

Improving Post-School Employment Outcomes: Evidence-Based Secondary Transition Predictors

One of the National Secondary Transition Technical Assistance Center’s (NSTTAC) tasks is to identify the evidence-based practices for the field of secondary transition. To do this, NSTTAC’s review of literature has been conducted in two parts. In Part I, evidence-based practices based on quality experimental (both group and single subject designs) studies were identified. However, while the evidence-based practices were designed to teach students specific transition-related skills, to date, the experimental literature has not attempted to measure the impact of these skills on post-school outcomes. As a result, in Part II, the review was expanded to include rigorous correlational research in secondary transition to identify evidence-based predictors that are correlated with improved post-school outcomes in education, employment, and/or independent living.

In order to systematically evaluate each correlational study, quality indicators for correlational research developed by Thompson, Diamond, McWilliam, Snyder, and Snyder (2005) were adapted for this review. Decision rules for determining levels of evidence for correlational research based on Thompson et al. and the United States Department of Education’s Institute for Education Sciences (IES) were also established. While correlational research examines relationships among variables, it is unable to reveal causality (although in many cases the direction of the relationship is hypothesized). Therefore, according to IES, the evidence provided by correlational research may only be established as moderate levels of causal inference. NSTTAC then added the potential level of evidence.

Levels of Evidence of Causal Inference	Correlational
Strong	N/A
Moderate	<ul style="list-style-type: none"> • 2 a priori (planned, hypothesis stated) studies with consistent significant correlations between predictor and outcome • Can include <i>exploratory</i> studies only when paired with <i>a priori</i> significant correlations • Must include effect size calculations or the data to calculate effect size
Potential (needs additional research)	<ul style="list-style-type: none"> • 1 a priori (planned, hypothesis stated) study • Two or more exploratory (no specific hypothesis) studies with significant correlations between predictor and outcome

This fact sheet includes in-school predictors of positive post-school employment outcomes for students with disabilities, please visit <http://www.nsttac.org/ebp/PredictorResources.aspx> for detailed information. Predictor categories were created based on consensus by researchers, and researchers classified each predictor to reflect a comprehensive term to support each description. The descriptions of each predictor were taken directly from the findings in the studies reviewed. Currently, there are 16 predictor categories for post-school employment, which are presented in alphabetical order. Following the predictor categories and descriptions, a table is provided of the predictor categories and levels of evidence for post-school employment.

1. Career Awareness

Description:

- Students in the School to Work Transition Program who exited school with high job search skills were more likely to be engaged in post-school employment (Benz et al., 1997)
- Students in the School to Work Transition Program who exited school with high career awareness skills were more likely to be engaged in post-school employment or education (Benz et al., 1997)

Level of evidence: *Potential* with all disability categories

2. Community Experiences

Description:

- Students who participated in community-based training which involved instruction in non-school, natural environments focused on development of social skills, domestic skills, accessing public transportation, and on-the-job training were more likely to be engaged in post-school employment (White & Weiner, 2004)

Level of evidence: *Potential* with students with severe disabilities

3. Exit Exam Requirements/ High School Diploma Status

Description:

- Students who had high adaptive and academic skills, high self-care skills, high GPA on academic activities, higher IQs, and received a diploma, as reported in school records or by parents, were more likely to be engaged in post-school employment (Heal & Rusch, 1994)

Level of evidence: *Potential* with all disability categories

4. Inclusion in General Education

Description:

- Students who took academic courses in regular education placements were more likely to be engaged in post-school education, employment, and independent living (Blackorby et al., 1993)
- Students who took more hours of academic and occupational courses and spent more time in regular education were more likely to be engaged in post-school employment (Heal & Rusch, 1995)
- Students who were integrated into a regular school setting (as opposed to special schooling for persons with a disability) for most of their schooling were more likely to be engaged in post-school employment (Leonard et al., 1999)
- Students who had the highest degree of integration with age-appropriate peers were more likely to engage in post-school employment (White & Weiner, 2004)

Level of evidence: *Moderate* with all disability categories

5. Interagency Collaboration

Description:

- Students who received assistance from 3 to 6 community-based agencies (as compared to students with assistance from 0 to 2 agencies) were more likely to be engaged in post-school employment or education (Bullis et al., 1995)

Level of evidence: *Potential* with all disability categories

6. Occupational Courses

Description:

- Students who took more hours of academic and occupational courses and spent more time in regular education were more likely to be engaged in post-school employment (Heal & Rusch, 1995)

Level of evidence: *Potential* with all disability categories

7. Paid Work Experience

Description:

- Students who participated in the Youth Transition Program with 2 or more paid jobs during high school were more likely to be engaged in post-school employment or education (Benz et al., 2000)
- Students in the School to Work Transition Program who had 2 or more jobs during the last two years of high school were more likely to be engaged in post-school employment (Benz et al., 1997)

- Students who had year round paid job for one full year during high school were 5 times more likely to be engaged in post-school employment and education (Bullis et al., 1995)
- Students with two or more jobs during their last two years of high school were more likely to be engaged in post-school employment (Doren & Benz, 1998)
- Students who had a job at the time of high school exit were 5.1 times more likely to be engaged in post-school employment (Rabren et al., 2002)

Level of evidence: *Moderate* with all disability categories

8. Parental Involvement

Description:

- Students with one or more parents who participated (as measured by the percentage) in more IEP meetings during the 11th and 12th grade year were more likely to be engaged in post-school employment (i.e., Employment Status defined as employed, skilled laborer receiving more than minimum wage that requires specific skill training prior to beginning the job; Employment Stability defined as high scores on the Employment Training Index which measure months of full and part-time employment, months out of high school, months enrolled in post-secondary education; Fourquarean et al., 1991)

Predicts improved outcomes in: Employment

Level of evidence: *Potential* for students with LD

9. Program of Study

Description:

- Students who participated in school-based programs that included career major (“sequence of courses based on occupational goal”), cooperative education (“combines academic and vocational studies with a job in a related field”), school-sponsored enterprise (“involves the production of goods or services by students for sale to or use by others”) and technical preparation (“a planned program of study with a defined career focus that links secondary and post-secondary education”) were 1.2 times more likely to be engaged in post-school employment (i.e., employment defined as (a) stability with benefits, insurance, paid sick days and (b) full-time employment; Shandra & Hogan, 2008)

Predicts improved outcomes in: Employment

Level of evidence: *Potential* with students with moderate and severe disabilities

10. Self-Advocacy/ Self-Determination

Description:

- Students with higher self-determination skills were more likely be engaged in post-school employment (Wehmeyer & Schwartz, 1997)

Level of evidence: *Potential* with all disability categories

11. Self-Care/ Independent Living Skills

Description:

- Students who had high self-care skills were more likely to be engaged in post-school education, employment, and independent living (Blackorby et al., 1993)
- Students with high daily living skills (based on teacher and student ratings from the Life Centered Career Education rating scales) were more likely to have a higher quality of life (independent living) and be engaged in post-school employment (Roessler et al., 1990)

Level of Evidence: *Potential* with all disability categories

12. Social Skills

Description:

- Students in the School to Work Transition Program who exited high school with high social skills were more likely to be engaged in post-school employment (Benz et al., 1997)
- Students with high social skills (based on teacher ratings from the Life Centered Career Education rating scales) were more likely to have a higher quality of life (independent living) and be engaged in post-school employment (Roessler et al., 1990)

Level of Evidence: *Potential* with all disability categories

13. Student Support

Description:

- Students who had support from self-family-friend network to find a job were more likely to be engaged in post-school employment (Doren & Benz, 1998)
- Students with high occupational guidance and preparation (based on teacher student ratings from the Life Centered Career Education rating scales) were more likely to have a higher quality of life (independent living) and be engaged in post-school employment (Roessler et al., 1990)

Level of Evidence: *Potential* with all disability categories

14. Transition Program

Description:

- Students who participated in the Youth Transition Program with four or more transition goals met were more likely to be engaged in post-school employment or education (Benz et al., 2000)

Level of Evidence: *Potential* with all disability categories

15. Vocational Education

Description:

- Students who participated in vocational education were 2 times more likely to be engaged in full-time post-school employment (Baer et al., 2003)
- Students with vocational education credits in high school were more likely to be engaged in post-school employment and post-school education (Harvey, 2002)
- Students who received technology training were more than twice as likely to be employed (Leonard et al., 1999)
- Students who took more hours of academic and occupational courses and spent more time in regular education were more likely to be engaged in post-school employment (Heal & Rusch, 1995)

Level of Evidence: *Moderate* with all disability categories

16. Work Study

Description:

- Students who participated in work study were 2 times more likely to be engaged in full-time post-school employment (Baer et al., 2003)
- Students in the Bridges School to Work Program who accepted a post-internship job offer and who completed the internship were more likely to engage in post-school employment (Fabian et al., 1998)
- Students who participated in the Bridges School to Work program in their last year of high school and completed the internship were four times more likely to be employed (Luecking & Fabian, 2000)
- Students who received a job offer after completion of the Bridges School to Work internship were five times more likely to be employed (Luecking & Fabian, 2000)

Level of Evidence: *Moderate* with all disability categories

Note: Complete references for all citations can be found on the NSTTAC website at:
<http://www.nsttac.org/ebp/ReferenceListPredictorCategories.aspx>

Predictors/Outcomes	Employment
•Career Awareness	P
•Community Experiences	P
•Exit Exam Requirements/High School Diploma Status	P
•Inclusion in General Education	M
•Interagency Collaboration	P
•Occupational Courses	P
•Paid Employment/Work Experience	M
•Parental Involvement	P
•Program of Study	P
•Self-Advocacy/Self-Determination	P
•Self-Care/Independent Living	P
•Social Skills	P
•Student Support	P
•Transition Program	P
•Vocational Education	M
•Work Study	M
M = Moderate; P = Potential	

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