)
		6.7%	9.8%
	More than 5	106 (112.9)*	16 (9.1)*
		4%	7.4%

Note: Values are observed count. Expected count in parentheses. p < .05. p < .001.

I have taken it" for SAT (20.6%) and ACT (16.6%; Fisher's exact probability \leq .001 for each). Students with disabilities who wanted to continue their education were also more likely than expected to have responded "No, I haven't thought about it" (11.4% SAT; 16.1% ACT) and "I have never heard of this test" (6.3% SAT; 7.3% ACT; Fisher's exact probability \leq .001 for each). See Table 7 for expected and observed counts.

Discussion

The purpose of this study was to examine the educational plans and activities of rural 11th- and 12th-grade youth, with disabilities and those without disabilities. The ideas and activities described were those that were generally available to all students and were not specific to the transition planning activities for students with disabilities

Activity	No. of times	No disability	Disability	
Received instruction or counseling on how to get a job	Never	936 (919.7)*	60 (76.3)*	
		34.8%	26.9%	
	l to 2	1,131 (1,138.6)	102 (94.4)	
		42.1%	45.7%	
	3 to 5	469 (468.2)	38 (38.8)	
		17.4%	17%	
	More than 5	53 (162.5)**	23 (13.5)**	
		5.7%	10.3%	

Table 5. Career Counseling Activities

Table 6. SAT/ACT Participation

Educational plan	Test	Disability status	Yes, I have taken it	Yes, I plan to take it	No, I don't plan to take it	l haven't thought about it	l haven't heard of the test
	SAT	No disability	916 (883.4)**	753 (755.5)	779 (771.1)	340 (369.9)**	61 (69)*
			32.2%	26.4%	27.3%	11.9%	2.1%
		Disability	44 (76.5)**	68 (65.4)	59 (66.8)	62 (32)**	14 (5.9)*
		,	17.8%	27.5%	23.9%	25.1%	5.7%
	ACT	No disability	03 (.05 .9)**	1205 (1,202,1)	329 (344.5)*	223 (250.5)**	85 (95)**
			37.5%	40.9%	11.2%	7.6%	2.9%
		Disability	39 (90)**	100 (102.8)	45 (29.4)*	49 (21.4)**	19 (8.1)**
		/	15.5%	39.7%	17.9%	19.4%	7.5%
Yes, I plan to c	ontinue e	ducation					
	SAT	No disability	877 (853.2)**	700 (707)	681 (668.8)*	272 (292.4)**	41 (49.3)**
			34.1%	27.2%	26.5%	10.6%	Ì.6%
		Disability	39 (62)**	59 (51.9)	37 (49.1)*	42 (21.5)**	12 (3.6)**
		,	20.6%	31.2%	19.6%	22.2%	6.3%
	ACT	No disability	1061 (1,019.1)**	l,144 (1,149.7)	232 (241.5)*	l6l (l 79) **	67 (75.5)**
			39.8%	42.9%	8.7%	6%	2.5%
		Disability	32 (73.8)**	89 (83.2)	27 (17.4)*	3Ⅰ (12.9)**	I4 (5.4) ^{*∗}
			16.6%	46.1%	14%	16.1%	7.3%

Note: SAT = Scholastic Aptitude Test; ACT = American College Test. Values are observed count. Expected count in parentheses. *p < .05. **p < .001.

required under IDEA. We focused our questions on topics that aligned with several of the predictors and critical needs identified by Benz et al. (2000), Test et al. (2009), and Webb et al. (2008). Specifically, the items addressed educational goals, planning to meet those goals (e.g., academic program, college entrance exam) and participation in career exploration and awareness activities. We were also interested in where students received valuable information about postsecondary options.

In terms of goal setting, almost 87% of the students with disabilities were clear about their postsecondary education—78.5% wanted to continue and 8.3% did not. That leaves 13.2% of the students with disabilities who

were unsure, a significantly higher number than expected by chance. Being undecided about postsecondary education in 11th or 12th grade may pose significant difficulties for students who eventually decide to go on in their education. One difficulty could be in completing the required coursework, particularly in rural schools where lack of teachers or technology may limit when a course is offered. If a student does not have that coursework, they may have to take additional courses after graduation, delaying their college entry or causing them to decide not to persist to graduation (Garrison-Wade & Lehmann, 2009).

To describe how students set about planning to achieve these educational goals, we asked them about academic

Disability status	Teacher	Principal or school staff	College search guides	Visit to college	None of the above
No disability	754 (780.5)**	102 (108.7)*	801 (779.6)**	717 (701.3)*	181 (193.5)**
	25.5%	3.4%	27.1%	24.2%	6.1%
Disability	93 (66.5)**	l6 (9.3)*	45 (66.4)** [*]	44 (59.7)*	29 (16.5)**
	36.9%	6.3%	17.9%	5.8%	11.5%

Table 7. Sources of Most Helpful Information

Note: Values are observed count. Expected count in parentheses.

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

programs and college entrance exams. Approximately, 90% of students without disabilities and 74.4% of students with disabilities knew the academic program in which they were enrolled. Unfortunately, 25.5% of students with disabilities did not know their academic program. This included 21.1% of students who want to continue their education and 53.1% who were unsure. The reasons for this confusion are unknown but warrant further investigation. Confusion about programs may signal confusion about plans to meet goals and could hinder a student's ability to actively participate in development of transition plans (Trainor, 2005). Given that students with disabilities stated that teachers gave them the most helpful information about postsecondary options, a pattern different from that for nondisabled peers, it would seem appropriate that teachers could work to alleviate this confusion. Because many rural areas have trouble recruiting and retaining qualified special educators, these teachers may not be as accessible to students (Smith et al., 2008). Support and guidance from the school is critical for student engagement, persistence to graduation, and postsecondary planning (Li, Bassett, & Hutchinson, 2009; Reschly & Christenson, 2006; Trainor, 2005).

Perhaps the most encouraging result of this study is the finding that students with disabilities are participating in career exploration activities such as cooperative education, internships, job mentoring, job shadowing, and vocational education programs at rates greater than expected by chance. Though these are not necessarily paid work experiences as described by Benz et al. (2000) or Test et al. (2009), they are experiences in the world of work that could help students to better identify their educational goals and to see the relevance of education to these experiences.

The convergence of results from this study indicate that, in these rural schools, students with disabilities are participating in career exploration activities, are in the general academic program, and value information about postsecondary options from school sources. However, students also indicated that they were unsure about their future educational plans and about their current programs. For all students, being engaged in setting goals and planning activities to work toward specific goals is related to positive postsecondary outcomes (Benz et al., 2000; Benz, Yovanoff, & Doren, 1997; Engberg & Wolniak, 2010; Lee, Wehmeyer, Palmer, Soukup, & Little, 2008). It is evident from several longitudinal studies that students with disabilities, particularly learning disabilities, must develop a sense of control over their decisions to be successful (Gerber, Ginsburg, & Reiff, 1992; Goldberg, Higgins, Raskind, & Herman, 2003). Though much of the special education research focuses on the transition planning process required by IDEA, the activities and programs examined in this study are also critical to the postsecondary success of students. The educational plans identified by these students should be linked to the activities in which they participate. In addition, those who do not know what their educational plans by 11th and 12th grade are in need of guidance in making critical decisions.

Determining why students are unsure about their paths in high school is a topic for future research. This research could focus on how students might gain information from the school sources and how schools could have more impact in career exploration and counseling activities, particularly in consideration of postsecondary education. In addition, future research could address whether these students have the critical self-determination skills necessary to know what information is necessary, how the information can be used to set goals, and how support can be recruited in the general education curriculum. These are critical questions, particularly given the economic struggles of rural areas and the lower postsecondary attainment statistics of this group (J. Johnson & Strange, 2009).

There are several limitations to this study. First, we report student responses to a survey and not direct outcomes or observation measures. Second, we report student perceptions and understandings as responses to specific survey questions. Finally, our analysis included only students in rural high schools. Comparisons to students with disabilities in urban and suburban high schools would be very informative. Given these limitations, this study adds to the current research about postsecondary education plans and activities for students with disabilities in rural high schools by identifying a general pattern of participation and a continuing need to focus on helping students set clear goals and plan the activities to achieve those goals for life after high school. Focusing on goal setting and organizing activities around goals will move students toward a level of independence and provide more options for postsecondary success.

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