

SECONDARY TRANSITION EVIDENCE-BASED PRACTICES AND PREDICTORS OF POST-SCHOOL SUCCESS

An **evidence-based practice** (EBP) is a teaching method used to teach a specific skill that has been shown to be effective based on high-quality research (Cook, Tankersly, & Landrum, 2009; Odom, Brantlinger, Gersten, Horner, Thompson, & Harris, 2005). Evidence-based practices apply to secondary transition planning and instruction in the following ways:

- ❖ Evidence-based practices provide teachers information about what teaching methods in secondary transition have been effective in helping students with disabilities learn specific skills.
- ❖ Evidence-based practices can be used to support IEP goals and objectives as well as skill development.

Table 1 lists skills taught using evidence-based practices, and references used to establish the evidence-base for the practice(s) to teach that skill. Visit www.nsttac.org for information pertaining to how these practices were identified.

Table 1. Skills taught using evidence-based practices in secondary transition

| Evidence-based Practices | | |
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| Skills Taught | Evidence-Based Practice | References |
| Banking Skills | <ul style="list-style-type: none"> • Using community-based instruction • Using constant time delay • Using simulations | Alberto, Cihak, & Gama, 2005; Branham, Collins, Schuster, & Kleinert 1999; McDonnell & Ferguson, 1989; Aeschleman & Gedig, 1985; Cihak, Alberto, Kessler, & Taber, 2004 |
| Promoting Parent Involvement in the Transition Planning Process | <ul style="list-style-type: none"> • Using training modules | Boone, 1992 |
| Communication Skills | <ul style="list-style-type: none"> • Using least-to-most prompting • Using community-based instruction | Heller, Allgood, Ware, & Castelle, 1996; Westling, Floyd, & Carr, 1990; Heller, Allgood, Ware, & Castelle, 1996 |
| Community Integration | <ul style="list-style-type: none"> • Using community-based instruction | Bates, Cuvo, Miner, & Korabek 1999; Branham, Collins, Schuster, & Kleinert, 1999; Collins, Stinson, & Land, 1993 |
| Counting Money | <ul style="list-style-type: none"> • Using the one-more-than strategy | Test, Howell, Burkhart, & Beroth, 1993; Colyer & Collins, 1996 |
| Employment Skills | <ul style="list-style-type: none"> • Using community-based instruction • Using response prompting | Bates, Cuvo, Miner, & Korabek, 1999; |

SECONDARY TRANSITION EVIDENCE-BASED PRACTICES AND PREDICTORS OF POST-SCHOOL SUCCESS

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| | | <p>Ciha, Alberto, Kessler, & Taber, 2004; DiPipi-Hoy, Jitendra, & Kern, 2009; Berg & Wacker, 1989; Mitchell, Schuster, Collins, & Gassaway, 2000; Sowers, Verdi, Bourbeau, & Sheehan, 1985</p> |
| <p>Food Preparation and Cooking Skills</p> | <ul style="list-style-type: none"> • Using computer-assisted instruction • Using constant time delay • Using least-to-most prompting • Using response prompting • Using video modeling | <p>Ayers & Cihak, 2010; Mechling, Gast, & Fields, 2008; Mechling & Stephens, 2009; Bozkurt & Gursel, 2005; Griffen, Wolery, & Schuster, 1992; Hall, Schuster, Wolery, Gast, & Doyle, 1992; Schuster, Gast, & Wolery, 1988; Schuster & Griffen, 1991; Wolery, Ault, Gast, Doyle, & Griffen, 1991; Horsfall & Maggs, 1986; Steege, Wacker, & McMahon, 1987; Lasater & Brady, 1995; Mechling, Gast, & Gustafson, 2009; Mechling & Gustafson, 2009; Mechling & Stephens, 2009; Trask-Tyler, Grossi, & Heward, 1994; Van Laarhoven & Van Laarhoven-Myers, 2006</p> |
| <p>Functional Life Skills</p> | <ul style="list-style-type: none"> • Using backward chaining • Using constant time delay • Using forward chaining • Using least-to-most prompting • Using progressive time delay • Using self-monitoring • Using simultaneous prompting • Using system of most-to-least prompting • Using total task chaining | <p>McDonnell & Ferguson, 1989; McDonnell & Laughlin, 1989; O'Conner & Cuvo, 1989; Vandercook, 1991, Collins & Stinson, 1994-1995; Collins, Stinson, & Land, 1993; McDonnell, 1987; Sandknop,</p> |

SECONDARY TRANSITION EVIDENCE-BASED PRACTICES AND PREDICTORS OF POST-SCHOOL SUCCESS

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| | | Schuster, Wolery, & Cross, 1992, McDonnell 1987, Sandknop, Schuster, Wolery, & Cross 1992, Branham, Collins, Schuster, & Kleinert, 1999, Miller & Test, 1989, Wolery, Ault, Gast, Doyle, & Griffen, 1991; Horsfall & Maggs, 1986; McDonnell & McFarland, 1988 |
| Goal Attainment | <ul style="list-style-type: none"> Using <i>Self-Determined Learning Model of Instruction</i> | Lee, Wehmeyer, Palmer, Soukup, & Little, 2008 |
| Grocery Shopping | <ul style="list-style-type: none"> Using community-based instruction Using computer-assisted Instruction Using least-to-most prompting Using response prompting | Bates, Cuvo, Miner, & Korabek, 1999; Ferguson & McDonnell, 1991; Gaule, Nietupski, & Certo, 1985; Mechling, 2004; Mechling, Gast, & Krupa, 2007; Mechling, Gast, & Langone, 2002; Wissick, Lloyd, & Kinzie, 1992; Arnold-Reid, Schloss, & Alper, 1997; Bates, Cuvo, Miner, & Korabek, 2001; Gaule, Nietupski, & Certo, 1985; Mechling & Gast, 1997; Nietupski, Welch, & Wacker, 1983 |
| Home Maintenance Skills | <ul style="list-style-type: none"> Using response prompting Using video modeling | Mechling & Stephens, 2009; Mechling & Gustafson, 2009; Mechling, Gast, & Gustafson, 2009; Lasater & Brady, 1995; Van Laarhoven & Van Laarhoven-Myers, 2006; Mechling & Gast, 1997; Cuvo, David, O'Reilly, Mooney, & Crowley, 1992; Briggs, Alberto, |

SECONDARY TRANSITION EVIDENCE-BASED PRACTICES AND PREDICTORS OF POST-SCHOOL SUCCESS

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| | | Sharpton, Berlin, McKinley, & Ritts, 1990 |
| Increased financial skills | <ul style="list-style-type: none"> Using extended career planning services after graduation | Izzo, Cartledge, Miller, Growick, & Rutkowski, 2000 |
| Integration Skills | <ul style="list-style-type: none"> Using community-based instruction | Collins, Stinson, & Land, 1993; Branham, Collins, Schuster, & Kleinert, 1999; Bates, Cuvo, Miner, & Korabek, 1999 |
| Job Application Skills | <ul style="list-style-type: none"> Using mnemonic strategies | Nelson, Smith, & Dodd, 1994 |
| Job Specific Skills | <ul style="list-style-type: none"> Using computer-assisted instruction Using constant time delay Using self-management | Salend, Ellis, & Reynolds, 1989; Moore, Agran, & Fodor-Davis, 1989; Irvine, Erickson, Singer, & Stahlberg 1992; Berg & Wacker 1989; Wolery, Ault, Gast, Doyle, & Griffen, 1991; Mechling & Ortega-Hurndon, 2007; Riffel, Wehmeyer, Turnbull, Lattimore, Davies, Stock, & Fisher, 2005; Mechling & Ortega-Hurndon, 2007 |
| Laundry Tasks | <ul style="list-style-type: none"> Using response prompting | Van Laarhoven & Van Laarhoven-Myers, 2006; Taylor, Collins, Schuster, & Kleinert 2002; Lasater & Brady, 1995; Briggs, Alberto, Sharpton, Berlin, McKinley, & Ritts, 1990 |
| Leisure Skills | <ul style="list-style-type: none"> Using constant time delay Using response prompting | Whatley, Gast, & Hammond, 2009; Nietupski, et al. 1986; Zhang, Gast, Horvat, & Dattilo, 1995; Wall, Gast, & Royston, 1999 |
| Purchasing Skills | <ul style="list-style-type: none"> Using community-based instruction Using least-to-most prompting Using one-more-than strategy Using progressive time delay Using response prompting | Wissick, Lloyd, & Kinzie, 1992; Mechling, Gast, & Langone, 2002; Mechling, 2004; Dipipi-Hoy & |

**SECONDARY TRANSITION EVIDENCE-BASED PRACTICES AND
PREDICTORS OF POST-SCHOOL SUCCESS**

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| | <ul style="list-style-type: none"> Using simulations | <p>Jitendra, 2004; Cihak, Alberto, Kessler, & Taber, 2004; Aeschleman & Schladenhauffen, 1984; Nietupski, Welch, & Wacker, 1983; McDonnell, 1987; Alberto, Cihak, & Gama, 2005; Sandknop, Schuster, Wolery, & Cross, 1992; McDonnell, 1987; Denny & Test, 1995; Cihak & Grim, 2008; Ayres, Langone, Boon, & Norman, 2006; Westling, Floyd, & Carr, 1990; Alberto, Cihak, & Gama, 2005; Haring, Kennedy, Adams, & Pitts-Conway, 1987; Westling, Floyd, & Carr, 1990</p> |
| Safety Skills | <ul style="list-style-type: none"> Using community-based instruction Using least-to-most prompting Using progressive time delay | <p>Collins, Stinson, & Land, 1993; Collins & Stinson, 1994; 1995; Taber, Alberto, Seltzer, & Hughes, 2003; Taber, Alberto, Hughes, & Seltzer, 2002; Collins, Stinson, & Land, 1993; Branham, Collins, Schuster, & Kleinert, 1999</p> |
| Social Skills | <ul style="list-style-type: none"> Using response prompting Using self-management Using simulations | <p>Storey & Allargice, 1987; Heller, Allgood, Ware, Arnold, & Castelle, 1996; Clement-Heist, Siegel, & Gaylord-Ross, 1992; Baum, Clark, McCarthy, Sandler, & Carpenter, 1987; Moore, Cartledge, & Heckaman, 1995; Keogh, Faw, Whitman, & Reid, 1984; Hunt, Alwell, Goetz, & Sailor, 1990; Hunt, Alwell,</p> |

SECONDARY TRANSITION EVIDENCE-BASED PRACTICES AND PREDICTORS OF POST-SCHOOL SUCCESS

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| | | & Goetz, 1988; Frea, 1997 |
| Specific Job Skills | <ul style="list-style-type: none"> Using least-to-most prompting | Smith, Collins, Schuster, & Kleinert, 1999; Bates, Cuvo, Miner, & Korabek, 2001 |
| Student Involvement in the IEP | <ul style="list-style-type: none"> Using published curricula | Allen, Smith, Test, Flowers, & Wood, 2001; Martin et al., 2006; Snyder & Shapiro, 1997, Lee, Wehmeyer, Palmer, Williams, Diehm, Davies, & Stock, 2010, Hammer, 2004; Lancaster, Schumaker, & Deschler, 2002; Miner & Bates, 1997; Snyder & Shapiro, 1997; Test & Neale, 2004; Van Reusen & Bos, 1994; Van Reusen, Deschler, & Schumaker, 1989 |
| Student Participation in IEP meetings | <ul style="list-style-type: none"> Using computer assisted instruction | Lancaster, Schumaker, & Deshler, 2002; Hammer, 2004 |
| Using <i>Self-Advocacy Strategy</i> to teach student participation in IEP meetings | <ul style="list-style-type: none"> Using published curricula | Van Reusen, Deschler, & Schumaker, 1989; Van Reusen & Bos, 1994; Test & Neale, 2004; Hammer, 2004; Lancaster, Schumaker, & Deshler, 2002 |
| Using <i>Check and Connect</i> to promote student participation in IEP meetings | <ul style="list-style-type: none"> Using published curricula | Sinclair, Christensen, & Thurlow, 2005 |
| Using the <i>Self-Directed IEP</i> to teach student participation in IEP meetings | <ul style="list-style-type: none"> Using published curricula | Snyder & Shapiro, 1997; Martin, Van Dycke, Christensen, Green Gardner, & Lovett, 2006; Allen, Smith, Test, Flowers, & Wood, 2001 |
| Using <i>Whose Future is it Anyway?</i> To teach student knowledge of Transition Planning | <ul style="list-style-type: none"> Using published curricula | Lee, Wehmeyer, Palmer, Williams, Diehm, Davies, & Stock, 2010 |

**SECONDARY TRANSITION EVIDENCE-BASED PRACTICES AND
PREDICTORS OF POST-SCHOOL SUCCESS**

Table 2 lists the evidence-based practices from Table 1 and a basic description of that practice.

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| Backward Chaining | Backward chaining is defined by all behaviors identified in the task analysis initially completed by the trainer, except for the final behavior in the chain. When the learner performs the final behavior in the sequence at the predetermined criterion level, reinforcement is delivered and the next-to-last behavior is introduced (Cooper, Heron, & Heward, 2007). |
| Check and Connect | <i>Check and Connect</i> is a structured intervention model designed to assist schools and organizations in identifying students who are at risk for dropping out of school, then pairing those students with mentors who address each student's individual needs to help them progress toward school completion (http://checkandconnect.org/model/default.html ; Christenson et al., 2008). |
| Community based instruction | Community based instruction is teaching functional skills that take place in the community where target skills would naturally occur (Brown et al., 1983). |
| Computer-assisted instruction | Computer-assisted instruction (CAI) has been defined as "the use of a computer and other associated technology with the intention of improving students' skills, knowledge, or academic performance" (Okolo, Bahr, & Rieth, 1993, p. 1) and is synonymous with terms such as computer-based instruction, computer-mediated instruction, interactive hyper-media instruction, and multimedia instruction. CAI offers an interactive format that can provide examples and feedback to students, while including multiple components, such as graphics, photographs, audio, text, and video (Hutcherson, Langone, Ayres, & Clees, 2004). |
| Constant Time Delay | Constant time delay is a variation of time delay, a prompting procedure that uses variations in the time intervals between presentation of the natural stimulus and the response prompt. Time delay transfers stimulus control from a prompt to the natural stimulus by delaying the presentation of the prompt following the presentation of the natural stimulus. Constant time delay is implemented by presenting several trials using a 0-second delay between the presentation of the natural stimulus and the response prompt. The trials that follow the simultaneous prompt condition apply a fixed time |

**SECONDARY TRANSITION EVIDENCE-BASED PRACTICES AND
PREDICTORS OF POST-SCHOOL SUCCESS**

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| | delay (e.g., 3 seconds or 5 seconds; Cooper, Heron, & Heward, 2007). |
| Extension of Career Planning Services | <p>Services extended beyond graduation include any individualized services focused on postsecondary achievement provided after a student completes the secondary program. In the study used to establish the evidence base for extending services beyond high school to increase finance skills (Izzo, Cartledge, Miller, Growick, & Rutkowski, 2000) services included:</p> <ul style="list-style-type: none"> • Vocational assessment • Agency contacts • IEP meetings • Vocational training • Employability counseling • Job club • Job interview assistance • Job development • Job coaching |
| Forward Chaining | Behaviors identified in a forward chaining task analysis are taught in their naturally occurring order. Reinforcement is delivered when the predetermined criterion for the first behavior in the sequence is achieved then the next step in the task analysis is taught (Cooper, Heron, & Heward, 2007). |
| Least to Most Prompting | A system of least-to-most prompts is a method used to transfer stimulus control from response prompts to the natural stimulus whenever the participant does not respond to the natural stimulus or makes an incorrect response. Least-to-most prompts begin with the participant having the opportunity to perform the response with the least amount of assistance on each trial. Greater degrees of assistance are provided with each successive trial without a correct response (Cooper, Heron, & Heward, 2007). |
| Mnemonics | Mnemonics is defined as using keywords that provide acoustic reconstructions of unfamiliar information such as symbolic pictures of abstract concepts or descriptive pictures of concrete information (Scruggs & Mastropieri, 1989). |
| Most to Least Prompting | A system of most-to-least prompts is a method used to transfer stimulus control from response prompts to the natural stimulus whenever the participant does not respond to the natural stimulus or makes an incorrect response. Most-to-least prompting starts with physically guiding the participant through the performance sequence, then gradually reducing the amount of physical assistance provided as training progresses from session to session (Cooper, Heron, & Heward, 2007). |
| One-More- Than Strategy | The <i>One-More-Than Strategy</i> a rounding up strategy that teaches individuals to give “one more” dollar |

**SECONDARY TRANSITION EVIDENCE-BASED PRACTICES AND
PREDICTORS OF POST-SCHOOL SUCCESS**

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| | <p>than the amount requested (e.g., if the requested amount is \$3.29, the individual gives \$4.00 and waits to receive change; Denny & Test, 1995). The strategy is also referred to as “next dollar”, “counting on”, or “dollar more” strategy.</p> |
| Progressive Time Delay | <p>Progressive time delay is a variation of time delay, a prompting procedure that uses variations in the time intervals between presentation of the natural stimulus and the response prompt. Time delay transfers stimulus control from a prompt to the natural stimulus by delaying the presentation of the prompt following the presentation of the natural stimulus. Progressive time delay is implemented by presenting a trial with a 0- second delay between the presentation of the natural stimulus and the response prompt and then gradually and systematically extending the time delay, often in one second intervals (e.g., 0 sec to 2 sec to 3 sec; Cooper, Heron, & Heward, 2007). Collins & Stinson, 1994-1995;</p> |
| Response Prompting | <p>Response prompting is defined as stimuli that later functions as extra cues and reminders for desired behavior. Prompts can be visual, auditory, textual, or symbolic (Cooper, Heron, & Heward, 2007).</p> |
| Self-Management | <p>Defining characteristics of self-management interventions include “methods used by students to manage, monitor, record, and/or assess their behavior or academic achievement” (Reid, Trout, & Schartz, 2005, p. 362).</p> <p>Self-management has also been called: self-monitoring (n=5 studies), self-evaluation (n= 2 studies), self-instruction (n=2 studies), goal setting (n= 1 study), strategy instruction (n= 1 study). In addition, components can be combined (n=7 studies).</p> <ul style="list-style-type: none"> • “Self-monitoring is a multi-stage process of observing and recording one’s behavior” (Mooney et al., 2005, p. 204). • “Self-evaluation is a process wherein a student compares her/his performance to a previously established criterion set by student or a teacher and is awarded reinforcement based on achieving the criterion” (Mooney et al., 2005, p. 207). • “Self-instruction refers to techniques that involve the use of self-statements to direct behavior” (Mooney et al., 2005, p. 204). • “Goal setting generally refers to a process of a student self-selecting behavioral targets, which serve to structure student effort, provide information on progress, and motivate |

**SECONDARY TRANSITION EVIDENCE-BASED PRACTICES AND
PREDICTORS OF POST-SCHOOL SUCCESS**

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| | performance” (Mooney et al., 2005, p. 204). “Strategy instruction refers to teaching students a series of steps to follow independently in solving a problem or achieving an outcome” (Mooney et al., 2005) |
| Self-Monitoring | Self-monitoring is defined as a procedure whereby a person observes his behavior systematically and records the occurrence or nonoccurrence of a target behavior (Cooper, Heron, & Heward, 2007). The procedure is also called self-recording and self-observation. |
| Simulations | Simulation is defined as using materials and situations in the classroom that approximate the natural stimulus conditions and response topographies associated with the performance of functional skills in community settings (Bates et al., 2001). |
| Simultaneous Prompting | Response prompting has been defined as “a stimuli that later functions as extra cues and reminders for desired behavior.. Can be visual, auditory, textual, or symbolic (Cooper, Heron, & Heward, 2007). Simultaneous prompting is a response prompting strategy that results in near errorless learning. Simultaneous prompting is a “systematic form of the antecedent prompt and test procedure” (Wolery et al., 1992). Simultaneous prompting involves the “presentation of a task direction followed immediately by the presentation of a controlling prompt (i.e., a prompt that ensures a correct response).” Once the instructional sessions is conducted, daily probe sessions are conducted immediately prior to instructional sessions on subsequent days so the instructor can determine when stimulus control, or acquisition of the target skill, has occurred (Morse & Schuster, 2004). |
| Total Task Chaining | Total task chaining is defined as a variation of forward chaining in which the learner receives training on each step in the task analysis during each session (Cooper, Heron, & Heward, 2007). Total task chaining is also sometimes referred to as concurrent training (McDonnell & Laughlin, 1989). |
| Video Modeling | Video modeling is a form of video response prompting. Response prompting is defined as a stimuli that later functions as extra cues and reminders for desired behavior (Cooper, Heron, & Heward, 2007). |
| Published Curricula | Published curricula to teach student involvement in the IEP meeting includes the following curricula: <ul style="list-style-type: none"> • The Self-Directed IEP (Martin et al., 2006) • Self-Advocacy Strategy (Test and Neale, 2004) • Whose Future is it Anyway? (Lee et al., 2010) |

**SECONDARY TRANSITION EVIDENCE-BASED PRACTICES AND
PREDICTORS OF POST-SCHOOL SUCCESS**

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| | <ul style="list-style-type: none"> An adapted version of Personal Futures Planning model (Miner and Bates, 1997) |
| <p>Self-Advocacy Strategy</p> | <p>The Self-Advocacy Strategy (SAS) is a motivation and self-determination strategy designed to prepare students to participate in education or transition planning conferences. The strategy consists of 5 steps which are taught over a series of seven acquisition and generalization stages. The five steps are presented using the mnemonic “I PLAN” to help cue students to remember the steps for the strategy.</p> <p>I PLAN represents:</p> <p>I - Inventory completed by students listing their strengths, weaknesses, learning needs, goals, and choices to prepare them for their upcoming IEP conference</p> <p>P - Provide your inventory involves identifying appropriate time for individual to share information during the conference, speaking clearly and completely, and referring to inventory as needed</p> <p>L - Listen & Respond addresses being an active listener and responding to statements made by others in a positive manner</p> <p>A - Ask questions focuses on asking appropriate questions to gather needed information</p> <p>N - Name your goals to communicate goals and ideas on actions to be taken</p> |
| <p>Self-Determined Learning Model of Instruction</p> | <p>The Self-Determined Learning Model of Instruction (SDLMI) is a curriculum that teaches students to engage in self-directed and self-regulated learning. The curriculum is comprised of three units:</p> <ol style="list-style-type: none"> 1. Set a goal 2. Take action 3. Adjust goal or plan <p>Students are required to solve the problems through a series of four steps:</p> <ol style="list-style-type: none"> 1. Identify the problem 2. Identify potential solutions to the problem 3. Identify barriers to solving the problem 4. Identify consequences of each solution <p>Each question is linked to a set of Teacher Objectives that describe the student outcomes for each question. Each phase includes a list of Educational Supports that teachers can implement to enable students to engage in self-directed learning.</p> |
| <p>Self-Directed IEP</p> | <p>The Self-Directed IEP (SD IEP) lesson package is divided into four instructional units, including students leading meeting, reporting interests, reporting skills, and reporting options. It is a</p> |

SECONDARY TRANSITION EVIDENCE-BASED PRACTICES AND PREDICTORS OF POST-SCHOOL SUCCESS

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| | <p>multimedia package designed to teach students the skills needed to manage their own IEP meetings. It includes a teacher manual, a student workbook, and two videos that present 11 steps necessary for students to lead their own IEP meetings:</p> <ul style="list-style-type: none"> • Begin meeting by stating purpose • Introduce everyone • Review past goals and performance • Ask for others' feedback • State your school & transition goals • Ask questions • Deal with differences of opinion • State the support you'll need • Summarize your goals • Close meeting • Work on IEP goals all year <p>Instruction follows a model-lead-test format.</p> |
| <p>Whose Future Is It?</p> | <p><i>"Whose Future is it Anyway?"</i> (WFA) is a student-directed transition planning curriculum designed to help students learn to be more involved in the IEP process. The curriculum is comprised of six sections and 36 sessions related to:</p> <ul style="list-style-type: none"> • Having self-awareness and disability awareness • Decision making about transition-related outcomes Identifying and securing community resources to support transition services • Writing and evaluating goals and objectives • Communicating effectively in small groups • Developing skills to become and effective team member, leader, or self-advocate |
| <p>Peer Assisted Instruction</p> | <p>Teaching using peer assistance may include the following: Peer tutoring as the delivery of instruction by another student, either older or the same age as the tutee (Scruggs et al., 1985). Cooperative learning when groups of students of different ability, sex, or ethnicity work together to achieve mutual goals (Tateyama-Sniezek, 1990). Peer instruction when students are given specific roles to assist other students in completing an activity or teaching of a lesson (Hughes, Carter, Hughes, Bradford, & Copeland, 2002).</p> |
| <p>Visual Displays</p> | <p>Visual displays are tools used to represent the complexity of the mental and physical world in which we live (Hyerle, 1996, 2000). Visual displays are used in several ways including: graphic organizers, cognitive organizers, cognitive maps, structured overviews, tree diagrams, concept maps, and Thinking Maps (Boyle, 2000; Horton, Lovitt, & Bergerud, 1990; Hyerle, 1996, 2000).</p> |

SECONDARY TRANSITION EVIDENCE-BASED PRACTICES AND PREDICTORS OF POST-SCHOOL SUCCESS

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| Training Modules | A training module is a unit of education or instruction with a relatively low student-to- teacher ratio, in which a single topic or a small section of a broad topic is studied for a given period of time. http://thefreedictionary.com/module . |
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SECONDARY TRANSITION EVIDENCE-BASED PRACTICES AND PREDICTORS OF POST-SCHOOL SUCCESS

A **predictor of post-school success** is an in-school experience, typically a program (i.e., work-based learning experience) correlated with improved post-school outcomes. Predictors, like the evidence-based practices listed above, are based on empirical research. Predictors apply to transition planning and instruction in the following ways:

Predictors of post-school success

- ❖ provide practitioners information about secondary transition program characteristics that are empirically linked to better post-school success for students with disabilities,
- ❖ can be used to develop, expand, and or evaluate secondary transition programs,
- ❖ help IEP teams design annual IEP goals and transition services that are more likely to help students achieve their stated post-school goals.

Table 3 lists each predictor of post-school success and operational definition for each predictor from (Rowe, Alverson, Unruh, Fowler, Kellems, Test, & Kohler, 2013).

Table 3. Predictors of Post-School Success

| Predictor | Definition |
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| 1. Inclusion in General Education | Inclusion in general education requires students with disabilities to have access to general education curriculum and be engaged in regular education classes with peers without disabilities. |
| 2. Exit Exam Requirements/ High School Diploma Status | Exit exams are standardized state tests, assessing single content area (e.g. Algebra, English) or multiple skill areas, with specified levels of proficiency that students must pass in order to obtain a high school diploma. Diploma status is achieved by completing the requirements of the state awarding the diploma including the completion of necessary core curriculum credits. |
| 3. Program of Study | A program of study is an individualized set of courses, experiences, and curriculum designed to develop students' academic and functional achievement to support the attainment of students' desired post-school goals. |
| 4. Transition Program | A transition program prepares students to move from secondary settings (e.g., middle school/high school) to adult-life, utilizing comprehensive transition planning and education that creates individualized opportunities, services, and supports to help students achieve their post-school goals in education/training, employment, and independent living. |
| 5. Occupational Courses | Occupational courses are individual courses that support career awareness, allow or enable students to explore various career pathways, develop occupational specific skills through instruction, and experiences focused on their desired employment goals. |
| 6. Paid Work Experience | Work experience is any activity that places the student in an authentic workplace, and could include: work sampling, job shadowing, internships, apprenticeships, and paid employment. Paid employment can include existing standard jobs in a company or organization or customized work assignments negotiated with the employer, but these activities always feature competitive pay (e.g., minimum wage) paid directly to the student by the employer. |

SECONDARY TRANSITION EVIDENCE-BASED PRACTICES AND PREDICTORS OF POST-SCHOOL SUCCESS

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| 7. Vocational Education | Vocational education is a sequence of courses that prepares students for a specific job or career at various levels from trade or craft positions to technical, business, or professional careers. |
| 8. Work Study | A work study program is a specified sequence of work skills instruction and experiences designed to develop students' work attitudes and general work behaviors by providing students with mutually supportive and integrated academic and vocational instruction. |
| 9. Career Awareness | Career Awareness is learning about opportunities, education, and skills needed in various occupational pathways to choose a career that matches one's strengths and interests. |
| 10. Community Experiences | Community experiences are activities occurring outside of the school setting, supported with in-class instruction, where students apply academic, social, and/or general work behaviors and skills. |
| 11. Self-Advocacy/Self-Determination | Self-Determination is the ability to make choices, solve problems, set goals, evaluate options, take initiative to reach one's goals, and accept consequences of one's actions. |
| 12. Self-Care/Independent Living Skills | Self-care/independent living skills are skills necessary for management of one's personal self-care and daily independent living, including the personal management skills needed to interact with others, daily living skills, financial management skills, and the self-management of healthcare/wellness needs. |
| 13. Social Skills | Social skills are behaviors and attitudes that facilitate communication and cooperation (e.g., social conventions, social problem-solving when engaged in a social interaction, body language, speaking, listening, responding, verbal and written communication). |
| 14. Parental Involvement | Involvement means parents /families/guardian are active and knowledgeable participants in all aspects of transition planning (e.g., decision-making, providing support, attending meetings, and advocating for their child). |
| 15. Parent Expectations | Expectations include a parents and families planning and articulating an expectation that their child will participate in integrated postsecondary education and be employed in integrated settings the community after high school. |
| 16. Student Support | Student support is a network of people (e.g., family, friends, educators and adult service providers) who provide services and resources in multiple environments to prepare students to obtain their annual transition and post-secondary goals aligned with their preferences, interests, and needs. |
| 17. Interagency Collaboration | Interagency Collaboration is a clear, purposeful, and carefully designed process that promotes cross agency, cross program, and cross disciplinary collaborative efforts leading to tangible transition outcomes for youth. |

SECONDARY TRANSITION EVIDENCE-BASED PRACTICES AND PREDICTORS OF POST-SCHOOL SUCCESS

Table 4 lists each predictor and the description of that predictor directly from the empirical research literature, and references used to establish the predictor. Visit www.nsttac.org for information pertaining to how the predictors were identified.

Table 4. *Predictors of Post-School Success, Description, and References*

| Predictors of Post-School Success | | |
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| Predictor | Description | References |
| 1. Inclusion in General Education | <ul style="list-style-type: none"> • Students who participated in regular academics were 5 times more likely to participate in postsecondary education • Students who took academic courses in regular education placements were more likely to be engaged in post-school education, employment, and independent living • Students with high performance in five areas, including reading, writing, math, behaving responsibly, and problem solving skills were more likely to be engaged in postsecondary education • Students who passed more than half or all courses in 8 curriculum areas (remedial academics, traditional content classes, personal finance, community access, behaving responsibly, goal-setting or problem solving, specialized vocational education, regular vocational education) were more likely to be engaged in postsecondary education • Students who had high scores on adaptive and academic skills, self-care skills, GPA on academic activities, received a diploma, and higher IQs as reported in school records were more likely to live independently • 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 • Students who participated in more highly integrated and less highly specialized school programs were more likely to be living independently (i.e., high independence defined as: (a) parent's prediction of youth's future home independence, sum of cooking, shopping, washing, and cleaning skills, (b) sum of phone, time-keeping, counting, reading skills; (c) sum of dressing, feeding, and going out skills; (d) respondent's claim of youth's ability to respond on a follow-up questionnaire) • Students who spent more hours in regular education courses were more likely to be living independently (i.e., high independence, high esteem, minimal (i.e., high independence defined as: (a) parent's prediction of youth's future home independence, sum of cooking, shopping, washing, and cleaning skills, (b) sum of phone, time-keeping, counting, reading skills; (c) sum of dressing, feeding, and going out skills; (d) respondent's claim of youth's ability to respond on a follow-up questionnaire; high esteem defined as: (a) respondent's or school's claim of therapeutic counseling for youth; (b) number of developmental disabilities services | Adelman, 2006; Baer et al., 2003; Baker, 1994; Blackorby et al., 1993; Carlberg & Kavale, 1980; Chapman, 1983; Daviso, Denney, Baer, & Flexer, 2011; Halpern et al., 1995; Heal & Rusch, 1994; Heal & Rusch, 1995; Heal et al., 1997; Leonard et al., 1999; Oakes & Saunders, 2007; Scott & Ingles, 2007; Wang & Baker; White & Weiner, 2004 |

SECONDARY TRANSITION EVIDENCE-BASED PRACTICES AND PREDICTORS OF POST-SCHOOL SUCCESS

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| | <p>attributed to the youth; (c) youth used some developmental disabilities prosthetic device in the past year; (d) youth worked for pay in the past year; (e) youth worked with or without pay in the past year; (f) educational status, dropout to college graduation)</p> <ul style="list-style-type: none"> • Students who were integrated into a regular school setting for most of their schooling were more likely to be engaged in post-school employment • Students who had the highest degree of integration with age-appropriate peers were more likely to engage in post-school employment • Higher performance scaled to the National Assessment of Educational Progress (NAEP) in mathematics was positively correlated with enrollment in postsecondary education, selectivity of postsecondary institutions that students attend, and the likelihood that the students receive a bachelor's degree • Students, including those with low achievement levels, who take more rigorous, academically intense programs in high school are more likely to enroll and persist in post-school education | |
| <p>2. Exit Exam Requirements/ High School Diploma Status</p> | <ul style="list-style-type: none"> • Students who received a high school diploma were more likely to participate in postsecondary education • Students who had high scores on adaptive and academic skills, self-care skills, GPA on academic activities, received a diploma, and higher IQs as reported in school records were more likely to live independently and be engaged in post-school employment • Students who graduated with a diploma (versus a certificate) were more likely to be engaged in post-school employment • Students who had high GPA at graduation were more likely to have high GPA in post-school education | <p>DaDeppo, 2009; Harvey, 2002; Heal & Rusch, 1994; Heal & Rusch, 1995; Rabren et al., 2002</p> |
| <p>3. Program of Study</p> | <ul style="list-style-type: none"> • 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 | <p>Shandra & Hogan, 2008</p> |
| <p>4. Transition Program</p> | <ul style="list-style-type: none"> • The Youth Transition Program’s (YTP) goal is to improve participant’s post school outcomes by preparing them for meaningful competitive employment or career related post secondary training. Through the YTP students receive (a) transition planning focused on post school goals, (b) instruction in academic, vocational and independent living and personal social areas, (c) paid job training while in the program, and assistance to secure employment or enter postsecondary education upon leaving the program; and (d) follow up support for up to 2 years after leaving the program to help youth negotiate the uncertainties of the transition | <p>Benz et al., 2000; Certo et al., 2005; Halpern et al., 1995; Karpur, Clark, Caproni, & Sterner, 2005; Morningstar et al., 2010; Repetto et al., 2002</p> |

SECONDARY TRANSITION EVIDENCE-BASED PRACTICES AND PREDICTORS OF POST-SCHOOL SUCCESS

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| | <p>years.</p> <ul style="list-style-type: none"> • Students who participated in the YTP with 4+ transition goals met were more likely to be engaged in post-school employment or education • Students who received transition planning services (compared to those who did not) during the year prior to leaving school were more likely to be engaged in post-school education • Transition service characteristics (i.e., Assoc. of Retarded Citizens, Department of Children and Families, Developmental Services, Division of Blind Services, DVR Rehab, Easter Seal, Job Service of FL, Job Training, Mental Health, Social Security Initiatives, United Cerebral Palsy) were significantly positively correlated with the rate of exiters found in postsecondary education • Transition support characteristics (i.e., Agency Referral FU, Case Management, Community Services; Employment Spec. Equipment, Family Services, Financial, Guardianship, Guidance/Counseling, Living Arrangement, Medical, Parent Information, Referral, Social/Leisure, Support Service, Teacher Resources, Transition Spec., Transportation) were significantly positively correlated with the rate of exiters found in postsecondary education • Transition program characteristics (i.e., academic, adult ed. Career education, college, community training, course mod. developmental train. employment, entrepreneurship, follow-up services, goodwill, job coach, job corp, life skills, military, vocational training, voc eval/assess) were significantly positively correlated with the rate of exiters found in postsecondary education • Students with EBD, who received TIP-based transition services, were more than three times more likely than youth with EBD, who did not receive TIP services, to be engaged in post-school education • Students who participated in the Transition Service Integration Model were more likely to be engaged in post-school employment • Students who participated in transition programs that included student involvement in the IEP, skill development, and opportunities for self-advocacy and self-determination, postsecondary education preparation, independent living preparation, and career preparation had higher postsecondary self-determination skills as measured by the Psychological Empowerment subscale of the ARC's Self-Determination Scale (Wehmeyer & Kelchner, 1995), the How I feel About Myself Scale (Rehfeldt, 2006), and the Adult Trait Hope Scale (Snyder et al., 1991) | |
| <p>5. Occupational Courses</p> | <ul style="list-style-type: none"> • Students who passed more than half or all courses in 8 curriculum areas (remedial academics, traditional content classes, personal finance, community access, behaving responsibly, goal-setting or problem solving, specialized vocational education, regular vocational education) were more likely to be engaged in postsecondary education | <p>Flannery et al., 2008; Halpern et al., 1995</p> |

SECONDARY TRANSITION EVIDENCE-BASED PRACTICES AND PREDICTORS OF POST-SCHOOL SUCCESS

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| | <ul style="list-style-type: none"> Students who participated successfully in Occupational Skills Training (OST) program services which included characteristics: individualized design, work-site based curriculum, and a focus on the existing labor market and employment, were more likely to higher wages and worked more hours per quarter. | |
| 6. Paid Work Experience | <ul style="list-style-type: none"> Students who participated in the Youth Transition Program (Oregon) with 2 or more paid jobs during high school were more likely to be engaged in post-school employment or education Students in the School to Work Transition Program (Oregon) who had 2 or more jobs during the last two years of high school were more likely to be engaged in post-school employment Students who had worked for pay during high school for a full year were more likely to be living independently Students with two or more jobs during their last two years of high school were more likely to be engaged in post-school employment 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 | Benz et al., 1997; Benz et al., 2000; Bullis et al., 1995; Cater et al., 2011; Doren & Benz, 1998; McDonnal, 2010; Rabren et al., 2002 |
| 7. Vocational Education | <ul style="list-style-type: none"> Students who participated in vocational education were 2 times more likely to be engaged in full-time employment Students who passed more than half or all courses in 8 curriculum areas (remedial academics, traditional content classes, personal finance, community access, behaving responsibly, goal-setting or problem solving, specialized vocational education, regular vocational education) were more likely to be engaged in postsecondary education Students with vocational education credits in high school (versus those with none) were more likely to be engaged in post-school employment and post-school education Students who received technology training were more than twice as likely to be employed than those who did not receive technology training Vocational courses (CTE) improved later earnings for those students who enrolled in postsecondary education or training | Baer et al., 2003; Baker & Popowics, 1983; Berg, 2003; Halpern et al., 1995; Harvey, 2002; Leonard et al., 1999; Oliver & Spokane, 1988; Silverberg et al., 2004 |
| 8. Work Study | <ul style="list-style-type: none"> Participation in work study increased the likelihood of full-time employment more than two times Students in the Bridges School to Work Program who completed the internship were more likely to accept a post-school job offer Students who participated in the Bridges program in their last year of high school and completed the internship were 4 times more likely to be employed Students who received a job offer after completion of the Bridges internship were five times more likely to be employed | Baer et al., 2003; Fabian et al., 1998; Luecking & Fabian, 2000 |

SECONDARY TRANSITION EVIDENCE-BASED PRACTICES AND PREDICTORS OF POST-SCHOOL SUCCESS

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| 9. Career Awareness | <ul style="list-style-type: none"> Students in the School to Work Transition Program (Oregon) who exited school with high job search skills were more likely to be engaged in post-school employment Students in the School to Work Transition Program (Oregon) who exited school with high career awareness skills were more likely to be engaged in post-school employment or education | Benz et al. 1997 |
| 10. Community Experiences | <ul style="list-style-type: none"> 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 |
| 11. Self-Advocacy/Self-Determination | <ul style="list-style-type: none"> Students who passed more than half or all courses in 8 curriculum areas (remedial academics, traditional content classes, personal finance, community access, behaving responsibly, goal-setting or problem solving, specialized vocational education, regular vocational education) were more likely to be engaged in postsecondary education Students with higher self-determination skills were more likely to be engaged in post-school employment and independent living Students who participated in self-determination skill development programs had higher postsecondary self-determination skills as measured by the Psychological Empowerment subscale of the ARC's Self-Determination Scale (Wehmeyer & Kelchner, 1995), the How I feel About Myself Scale (Rehfeldt, 2006), and the Adult Trait Hope Scale (Snyder et al., 1991) | Halpern et al., 1995; Hansford & Hattie, 1982; Holder, Moncher, Schinke, & Barker, 1990; McDougall, Evans, & Baldwin, 2010; Morningstar et al., 2010; Valentine, DuBois, & Cooper, 2004; Wehmeyer & Schwartz, 1997 |
| 12. Self-Care/Independent Living Skills | <ul style="list-style-type: none"> Students who had high scores on adaptive and academic skills, self-care skills, GPA on academic activities, received a diploma, and higher IQs as reported in school records were more likely to live independently and be engaged in post-school employment Students who had high self-care skills were more likely to be engaged in post-school education, employment, and independent living 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 higher quality of life (independent living) and be engaged in post-school employment Students with strength-based adaptive behavior skills were more likely to be engaged in post-school independent living | Armstrong, Dedrick, & Greenbaum, 2003; Blackorby et al., 1993; Carter et al., 2011; Heal & Rusch, 1994; Heal & Rusch, 1995; Roessler et al., 1990 |
| 13. Social Skills | <ul style="list-style-type: none"> Students in the School to Work Transition Program (Oregon) who exited high school with high social skills at exit were more likely to be engaged in post-school employment Students who passed more than half or all courses in 8 curriculum areas (remedial academics, traditional content classes, personal finance, community access, behaving responsibly, goal-setting or problem solving, specialized | Benz et al. 1997; Halpern et al., 1995; Roessler et al., 1990 |

SECONDARY TRANSITION EVIDENCE-BASED PRACTICES AND PREDICTORS OF POST-SCHOOL SUCCESS

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| | <p>vocational education, regular vocational education) were more likely to be engaged in postsecondary education</p> <ul style="list-style-type: none"> • Students with high social skills (based on teacher ratings from the Life Centered Career Education rating scales) were more likely to have higher quality of life (independent living) and be engaged in post-school employment | |
| 14. Parental Involvement | <ul style="list-style-type: none"> • 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 • Students with positive perceptions of their parents' involvement in the IEP meeting (e.g., active participants, provided some input, attended meetings but did not actively participate) had higher postsecondary self-determination skills as measured by the Psychological Empowerment subscale of the ARC's Self-Determination Scale (Wehmeyer & Kelchner, 1995), the How I feel About Myself Scale (Rehfeldt, 2006), and the Adult Trait Hope Scale (Snyder et al., 1991) • Students with positive perceptions of activities parents involved them in to prepare them for postsecondary education had higher postsecondary self-determination skills as measured by the Psychological Empowerment subscale of the ARC's Self-Determination Scale (Wehmeyer & Kelchner, 1995), the How I feel About Myself Scale (Rehfeldt, 2006), and the Adult Trait Hope Scale (Snyder et al., 1991) • Students with positive perceptions of career skills parents taught them had greater postsecondary self-determination skills • Students with positive perceptions of independent living skills parents taught them had greater postsecondary self-determination skills as measured by the Psychological Empowerment subscale of the ARC's Self-Determination Scale (Wehmeyer & Kelchner, 1995), the How I feel About Myself Scale (Rehfeldt, 2006), and the Adult Trait Hope Scale (Snyder et al., 1991) | Carter et al., 2011; Fourqurean et al., 1991; McDonnall, 2010; Morningstar et al., 2010 |
| 15. Parent Expectations | <ul style="list-style-type: none"> • Students who had parents with high expectations were more likely to be engaged in postsecondary education or employment • Students who had parents with high expectations were more likely to attend postsecondary education <p>Students who had parents with high expectations were more likely to be engaged in postsecondary employment</p> | Doren, Gau, & Lindstrom, 2012; Chiang, Cheung, Hickson, & Tsai, 2012; Carter, Austin, & Trainor, 2012 |
| 16. Student Support | <ul style="list-style-type: none"> • Students who had support from self-family-friend network to find a job were more likely to be engaged in post-school employment • Students who indicated high levels of satisfaction with instruction received (reading, writing, math, behaving responsibly, and problem solving) during high school were more likely to be engaged in post-school education • Students who spent more time per week with friends during school were more likely to experience higher quality of life (independent living) | Doren & Benz, 1998; Halpern et al., 1995; Hasnain & Balcazar, 2009; Heal et al., 1999; Roessler et al., 1990 |

SECONDARY TRANSITION EVIDENCE-BASED PRACTICES AND PREDICTORS OF POST-SCHOOL SUCCESS

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| | <ul style="list-style-type: none"> • 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 higher quality of life (independent living) and be engaged in post-school employment • Student who had support from informal (family/friends) or formal (vocational rehabilitation service) were more likely to work in community-based work settings. | |
| 17. Interagency Collaboration | <ul style="list-style-type: none"> • 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 • Transition interagency council characteristics (i.e., agency directories, agreements, councils, general information, local business advisory boards, parent network, statements) were significantly and positively correlated with postsecondary education | Bullis et al., 1995; Repetto et al., 2002 |