

Evidence-Based Practices to Support Effective Transition for Young Adults with Disabilities Leaving High School

OVERVIEW/INTRODUCTION

In 1992, Halpern described secondary transition as “a period of *floundering* that occurs for at least the first several years after leaving school as adolescents attempt to assume a variety of adult roles in their communities.” For any young adult, this is a period of change, fraught with excitement and anxiety, opportunity and uncertainty. For young adults with disabilities, this period may last for years (Test, Mazzotti, et al. 2009) and be compounded or complicated by intellectual, physical, or societal challenges that make goals for postsecondary education, employment, and independent living more difficult to attain. Legislation and programs have been put in place to support the transition of young adults with disabilities from school to life in the community. But how can these young adults, their families, and the professionals who work with them make decisions about strategies, services, and supports that are the most likely to result in positive outcomes in the years following exit from high school? This issue brief describes program requirements related to transition and evidence-based practice, current research and recommended practice related to positive post-school outcomes, and implications for program planning, policymaking, and research activities.

BACKGROUND

Policy and Program Requirements. The Office of Special Education and Rehabilitative Services first described a model for transition in a 1984 position paper on services needed to facilitate transition from school to employment. The “bridges” model included three types of transition: 1) without special services, that is, utilizing generic resources that are available to anyone; 2) with time-limited services, that is, specialized services

IDEA DEFINES “TRANSITION SERVICES” AS

... a coordinated set of activities for a child with a disability that:

- (a) is designed to be within a results-oriented process that is focused on improving the academic and functional achievement of the child with a disability to facilitate the child’s movement from school to post-school activities, including postsecondary education, vocational education, integrated employment (including supported employment), continuing and adult education, adult services, independent living, and community participation;
- (b) is based on the individual child’s needs, taking into account the child’s strengths, preferences, and interests; and
- (c) includes instruction, related services, community experiences, the development of employment and other post-school adult living objectives, and, if appropriate, acquisition of daily living skills and functional vocational evaluation (United States Code 20 1401(34); Code of Federal Regulations 34 § 300.43[a]).

for individuals with disabilities to access additional supports and services through public agencies; and 3) with ongoing services—regular programs established especially for individuals with disabilities, such as supported employment (Halpern 1992).

The 1990s saw an expansion of transition and supported employment, with new legislation pertaining to individuals with disabilities (CDE 2008). In 1990, the Individuals with Disabilities Education Act (IDEA) required planning for post-school transition at individualized education plan (IEP) meetings; the invitation of students to attend the IEP meeting; and transition services and planning specifically to address instruction, employment, community experiences, daily living skills, and functional vocational evaluation. In 1997, IDEA required that transition planning include related services to achieve the activities stated in the transition plan and procedures for transferring legal, decision-making rights from the parent to the young adult at the age of majority (eighteen in California). Most recently, IDEA 2004 required transition services language in the IEP to include the student's postsecondary goals, or personal aspirations for life after school (CDE 2008).

Legislation has also led to general education programs that address post-school outcomes. The Office of Vocational and Adult Education is home to the Carl D. Perkins Career and Technical Education (CTE) Program and the Adult Education and Literacy Program (OVAE 2011). CTE provides technical training and education to any student who does not necessarily plan on going to college and requires schools to provide parents and students vocational education opportunities and eligibility requirements for enrolling in vocational

education. Programs funded under Adult Education and Literacy include workplace literacy services; family literacy services; English literacy programs and integrated English literacy-civics education programs. Participation in these programs is limited to adults and out-of-school youths age sixteen and older who are not enrolled or required to be enrolled in secondary school under state law.

Evidence-based Practice. The No Child Left Behind Act (NCLB) of 2001 required schools and educators to use instructional programs and practices grounded in scientifically based research, that is research “that involves the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs” (United States Code 20 [20 USC] 7801 § 9101[37]). Likewise, IDEA calls for special education and related services and supplemental aids and services identified in an IEP to be based on peer-reviewed reports to the “extent practicable” (20 USC § 1400 et seq.).

Specific to transition services, Kohler's Taxonomy for Transition Programming (1996) was constructed through a review of extant literature, an analysis of exemplary transition programs, a meta-evaluation of outcomes and activities, and a concept mapping process; it established a link between research findings and practice in the transition of young adults with disabilities (see Figure 1). The taxonomy describes practices in five areas of transition implementation: student-focused planning, student development, interagency collaboration, family involvement, and program structures. These five practice areas, originally identified in 1996, were reviewed and confirmed by Kohler in 2003 (Test, Fowler, et al. 2009). Kohler's Taxonomy is still a widely accepted framework for planning, implementing, and evaluating comprehensive secondary transition programs.

Increasingly, the focus in evidence-based practice is turning to results. Researchers seek longitudinal data on secondary transition practices that lead to positive post-school outcomes (NSTTAC 2010). Statistics, research, and practices will be discussed within the organizational frameworks of Kohler's Taxonomy and three broad categories of post-school activities: post-secondary education, employment, and independent living.

Figure 1: Taxonomy for Transition Programming.



Kohler 1996

DATA AND RESEARCH

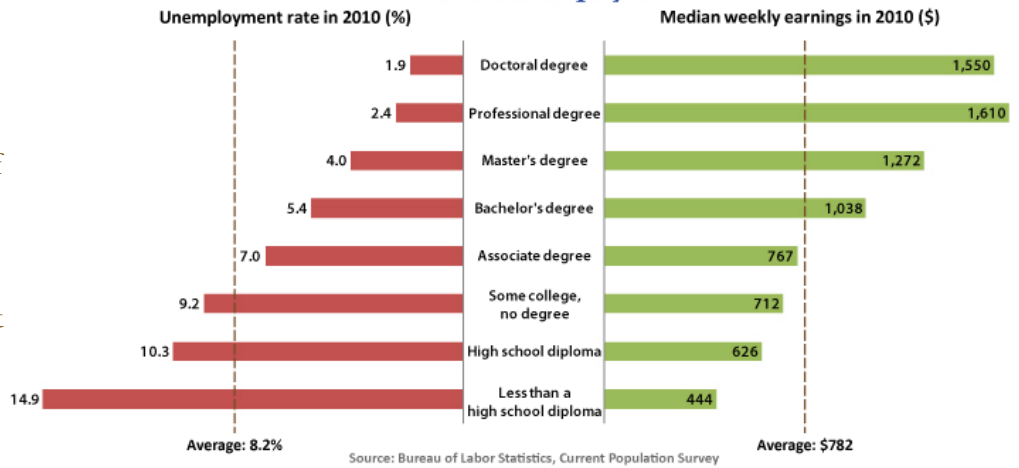
Education and Employment Data.

Statistics show that higher education results in higher earning and lower unemployment rates (Bureau of Labor and Statistics 2011), see Figure 2.

For all young adults, dropouts and students who exit high school without a diploma have higher unemployment, lower wages, and less postsecondary education and are more likely to have negative health and social outcomes (for example, substance abuse, arrests, crimes). Statistics are similar for young adults with disabilities, but they are more likely than peers without disabilities to have no diploma (Blackorby et al. 2010).

- Young adults with sensory impairments (blind, deaf, deaf blind) are more likely to obtain a diploma.
- Young adults with intellectual disabilities and students with emotional disturbance are least likely to obtain a diploma.
- Young adults with intellectual disabilities or with multiple disabilities are most likely to exit high school with a certificate of completion.
- California graduation rates are on par with national average (just over 75 percent).

Figure 2: Education Pays

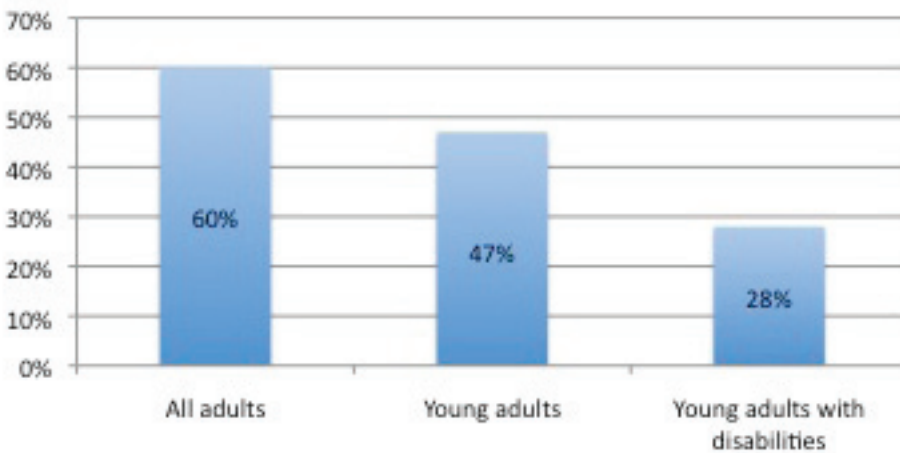


- California graduation rates for students with disabilities (approximately 40 percent) fall below the national average of graduation rates of students with disabilities by about 5 percent.

The Bureau of Labor Statistics on Workforce Characteristics of Individuals with Disabilities (2010), see Table 1, indicates:

- Young adults in general have a lower employment rate than that of the general population.
- Young adults with disabilities have a lower rate of employment than young adults without disabilities.
- Adults with disabilities have a lower level of educational attainment overall than adults without disabilities.
- Thirty-one percent of the general population obtained a bachelor's degree or higher.

Table 1. Rates of Employment, 2009



- Only 14 percent of individuals with disabilities obtained a bachelor's degree or higher.
- Individuals with disabilities who have a bachelor's degree or higher have a significantly lower employment rate than individuals without disabilities with the same level of education.

Bureau of Labor Statistics on Workforce Characteristics of Individuals with Disabilities, 2010

The National Longitudinal Transition Study-2 (NLTS2), commissioned by the United States Department of Education (ED), is a 10-year-long study of the student characteristics, in-school experiences, and post-school outcomes of a nationally representative sample of young adults with disabilities who were thirteen to sixteen years old and receiving special education services in grade seven or above on December 1, 2000. Outcome data was collected in 2005 through parent and youth telephone interviews and mail surveys. Data was compared to data from the original National Longitudinal Transition Study conducted in 1990, to identify changes in and relationships between in-school experiences and post-school outcomes. Researchers found that instructional settings, specifically the number of courses taken in general and special education settings, varied based on types and degrees of disability conditions. For instance, students with sensory impairments took more courses in general education settings; students with intellectual disabilities took fewer courses in general education settings. While young adults with disabilities had higher rates of enrolling in postsecondary education in 2005 than in 1990, they were still less likely than students without disabilities to be enrolled in postsecondary education. Researchers also found little change from 1990 to 2005 in the employment rates, community and social involvement, and living arrangements of young adults with disabilities (Newman et al. 2010; Yu et al. 2009; Shaver et al. 2011).

Recent Research. As is the case in many areas of education research, rigorous scientific research linking secondary transition practices to positive post-school outcomes is lacking. The “gold standard” for experimental research is the use of randomized clinical trials, a standard ill-suited to the study of education practices.

Early research found positive correlations between taking vocational education classes, participating in paid employment, and transition programming and better post-school employment outcomes. Self-determination skills and student participation in transition planning were also positively related to improved post-school outcomes, specifically in post-school education and independent living (Test, Mazzotti, et al. 2009).

A small 2005 study found that the quality and quantity of information found in the transition components of IEPs did not seem to be related to actual post-

school outcomes of the students in the study who had mild to moderate disabilities (Steele et al. 2005). Positive post-school education and leisure outcomes were not even reflected in IEPs. As the schools of attendance for the students had comprehensive coordinated transition programs in place emphasizing self-determination and aligned with Kohler’s Taxonomy, the researchers concluded that it was the program rather than the IEP that was the more critical factor.

In a 2009 study, Davies and Beamish found that parents were satisfied with the transition planning process and preparation-for-life curricula used for their children. However, findings confirmed other studies that young adults with intellectual disabilities and high support needs had poorer post-school outcomes and were at risk of experiencing poorer quality of life as compared to same-age peers without disabilities. Parents had concerns about post-school life and the difficulties experienced by both young adults and their families when outcomes related to employment, community living, and social networking were not achieved.

Most recently, the National Secondary Transition Technical Assistance Center (NSTTAC) has been conducting rigorous, systematic literature reviews to identify predictors of success and evidence-based practices for secondary transition (NSTTAC 2010). The literature included in the review and finally accepted as the evidence base was published between 1984 and March 2008; included at least one student with a disability as defined under IDEA; included independent or dependent variables aligned with one of five areas of Kohler’s Taxonomy for Transition Programming; included systematic literature reviews or group or single subject experimental studies that met specific criteria; and met criteria for high- or acceptable-quality (Gersten 2005; Hornor 2005). Researchers identified 16 evidence-based predictors of post-school success (Test, Mazzotti, et al. 2009) and 32 evidence-based practices (Test, Fowler, et al. 2009). The predictors and evidence-based practices are listed in Table 2 and organized according to Kohler’s Taxonomy.

Table 2. NSTTAC Identified Evidence-based Practices and Predictors of Positive Post-school Outcomes for Transition Services

Evidence-based Practices	Predictors of Positive Post-school Outcomes
STUDENT-FOCUSED PLANNING	
Involving Students in IEP Process <i>Self-Advocacy Strategy</i> <i>Self-Directed IEP</i>	Exit Exam Requirements High School Diploma Status Self-Advocacy/Self Determination
STUDENT DEVELOPMENT	
Life Skills: Teaching life skills Teaching purchasing skills Teaching self-advocacy skills Teaching self-determination skills Functional reading sight words Functional math skills Banking skills Cooking skills Food preparation skills Grocery shopping skills Home maintenance skills Leisure skills Restaurant purchasing skills Purchasing using the “one more than” strategy Safety skills Social skills training Life skills community-based instruction Life skills using computer-assisted instruction Life skills using self-management Employment: Job-specific employment skills Job-specific employment skills (computer-assisted) Completing a job application Employment skills using community-based instruction Teaching self-management for employment skills Job-related social/communication skills	<i>Self Care/Independent Living</i> Community Experiences Social Skills Career Awareness Occupational Courses <i>Paid Employment/Work Experience</i> <i>Vocational Education/Work Study</i>
FAMILY INVOLVEMENT	
Teaching Parents and Families about Transition	Parental Involvement
PROGRAM STRUCTURE	
Provide Community-based Instruction Structure Program to Extend Beyond Secondary School <i>Check & Connect</i>	<i>Inclusion in General Education</i> Program of Study Student Support <i>Transition Programming</i>
INTERAGENCY COLLABORATION	
	Interagency Collaboration

Predictors listed in **bold, italicized** type had the strongest levels of evidence linking them to positive post-school outcomes. Inclusion in General Education and Self-care/Independent Living were predictors of positive outcomes across all three post-school areas: education, employment, and independent living. The majority of evidence-based practices are in the category of Student Development, which involves teaching functional skills to students. The two practices with the strongest evidence were teaching life skills and teaching purchasing skills.

Additionally, negative correlations were identified between the percentage of time spent in regular education and support variables for quality of life. Post-school support levels were higher for students who had spent more time in special education and lower for students who had spent more time in general education. Researchers surmised that this may be due to personal characteristics of students: students with more significant disabilities spent more time in special education classes.

IMPLICATIONS

IEP Development. The predictors and evidence-based practices identified by NSTTAC may be used immediately to guide young adults, parents, and education professionals in the design of IEP goals and transition services that are more likely to lead to post-school success.

Program Implementation. The predictors and evidence-based practices may also be used to guide the development, expansion, and evaluation of local and state programs. All students may be offered more opportunities in inclusion, paid employment and work experience, self-care and independent living skills, and transition planning and support, as indicated by the evidence linking specific in-school activities to positive post-school outcomes.

Future Research. Current research only points to relationships, not causality. It is unclear whether practices have a strong evidence base because they are the most effective or because they are the most prevalent

in research studies. Additional research is needed to identify specific practices and curricula that result in post-school success, especially over the long-term and for students with specific disabilities or representing specific ethnicities. Practices and aspects of family involvement, program structure, and interagency collaboration are predictors of positive outcomes, yet there is little evidence linked to specific practices in these areas.

RESOURCES

Transition to Adult Living Information and Resource Guide (CalSTAT 2007). This guide supports compliance with federal and state law, showcases best practices in secondary transition, and provides technical assistance in the implementation of transition services. It is organized around the essential components of effective practice as described in the National Standards and Quality Indicators for Transition developed by the National Association of Special Education Teachers. The essential components closely reflect Kohler's Taxonomy:

- Schooling (student-focused planning)
- Career preparatory experiences (program structures)
- Youth development and leadership (student development)
- Family involvement
- Connecting activities (interagency collaboration)

NSTTAC Evidence-based Practices Web Site. The evidence-based practices listed above are further described in terms of

- with whom the practice was used;
- what the practice is;
- how and where the practice has been used;
- how the practice relates to IDEA compliance indicators and national standards;
- where to find out how to do the practice;
- references for the evidence.

The Web site also includes lesson plan starters for each practice.

REFERENCES

- Blackorby, J. Schiller, and others. *Patterns in the Identification of and Outcomes for Children and Youth with Disabilities* (NCEE2010-4005). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education, 2010.
- Bureau of Labor Statistics. "Persons with a Disability: Labor Force Characteristics – 2009." News release, August 25, 2010.
- California Department of Education. *Update to State Performance Plan for IDEA 2004*. Sacramento: California Department of Education, 2008.
- _____, California Services for Technical Assistance and Training (CalSTAT). 2008. Transition to Adult Living: An Information and Resource Guide. <http://www.calstat.org/info.html> (accessed August 1, 2011).
- Davies, M. and W. Beamish. "Transitions from School for Young Adults with Intellectual Disability: Parental Perspectives on 'Life as an Adjustment.'" *Journal of Intellectual & Developmental Disability* 34(3) (2009): 248–257.
- Gersten, R. and others. "Quality Indicators for Group Experimental and Quasi-Experimental Research in Special Education." *Exceptional Children* 71(7) (2005): 149–164.
- Halpern, A. "Transition: Old Wine in New Bottles." *Exceptional Children* 58 (1992): 202–211.
- Horner, R., and others. "The Use of Single-Subject Research to Identify Evidence-based Practice in Special Education." *Exceptional Children* 71(2) (2005): 165–179.
- Individuals with Disabilities Education Act of 2004, United States Code 20* (2004), § 1400 et seq.
- Kohler, P.D. *Taxonomy for Transition Programming*. Champaign: University of Illinois, 1996.
- National Secondary Transition Center. *Evidence-based Practices and Predictors in Secondary Transition: What We Know and What We Still Need to Know*. Charlotte, NC: NSTTAC, 2010.
- Newman, L., and others. Comparisons across Time of the Outcomes of Youth with Disabilities up to 4 Years after High School: A Report of Findings from the National Longitudinal Transition Study and the National Longitudinal Transition Study-2 (NCSER 2010-3008). Menlo Park, CA: SRI International, 2010.
- No Child Left Behind Act of 2001, United States Code 20* (2001) 7801 § 9101[37].
- Office of Vocational and Adult Education . 2011. <http://www2.ed.gov/about/offices/list/ovae/index.html> (accessed August 1, 2011).
- Shaver, D., and others. *Secondary School Experiences and Academic Performance of Students with Hearing Impairments*. Menlo Park, CA: SRI International, 2011.
- Steele, R., M. Konrad, and D. Test. "An Evaluation of IEP Transition Components and Post-school Outcomes in Two States." *The Journal for Vocational Special Needs Education* 27(2) (2005): 4–18.
- Test, D., and others. "Evidence-based Practices in Secondary Transitions." *Career Development for Exceptional Individuals*, 32 (2009): 115–128.
- Test, D., and others. "Evidence-based Secondary Transition Predictors for Improving Post-school Outcomes for Students with Disabilities." *Career Development for Exceptional Individuals Online-First*, October 2009.
- United States Department of Education, 2009. Questions and Answers on Secondary Transition. <http://idea.ed.gov/explore/view/p/,root,dynamic,QaCorner,10> (accessed August 1, 2011).
- Yu, J., L. Newman, and M. Wagner. *Secondary School Experiences and Academic Performance of Students with Mental Retardation*. Menlo Park, CA: SRI International, 2009.

The Family Empowerment and Disability Council is sponsored by the California Department of Education and coordinated under a contract with the WestEd Center for Prevention & Early Intervention.

September 2011

Copyright 2011 WestEd Center for Prevention & Early Intervention

