Teacher Preparation and Professional Development to Deliver Evidence-Based Transition Planning and Services to Youth With Disabilities

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Since 1990, and with subsequent amendments in 1997 and 2004, the secondary transition provisions of the Individuals with Disabilities Education Act (IDEA) have required special educators to plan, coordinate, and deliver transition services for secondary-aged students with disabilities (U.S. Department of Education, 2011). Section 300.43 of IDEA 2004 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 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, or community participation and (b) is based on the individual child's needs, taking into account the child's strengths, preferences, and interests, including 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 provision of a functional vocational evaluation (U.S. Department of Education, 2011).

Despite these requirements, students with disabilities continue to face post-school outcomes in which they are less prepared for adulthood than their peers without disabilities (Newman, Wagner, Cameto, & Knokey, 2009). This discrepancy may be due, in part, to secondary special educators feeling unprepared to plan for and deliver transition services (Li, Bassett, & Hutchison, 2009; Wolfe, Boone, & Blanchett, 1998). Studies have shown that secondary special educators lack knowledge and skills that hinder their abilities to implement effective transition practices (Benitez, Morningstar, & Frey, 2009; Knott & Asselin, 1999). Consequently, teachers who are unprepared to plan and deliver transition services may be contributing to the poor outcomes of students with disabilities (Morningstar & Clavenna-Deane, in press).

Given the changing roles of secondary special educators, it stands to reason that teacher education and professional development should be geared toward increasing pre-service content targeting transition planning and services. Unfortunately, Anderson et al. (2003) reported from a national survey of special education personnel preparation programs that less than half of the programs (43%) offered a stand-alone course devoted to secondary transition. Transition personnel development (i.e., pre-service and in-service) has been recognized as a keystone to improving transition services (Blalock et al., 2003); however, clear guidance has not been provided for establishing high-quality approaches that prepare secondary transition teachers with the knowledge and skills to improve in-school and post-school outcomes for students with disabilities.

The innovation configuration described in this paper can serve as a foundation for enhancing current practices in preparing special educators to provide transition services. As such, this paper examines (a) the current state of identified transition evidence-based practices (EBPs) and predictors of post-school success to support students with disabilities as they transition into post-school life; (b) a review of critical programmatic structures and services teachers must have that predict better post-school outcomes, including secondary transition EBPs to support student skill development; and (c) implications for future practice and research, including how state educational agencies (SEAs) and institutions of higher education (IHEs) can utilize the innovation configuration to identify areas of strengths and necessary changes to improve transition services that result in improved adult outcomes for youth with disabilities.

Required Knowledge and Skills for Teachers of Secondary Students With Disabilities

In order to improve in-school and post-school outcomes for students with disabilities, teachers must be prepared with the knowledge and skills to provide secondary transition EBPs and programs. However, recent survey research indicates that many transition specialists and teachers are not fully prepared to effectively implement secondary transition EBPs, and many transition

specialists and teachers have indicated that they are unaware of established EBPs of post-school success (Mazzotti & Plotner, 2013; Morningstar & Roberts, in preparation). To ensure teachers are fully prepared to provide effective secondary transition programs and practices, student-level EBPs and systems-level predictors must be included in teacher education and professional development (Cook, Cook, & Landrum, 2013; Mazzotti, Test, & Mustian, 2012).

In 2009, the National Secondary Transition Technical Assistance Center (NSTTAC, 2013) completed a two-part systematic literature review that included identifying secondary transition EBPs (Test, Fowler, et al., 2009) and predictors of post-school success (Test, Mazzotti, et al., 2009). The first comprehensive literature review focused on identifying secondary transition EBPs to determine practices that supported secondary transition skill development for

> **Essential Components of Effective Transition Programs**
>
> The *Taxonomy* is a research-based framework used in the field of secondary transition to guide the development, implementation, and evaluation of secondary transition programs (Kohler & Field, 2003; Mazzotti, Rowe, & Test, 2013). The *Taxonomy* includes the following five essential areas:
>
> - student-focused planning,
> - student development,
> - family involvement,
> - program structure, and
> - interagency collaboration.

students. Based on the first review of literature, 63 secondary transition EBPs were identified (Test, Fowler, et al., 2009). Kohler's *Taxonomy for Transition Programming* (i.e., *Taxonomy*; Kohler, 1996) was used to organize the EBPs. The *Taxonomy* is a research-based framework used in the field of secondary transition to guide the development, implementation, and evaluation of secondary transition programs (Kohler & Field, 2003; Mazzotti, Rowe, & Test, 2013). The *Taxonomy* includes five essential areas: (a) student-focused planning, (b) student development, (d) family involvement, (d) program structure, and (e) interagency collaboration. Of the 63 practices,

six were identified under the taxonomy area of student-focused planning, 56 were identified under student development, one was identified under family involvement, nine were identified under program structure, and nothing was identified under interagency collaboration (Test, Fowler, et al., 2009). See Appendix A: Table A1 for a list of EBPs by taxonomy area. In an effort to bridge the research-to-practice gap, NSTTAC developed Practice Descriptions that describe each EBP in detail and Research to Practice Lesson Plan Starters that provide teachers with lesson plans based on the empirical research they can use to teach each EBP (NSTTAC, 2013).

Although the first review examined group and single-subject experimental research and provided pertinent information related to EBPs to support skill development of secondary students with disabilities, it did not provide information about secondary transition program components that lead to positive outcomes for students with disabilities as they transition into post-school life. Therefore, the second review of literature focused on reviewing correlational research to determine in-school secondary transition program variables that were linked to positive post-school outcomes for students with disabilities (Test, Mazzotti, et al., 2009). Based on findings of the second review, 16 evidence-based predictors of post-school success were identified (see Appendix A: Table A2). Findings supported the emergence of essential secondary transition program characteristics required to ensure students with disabilities experience positive outcomes (Haber et al., 2013; Kohler, 1996; Landmark, Ju, & Zhang, 2010). Since the initial review, one additional predictor (i.e., parental expectations) has been added.

Finally, in an effort to support secondary transition program improvement, NSTTAC and the National Post-School Outcomes Center have recently completed a Delphi study to further define each predictor category in order to operationally define each predictor, including essential program characteristics, to ensure educators understand the components to develop, implement, and evaluate

secondary transition programs (Rowe et al., 2013a). Based on the results of the Delphi study, a Predictor Implementation School/District Self-Assessment was developed for schools, districts, and states to use to evaluate, develop, and improve transition programs to ensure programs include evidence-based transition program characteristics (Rowe et al., 2013b).

Appendix B features an innovation configuration that outlines the knowledge and skills needed to ensure that currently identified EBPs and programs are implemented. This innovation configuration should be applied to teacher education or professional development programs, rather than to a single course or training. Innovation configurations are used to define essential content and level of implementation within teacher education programs. Appendix A includes (a) Table A1: Secondary Transition Evidence-Based Predictors Organized by the Taxonomy, (b) Table A2: Operational Definitions for Evidence-Based Predictors, and (c) Table A3: Evidence-Based Predictors by Post-School Outcome Area.

Essential Components of Effective Transition Programs

For teachers to be prepared to implement secondary transition EBPs and predictors of post-school success, it is imperative that teacher education and professional development include these essential evidence-based components throughout a course of study (Morgan, Callow-Heuser, Horrocks, Hoffman, & Kupferman, 2013; Morningstar & Clark, 2003). It is important to note that although secondary transition personnel must have the knowledge and skills required to implement EBPs, there is a need for transition personnel to understand the systems-level supports that must also be in place to ensure programs can effectively support students with disabilities as they transition into adulthood. Therefore, it is imperative that personnel preparation programs also provide this information. Systems-level supports typically fall under the taxonomy categories of program structure and interagency collaboration and comprise the infrastructures that ensure comprehensive transition programs are effectively implemented. The following discussion of EBPs

and predictors is organized according to the five areas of the *Taxonomy* and include an overview of secondary transition EBPs and predictors of post-school success, including systems-level implementation, for students with disabilities.

Student-Focused Planning

There are five essential components under this area that should be considered while preparing teachers to work with secondary students with disabilities: (a) involving students in transition Individualized Education Programs (IEPs), (b) teaching transition planning skills, (c) including in the IEP a comprehensive and relevant program of study, (d) defining in the IEP appropriate and measurable transition goals, and (e) utilizing systematic age-appropriate transition assessment. Teachers must first be familiar with the evidence-based predictors that relate to the essential components. This familiarity provides teachers with the knowledge and skills to ensure that programs include practices leading to positive post-school success.

Specifically, there are two evidence-based predictors (i.e., self-determination/self-advocacy and program of study) related to these essential components that should be considered while preparing teachers to effectively implement secondary transition programs. First, research indicates that students who graduate high school with higher levels of self-determination are more likely to have positive post-school employment and education outcomes (Morningstar et al., 2010; Test, Mazzotti, et al., 2009). Self-determination/self-advocacy refers to "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" (Rowe et al., 2013b, p. 8). Related to these essential components, teachers must be prepared to teach self-advocacy skills, goal-setting skills, choice-making skills, and problem-solving skills. Additionally, teachers must be prepared to understand "cultural nuances" while teaching self-determination (Rowe et al., 2013b, p. 9) to ensure that cultural identity

is considered while supporting students from diverse backgrounds to make transition decisions and utilize self-determination strategies (Trainor, 2005).

Educators must also understand how to embed skill development and opportunities for students to practice self-determined skills within academic course content as well as throughout other aspects of students' days. This may include implementing EBPs such as the Self-Determination Learning Model of Instruction (Shogren, Palmer, Wehmeyer, Williams-Diehm, & Little, 2012), which can be implemented in general educational contexts and in special education settings. Teachers must also have an understanding of using student-centered transition assessment methods to facilitate the ability of students to learn about themselves, set in-school and post-school goals, and participate in the transition planning process. This is especially relevant while preparing students to self-direct their transition planning meetings (Martin et al., 2006).

Developing a relevant program of study has also been identified as a predictor of positive post-school employment success for students with disabilities (Test, Mazzotti, et al., 2009). Program of study has been operationally defined as "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" (Rowe et al., 2013b, p. 8). Therefore, effective transition programming requires that teachers have the knowledge and skills to work with students to develop an individualized program of study that incorporates relevant school experiences that engage students throughout their secondary school years. This requires secondary educators to understand and implement EBPs. Secondary educators must also understand predictors of post-school success, models of individualized learning plans (Solberg, Wills, & Osman, 2013), and diploma options available to all students.

NSTTAC has identified six EBPs that teachers can use to facilitate their understanding and implementation of student-focused planning (see Appendix A: Table A1; refer to http://www.nsttac.org/content/evidence-based-practices for Practice Descriptions and Research to Practice Lesson Plan Starters). For each of the EBPs identified under student-focused planning, there are a number of empirically validated teaching strategies used to teach each skill. Two examples of EBPs to teach student involvement in transition IEPs are the Self-Advocacy Strategy (VanReusen, Bos, & Shumaker, 1994) and the Self-Directed IEP (Martin, Huber-Marshall, Maxson, & Jerman, 1996). These practices have a number of empirical research studies to support use (e.g., Allen, Smith, Test, Flowers, & Wood, 2001; Lancaster, Shumaker, & Deshler, 2002; Martin et al., 2006; Test & Neale, 2004). Additionally, the Whose Future is it Anyway? curriculum (Wehmeyer, Lawrence, Soukup, & Palmer, 2004) has been identified as an EBP for teaching students about the transition planning process. Teacher education and professional development efforts must provide educators with opportunities to learn about and implement EBPs related to student-focused planning, including having the opportunity to implement EBPs and predictors in course work and field experiences.

Student Development

The *Taxonomy* area of student development includes assessing and teaching functional, academic, social, and vocational skills to ensure students are fully prepared for post-school life (Kohler, 1996). In this area, teachers should be prepared to teach and provide training related to (a) independent living, (b) community participation, (c) employment skills, (d) work-based experiences, (e) academics, and (f) self-determination. This domain has the most extensive depth and breadth of research evidence; therefore, teachers should develop a content map of the range of practices leading to student skill development and the factors that facilitate post-school success. While preparing teachers to assess and teach transition-related, student-specific skills, culturally

responsive teaching approaches that incorporate cultural knowledge, prior experience, frame of reference, and performance styles of diverse students should be emphasized so that learning is relevant and effective (Gay, 2010). The following sections are organized by the essential student development components.

Independent living skills. Two evidence-based predictors related to teaching independent living skills (i.e., self-care/independent living and social skills) should be considered. Self-care/independent living has been operationally defined as "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" (Rowe et al., 2013b, p. 9). The second evidence-based predictor is social skills, operationally defined as "behaviors and attitudes that facilitate communication and cooperation (e.g., social conventions and social problem-solving when engaged in a social interaction, body language, speaking, listening, responding, verbal and written communication)" (Rowe et al., 2013b, p. 10). Specifically, teachers must be prepared to integrate both independent living skills and social skills as needed to support the diverse needs of students. Therefore, at the systems level, teachers must know how to effectively embed independent living and social skills across academic content areas, in the general educational context, and in community settings.

Next, teachers must be prepared to teach independent living skills to students with disabilities. Independent living skill training will vary based on the needs of individual students. NSTTAC has identified nine EBPs for teaching independent living (i.e., home maintenance skills, leisure skills, food preparation and cooking skills, laundry skills, self-management skills, safety skills, communication skills, self-care skills, and social skills; see Appendix A: Table A1; refer to

http://www.nsttac.org/content/evidence-based-practices for Practice Descriptions and Research to Practice Lesson Plan Starters). For each of the evidence-based independent living skills, there are a number of empirically validated teaching strategies that have been used to teach each skill. For example, computer-assisted instruction has been used to teach food preparation and cooking skills to students with intellectual disabilities (Ayres & Cihak, 2010; Mechling, Gast, & Fields, 2008; Mechling & Stephens, 2009). Additionally, video modeling has been used to teach home maintenance skills to students with autism and moderate intellectual disabilities (e.g., Cannella-Malone, Wheaton, Wu, Tullis, & Park, 2012; Lasater & Brady, 1995; Mechling, Gast, & Gustafson, 2009).

The EBP descriptions and the NSTTAC resources provide methods for teaching evidence-based independent living skills. Given that these resources are now readily available, teacher education and professional development programs must prepare teachers to (a) teach independent living skills using EBPs, (b) understand when independent living skill training is needed, and (c) provide opportunities to use EBPs during course work and field experiences.

Community participation skills. Thus far, only one evidence-based predictor related to teaching community participation skills (i.e., community experiences) has been identified. Community experiences have been operationally defined as "activities occurring outside of the school setting, supported with in-class instruction, where students apply academic, social, and/or general work behaviors and skills" (Rowe et al., 2013b, p. 6). Teachers should have the knowledge and skills to effectively understand the characteristics of this predictor while determining opportunities students have to participate in community experiences in transition programs. Specifically, teachers must be prepared to integrate community experiences into the curriculum; they must also learn to consider rigorous simulated school experiences when budgetary funds are

limited. At the systems level, teachers must be prepared with the knowledge and skills to identify methods to provide meaningful community experiences (Landmark et al., 2010). This includes preparing teachers with information about how to allocate resources at the school and community levels, work with community partners, and conduct community mapping to determine opportunities and resources available to facilitate community experiences for students with disabilities.

Teachers must be prepared to provide community-based instruction to students with disabilities to support the generalization of skills learned in the classroom and to work with students to interpret and deepen their existing knowledge and enthusiasm for learning (Wiodowski & Ginsberg, 1995). It is essential to understand students' cultures and to use their communities to support engagement. NSTTAC has identified a number of EBPs for teaching community participation skills (i.e., restaurant purchasing skills, grocery shopping skills, life skills, and finance skills; see Appendix A: Table A1; refer to http://www.nsttac.org/content/evidence-based-practices for Practice Descriptions and Research to Practice Lesson Plan Starters). For each of the evidence-based skills, there have been a number of empirically validated studies that have used community-based instruction to teach each skill. For example, community-based instruction has been used to teach community integration skills, including crossing the street, washing clothes at a Laundromat, and cashing a check at a bank (i.e., Bates, Cuvo, Miner, & Korebek, 1999; Branham, Collins, Schuster, & Kleinhert, 1999; Collins, Stinson, & Land, 1993). Additionally, simulated instruction in the classroom paired with community-based instruction at a local grocery store has been used to teach students banking skills (i.e., withdrawing money from an ATM; Alberto, Cihak, & Gama, 2005).

The EBPs related to community participation and the NSTTAC resources provide methods for teaching evidence-based community participation skills. Therefore, teacher education and

professional development must prepare teachers to (a) understand the importance of community-based instruction for teaching generalization of skills; (b) teach community participation skills using EBPs; (b) understand when community participation is needed; (c) investigate methods to connect learning to schools and communities to facilitate community participation (e.g., community mapping); and (d) provide opportunities for teachers to use community participation EBPs during course work and field experiences.

Employment skills and experiences. This essential component includes teacher knowledge and skills related to providing both school-based and work-based employment opportunities for students with disabilities while they are in high school. There are five evidence-based predictors related to teaching employment skills and experiences (i.e., career awareness, occupational courses, paid employment/work experience, vocational education, and work study). See Appendix A: Table A2 for operational definitions of each of the evidence-based predictors related to teaching employment skills and experiences.

Specifically, teachers must be prepared to integrate school-based and work-based career development experiences into the curriculum. This should include preparing teachers with the knowledge and skills to understand how to develop, implement, and evaluate school-based and work-based experiences. At the systems level, teachers must be able to identify meaningful school-based (e.g., school-based enterprises, on-campus jobs) and work-based (e.g., volunteering, job shadowing, internships, paid work experiences) career development experiences (Baer et al., 2003; Benz, Lindstrom, & Yovanoff, 2000). This includes preparing teachers with information about how to (a) develop and implement school-based employment opportunities, (b) identify and allocate resources at the school and community levels to ensure employment opportunities for

students, and (c) develop partnerships with employers and community partners to facilitate off-campus work experiences for students with disabilities.

In addition to understanding the predictors, teachers must be prepared to provide employment skill training to ensure that students with disabilities have the skills to gain meaningful, competitive employment in post-school life. Employment skill training will vary based on the needs of individual students. NSTTAC has identified seven EBPs for teaching employment skills (i.e., job-specific employment skills [e.g., cleaning a bathroom, using a copy machine]; see Appendix A: Table A1; refer to http://www.nsttac.org/content/evidence-based-practices for Practice Descriptions and Research to Practice Lesson Plan Starters). There are a number of empirically validated teaching strategies that have been used to teach employment skills. For example, mnemonics has been used to teach students to complete job applications (Nelson, Smith, & Dodd, 1994). Additionally, computer-assisted instruction has been used to teach employment skills, such as rolling silverware, watering office plants, and changing paper towels in an office bathroom (Mechling & Ortega-Hurndon, 2007; Riffel et al., 2005).

The EBPs related to employment skills and the NSTTAC resources provide methods for teaching evidence-based employment skills. Therefore, teacher education and professional development programs must prepare teachers to (a) assess student employment skills and interests, (b) understand how to provide employment skills instruction and embed career awareness into the curriculum, (c) effectively implement school-based and work-based employment experiences, and (d) provide opportunities to use employment skill EBPs during course work and field experiences.

Teaching academic skills. This essential component includes teacher knowledge and skills related to academic skill instruction for students with disabilities while they are in high school. There are three evidence-based predictors related to teaching academic skills (i.e., exit exam

requirements/high school diploma status, inclusion in general education, and program of study).

Exit exam requirements/high school diploma status has been operationally defined as

standardized tests, assessing a 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.

(Rowe et al., 2013b, pp. 6-7)

Inclusion in general education has been operationally defined as follows: "General education requires students with disabilities to have access to general education curriculum and be engaged in regular education classes with peers without disabilities" (Rowe et al., 2013b, p. 7). Last, program of study has been operationally defined as "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" (Rowe et al., 2013b, p. 8).

Teachers should have the knowledge and skills to understand the academic skills, including functional academic skills, required for students to participate in a particular program of study, access the general curriculum, and obtain a high school diploma. At the systems level, teachers must be prepared with the knowledge and skills to implement the principles of Universal Design for Learning to support students with disabilities in the general curriculum, work with administrators and other school personnel to ensure students with disabilities are successful in academic settings, and identify a process for students to be successful and supported in a specific program of study (Rowe et al., 2013b). This includes preparing teachers with information about how to (a) differentiate instruction; (b) provide learning strategies and meta-cognitive strategy instruction; (c) develop relationships with general education teachers, including career and technical education

teachers, to support students with disabilities; and (d) identify needed accommodations and assistive technology that can support students with disabilities in academic settings.

Teachers must also be prepared to provide academic skills, including functional academic skills, for students with disabilities to ensure students have the reading, writing, and math skills to be successful in all aspects of post-school life. Academic skill training will vary based on the needs of individual students. NSTTAC has identified a number EBPs for teaching both academic and functional academic skills (see Appendix A: Table A1; refer to http://www.nsttac.org/content/evidence-based-practices for Practice Descriptions and Research to Practice Lesson Plan Starters). For each of the evidence-based academic skills, there have been many empirically validated teaching strategies used to teach each skill. For example, peer-assisted instruction (e.g., peer tutoring, cooperative learning) has been used to teach math and writing skills (Bahr & Reith, 1991; Wong, Butler, Ficzere, & Kuperis, 1997). Additionally, mnemonics has been used to facilitate learning of new information and to teach math skills (i.e, Wolgemuth, Cobb, & Alwell, 2008).

The EBPs related to academic skills and the NSTTAC resources provide methods for teaching evidence-based academic skills; therefore, teacher education and professional development programs must prepare teachers with knowledge and skills to (a) teach learning and meta-cognitive strategies to support academic skill development; (b) understand how to provide functional academic skills instruction; (c) embed real-life examples within academic content; (d) provide remediation, accommodations, and assistive technology to support academic skill development; and (e) provide opportunities to use academic skill EBPs during course work and field experiences.

Self-determination skills. This domain includes teacher knowledge and skills related to self-determination skill instruction for students with disabilities. The one evidence-based predictor

to teaching self-determination skills has been operationally defined as "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" (Rowe et al., 2013b, p. 8). The concept of self-determination includes 12 component skills that students must possess to lead a self-determined post-school life: (a) choice-making skills; (b) decision-making skills; (c) problem-solving skills; (d) goal-setting and attainment skills; (e) independence, risk-taking, and safety skills; (f) self-regulation/self-management skills; (g) self-instruction skills; (h) self-advocacy and leadership skills; (i) internal locus of control skills; (j) positive attributions of efficacy and outcome expectancy skills; (k) self-awareness skills; and (l) self-knowledge skills (Wehmeyer & Schalock, 2001).

At the systems level, teachers must be prepared with the knowledge and skills to develop and implement procedures that include teaching the components of self-determination, working with general education teachers to ensure opportunities related to self-determination are embedded across the curricula, and embedding real-life experiences in the curriculum to provide opportunities for students to learn self-determination skills (Wehmeyer & Schalock, 2001). This includes (a) preparing teachers with information about self-determination assessment and curricula; (b) developing and implementing student leadership opportunities; (c) developing plans that include general education teachers to ensure that choice making, problem solving, and goal setting are embedded in lesson planning across the curricula; and (d) identifying self-determination EBPs and curricula to support students with mild, moderate, and severe disabilities.

In addition to understanding the predictors, teachers must be prepared to provide self-determination skill instruction for students with disabilities to ensure students have the self-determination skills to be successful in all aspects of post-school life. Self-determination skill training will vary based on the needs of individual students. NSTTAC has identified two EBP

curricula for teaching self-determination skills (i.e., Whose Future is it Anyway? and

Self-Determined Learning Model of Instruction [SDLMI]; see Appendix A: Table A1; refer to

http://www.nsttac.org/content/evidence-based-practices for Practice Descriptions and Research to

Practice Lesson Plan Starters). These empirically validated self-determination curricula have been

used to teach several self-determination skills (e.g., goal-setting skills, problem-solving skills,

decision-making skills). For example, Whose Future is it Anyway? has been used to teach a

number of self-determination skills required in the transition planning process (e.g., self-awareness

skills, goal-setting skills, decision-making skills; Y. Lee et al., 2011). Additionally, the

SLDMI has been used to teach goal setting and attainment skills (S. Lee, Wehmeyer, Palmer,

Soukup, & Little, 2008).

The EBPs related to teaching self-determination skills and the NSTTAC resources provide

methods for teaching evidence-based self-determination skills. Although these practices and

resources are readily available, teacher education and professional development must prepare

teachers with (a) an understanding of the concept of self-determination, (b) knowledge and skills to

effectively teach self-determination skills and embed real-life self-determination examples into the

curriculum, (c) an understanding of the various self-determination assessments and curricula

available for teaching self-determination skills, and (d) opportunities to use self-determination skill

EBPs during course work and field experiences.

Family Involvement

This component includes involving families in the transition planning process and

empowering families to take a role in the process (Kohler, 1996). There are five essential

components under this area that should be considered while preparing teachers to work with

secondary students with disabilities: (a) facilitating parental involvement, engagement, and support

for post-school outcomes; (b) encouraging parent involvement in transition planning;

(c) understanding student perceptions of family support; (d) promoting positive parental expectations for post-school employment and education; and (e) implementing parental training in transition.

Parental involvement is one predictor to consider while preparing teachers to involve and empower families in transition planning. Parental involvement has been operationally defined as follows: "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)" (Rowe et al., 2013b, p. 11). Teachers must be prepared with the knowledge and skills to provide information to parents or caregivers about all aspects of the transition process, establish a school-wide system to facilitate on-going communication with families, and ensure school staff has knowledge related to providing culturally competent transition planning.

Further, parental expectations have been identified as predictors of post-school success for students with disabilities. It is important that teachers understand effective transition components that should be included in a transition program that may affect parents' expectations for their students in the transition planning process (Doren, Gau, & Lindstrom, 2012). Additionally, encouraging parent involvement can promote active student involvement in the transition planning process (Wagner, Newman, Cameto, Javitz, & Valdes, 2012). This includes preparing teachers to (a) understand families, including families from culturally diverse backgrounds; (b) identify methods for involving families in the transition process; (c) work with families and students to promote understanding of the importance of preparing students for post-school life; and (d) promote positive parental expectations for culturally relevant post-school employment and education.

Teachers must also understand the EBPs that can be used to promote family involvement during transition planning. NSTTAC has identified one EBP that can be used by teachers to

facilitate family involvement (i.e., using training modules; see to Appendix A: Table A1; refer to http://www.nsttac.org/content/evidence-based-practices for Practice Descriptions and Research to Practice Lesson Plan Starters). Offering training has been empirically validated as a strategy to promote family involvement. For example, parent training has been used to teach parents about the transition planning process and about how to be an integral part of the process (Boone, 1992). Furthermore, in other fields of study, parent-training interventions are established as EBPs (cf. Kaminsky, Valle, Filene, & Boyle, 2008).

It is important that teachers are prepared to not only implement effective parent training, but to also understand the importance of the parental involvement predictors. Teacher education and professional development must provide teachers with (a) an understanding of the importance of family involvement, (b) opportunities to develop training they can use to facilitate family involvement, (c) knowledge and skills to work with families from diverse backgrounds, and (d) opportunities to work with families during course work and field experiences.

Program Structure

This component involves evaluating and improving transition programs to support the needs of students with disabilities (Kohler, 1996). As mentioned previously, program structure requires not only teacher facilitation of effective transition programs and practices, but also an understanding of and the ability to elicit systems-level support. Therefore, teacher preparation and professional development programs should include information related to the infrastructures and systems related to stakeholder involvement and participation in stakeholder groups while providing in-school and post-school transition services for students with disabilities.

To ensure the needs of all students with disabilities are met, educators, along with other school staff and administrators, must understand how to evaluate and improve secondary transition programs to ensure continual program improvements. There are seven essential program structure

components: (a) promoting opportunities for extended transition services (18-21 programs), (b) promoting inclusion in general education, (c) ensuring that effective transition programs and services are in place, (d) promoting student supports, (e) ensuring exit exam requirements/high school diploma status, and (f) implementing drop-out prevention interventions for at-risk youth. Teachers must also have the knowledge and skills to effectively implement the EBPs related to these program structure components.

Specifically, there are four evidence-based predictors related to these essential components (i.e., student support, inclusion in general education, transition program, and exit exam/high school diploma status) that should be considered while preparing teachers to ensure students receive effective, evidence-based transition planning and services. See Appendix A: Table A2 for the operational definition of each of the evidence-based predictors related to program structure. Teachers must be prepared with the knowledge and skills to improve transition programs; they must (a) understand the characteristics of each evidence-based predictor as it relates to transition program components; (b) identify opportunities that students with mild, moderate, and severe disabilities have for extended transition services beyond high school; (c) have knowledge and skills to facilitate access to the general curriculum for all students with disabilities; (d) identify models of transition programs (e.g., employment programs, career technical education, college training) that can be implemented in high school; and (e) develop and implement both informal and formal student support networks to ensure students are supported as they move through high school into post-school life.

Teachers must also understand the EBPs related to program structures that can be used to support students with disabilities. NSTTAC has identified three EBPs that can be used by teachers and schools to support students (Check and Connect, community-based instruction, and extension

of career planning services after graduation; see Appendix A: Table A2; refer to

http://www.nsttac.org/content/evidence-based-practices for Practice Descriptions and Research to

Practice Lesson Plan Starters). There are a number of empirically validated practices related to

these EBPs. For example, Check and Connect has been used to promote student involvement in

IEP meetings with students who have participated in systematic monitoring, mentoring, and

problem-solving and goal-setting training; there is also a variety of methods used to facilitate

participation in IEP meetings (Sinclair, Christensen, & Thurlow, 2005). In addition, extension of

career planning services after graduation has been used to promote increased financial skills for

students with disabilities by providing a variety of services (e.g., job training, identifying

employers, linking with adult service providers, on-the-job training, vocational assessment; Izzo,

Cartledge, Miller, Growick, & Rutkowski, 2000).

Teacher education and professional development programs must prepare teachers with

(a) an understanding of the need for effective methods to ensure transition programs include all of

the components to promote student success, (b) knowledge and skills to effectively evaluate and

improve transition programs and practices, (c) knowledge and understanding of methods to

facilitate both informal and formal support systems for students with disabilities, and

(d) opportunities to design and implement program structure EBPs during course work and field

experiences.

Interagency Collaboration

Interagency collaboration involves methods for developing relationships and agreements

with agency partners required to facilitate a successful transition into post-school life for students

with disabilities (Kohler, 1996). There are three essential components under this area that should

be considered while preparing teachers to work with secondary students with disabilities:

(a) connecting students and families to outside agencies, (b) understanding critical elements of interagency collaboration, and (c) cross-disciplinary training.

For interagency collaboration, EBPs have not yet been identified; however, interagency collaboration is considered to be an evidence-based predictor of post-school education and employment success (Test, Mazzotti, et al., 2009). Further, interagency collaboration has been continuously identified in the literature as a "best practice" in the transition planning process (Kohler, 1996; Morgan et al., 2013; Morningstar & Clark, 2003). Therefore, it is imperative that teachers are effectively prepared with the knowledge and skills to facilitate both intra-agency and interagency collaboration.

Similar to program structure, interagency collaboration requires not only teacher effort, but also systems-level supports that include making connections with intra-agency and interagency personnel to ensure students with disabilities are linked to services and supports to ensure both in-school and post-school success. Therefore, teacher preparation programs should include information related to systems-level supports that enhance teachers' knowledge and skills related to intra-agency and interagency collaboration. While considering intra-agency and interagency collaboration, it is imperative that teachers, along with other stakeholders, understand how the needs of students with disabilities from culturally diverse backgrounds are being met.

There is one predictor related to these essential components that should be considered while preparing teachers to effectively facilitate intra-agency and interagency collaboration (i.e., interagency collaboration). Interagency collaboration has been operationally defined as "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" (Rowe et al., 2013b, p. 10). Teachers must be prepared with the knowledge and skills to facilitate

intra-agency collaboration (i.e., collaboration within school [e.g., general education teachers, career technical educators, related service providers]) and interagency collaboration (i.e., collaboration with adult service providers and community partners). This includes preparing teachers to (a) participate in interagency councils; (b) develop and/or understand district/state interagency agreements; (c) identify methods for developing community partnerships (i.e., local businesses, recreational programs, and parent networks); (d) conduct community mapping to identify resources and adult services providers within the community; (e) understand interagency collaboration models; and (f) effectively collaborate with school personnel to ensure students with disabilities are supported throughout the school environment; this includes collaborating to ensure students receive appropriate accommodations and assistive technology as needed in course work.

This section has described the required knowledge and skills that teachers must have to provide evidence-based secondary transition programs and practices. It is imperative that teacher education and professional development programs include these components to ensure pre-service and in-service teachers are prepared to support secondary students with disabilities. The evidence-based predictors should guide transition program development and instruction, and the transition EBPs should be used to promote student skill development. This helps ensure that pre-service and in-service teachers are prepared to successfully work with secondary students with disabilities.

Recommendations and Conclusions

Although general consensus has been reached regarding the domains for teaching transition content, research related to transition EBPs offers continued enhancements to what should be taught. The steady increase in the volume of research targeting evidenced-based interventions for teaching students transition-related skills should guide content enhancement efforts for IHEs and SEAs. A large research base of secondary transition EBPs has been identified for teachers to use

to promote student skill development, such as (a) teaching academic and functional skills, employment skills, and self-determination skills; (b) providing community-based instruction; and (c) facilitating family involvement (Test, Fowler, et al., 2009). Additionally, there are 17 operationally defined predictors of post-school success (see Appendix A: Table A3) that support essential program characteristics that should be considered for inclusion in teacher preparation programs to ensure teachers are prepared to work with stakeholders to evaluate, develop, and enhance secondary transition programs at the school, district, and systems levels (Mazzotti et al., 2012; Rowe et al., 2013; Test, Mazzotti, et al., 2009). Taken together, these research syntheses provide direction for preparing secondary special educators and transition specialists in EBPs exhibiting at least moderate effects on student skill development; they also point to important areas that predict future in-school and post-school success.

Further, it is important to note that although two of the *Taxonomy* areas (i.e., student-focused planning and student development) have a number of EBPs to support the research base, there are three areas (i.e., program structure, interagency collaboration, and family involvement) that have a limited number of EBPs or no EBPs. This has implications for IHEs and researchers because consideration must be given to future research related to these areas to enhance the research base. On the other hand, while including the areas of program structure, family involvement, and interagency collaboration in personnel preparation programs, IHE and SEA professionals should discuss these in terms of the identified predictors of post-school success to ensure teachers understand the essential program characteristics that have been linked to positive post-school outcomes for youth with disabilities.

While preparing secondary transition teachers, the challenge is to not only support teachers in gaining the knowledge and skills to implement secondary transition EBPs and predictors of

post-school success, but to also change current practice. The results from meta-analyses and systematic literature reviews identifying transition interventions showing evidence of effectiveness should be carefully considered while developing transition course work (Haber et al., 2013; Test, Fowler, et al., 2009; Test, Mazzotti, et al., 2009). It is clear that research should continue to address the impact of transition teacher education to ensure secondary teachers are implementing EBPs. The next generation of research must directly examine student post-school outcomes in relationship to teacher training. In addition, teacher preparation programs must carefully examine what are believed to be essential components of transition but for which there is limited research (e.g., interagency collaboration, family involvement). Finally, future researchers should consider examining the degree to which current transition programs include EBPs in their course work. To date, this important area of research has yet to be undertaken.

Teacher preparation and professional development must continue to identify and embed instruction related to secondary transition throughout course work, including providing consistent and ongoing professional development. Because many teacher preparation programs may have only a single course (or no courses) introducing transition practices, it is imperative that teacher education and professional development programs use the innovation configuration to evaluate their content and methods of instruction. This will offer guidance to programs to consider addressing essential transition components throughout course work and professional development to ensure that teachers are prepared with the knowledge and skills to provide evidence-based transition programming to students with disabilities. Ultimately, this should lead to improved teacher preparation at the secondary level and improved in-school and post-school outcomes for students with disabilities.

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Appendix A

Table A1: Secondary Transition Evidence-Based Predictors Organized by the Taxonomy

Table A2: Operational Definitions for Evidence-Based Predictors

Table A3: Evidence-Based Predictors by Post-School Outcome Area

Table A1

Secondary Transition Evidence-Based Predictors Organized by the Taxonomy

Taxonomy Category	Instructional Strategy	Skill Taught
Student-Focused Planning	• Using Whose Future is it Anyway?	Student Knowledge of Transition Planning
	• Using Check and Connect • Using Computer-Assisted Instruction • Using the Self-Advocacy Strategy • Using the Self-Directed IEP • Using Published Curricula	Student Participation in the IEP Meeting
Student Development	• Using Mnemonics • Using Peer-Assisted Instruction • Using Self-Management Instruction • Using Technology • Using Visual Displays	Academic Skills
	• Using Backward Chaining • Using Constant Time Delay • Using Forward Chaining • Using Progressive Time Delay • Using Self-Monitoring Instruction • Using a System of Least-to-Most Prompts • Using a System of Most-to-Least Prompts • Using Total Task Chaining	Functional Life Skills
	• Using Community-Based Instruction • Using Constant Time Delay • Using Simulations	Banking Skills

Taxonomy Category	Instructional Strategy	Skill Taught
	• Using Community-Based Instruction	Community Integration Skills
	• Using Computer-Assisted Instruction • Using Constant Time Delay • Using Response Prompting • Using Video Modeling • Using a System of Least-to-Most Prompts	Food Preparation and Cooking Skills
	• Using Computer-Assisted Instruction • Using Community-Based Instruction • Using Response Prompting • Using a System of Least-to-Most Prompts	Grocery Shopping Skills
	• Using Response Prompting • Using Video Modeling	Home Maintenance Skills
	• Using Response Prompting	Laundry Skills
	• Using Response Prompting • Using Constant Time Delay	Leisure Skills
	• Using Community-Based Instruction • Using Progressive Time Delay • Using a System of Least-to-Most Prompts	Safety Skills
	• Using One-More-Than Strategy	Counting Money
	• Using Extension of Career Planning Services After Graduation	Increased Finance Skills
	• Using Community-Based Instruction • Using the One-More-Than Strategy	Purchasing Skills

Taxonomy Category	Instructional Strategy	Skill Taught
	• Using Progressive Time Delay • Using Response Prompting • Using Simulations • Using a System of Least-to-Most Prompts	
	• Using Whose Future is it Anyway?	Self-Determination Skills
	• Using Self-Determined Learning Model of Instruction	Goal Attainment Skills
	• Using Response Prompting • Using Self-Management Instruction • Using Simulations • Using Self-Management Instruction	Social Skills
	• Using Community-Based Instruction • Using a System of Least-to-Most Prompts	Communication Skills
	• Using Community-Based Instruction • Using Response Prompting	Employment Skills
	• Using Computer-Assisted Instruction • Using Constant Time Delay • Using Self-Management Instruction • Using a System of Least-to-Most Prompts	Job-Specific Skills
	• Using Mnemonics	Completing a Job Application
Family Involvement	• Using Training Modules	Parent Involvement in the Transition Process
Program Structure	• Using Check and Connect	Student Participation in the IEP Meeting

Taxonomy Category	Instructional Strategy	Skill Taught
	• Using Community-Based Instruction	Banking Skills
	• Using Community-Based Instruction	Grocery Shopping Skills
	• Using Community-Based Instruction	Community Integration Skills
	• Using Community-Based Instruction	Purchasing Skills
	• Using Community-Based Instruction	Safety Skills
	• Using Community-Based Instruction	Communication Skills
	• Using Community-Based Instruction	Employment Skills
	• Using an Extension of Career Planning Services After Graduation	Increased Finance Skills
Interagency Collaboration	• None	None

Note. Secondary transition EBPs were identified by NSTTAC (Test, Fowler, et al., 2009). Descriptions of each EBP can be found at http://www.nsttac.org/content/evidence-based-practices-organized-skill-being-taught.

Table A2

Operational Definitions for Evidence-Based Predictors

Evidence-Based Predictor	Operational Definition
Career Awareness (Taxonomy Area: Student Development)	Learning about opportunities, education, and skills needed in various occupational pathways to choose a career that matches one's strengths and interests.
Community Experiences (Taxonomy Area: Student Development)	Activities occurring outside of the school setting, supported with in-class instruction, where students apply academic, social, and/or general work behaviors and skills.
Exit Exam Requirements/High School Diploma Status (Taxonomy Areas: Student Development, Program Structure)	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.
Inclusion in General Education (Taxonomy Areas: Student Development, Program Structure)	Requires students with disabilities to have access to general education curriculum and be engaged in regular education classes with peers without disabilities.
Interagency Collaboration (Taxonomy Area: Interagency Collaboration)	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.
Occupational Courses (Taxonomy Area: Student Development)	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.

Evidence-Based Predictor	Operational Definition
Paid Employment/Work Experience (Taxonomy Area: Student Development)	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.
Parental Involvement (Taxonomy Area: Family Involvement)	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).
Program of Study (Taxonomy Area: Student-Focused Planning)	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.
Self-Care/Independent Living Skills (Taxonomy Area: Student Development)	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.
Self-Determination/Self-Advocacy (Taxonomy Areas: Student-Focused Planning, Student Development)	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.
Social Skills (Taxonomy Area: Student Development)	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).

Evidence-Based Predictor	Operational Definition
Student Support (Taxonomy Area: Program Structure)	A network of people (e.g., family, friends, educators, 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.
Transition Program (Taxonomy Area: Program Structure)	A program that 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.
Vocational Education (Taxonomy Area: Student Development)	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.
Work Study (Taxonomy Area: Student Development)	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.

Note. Evidence-based predictor operational definitions from Rowe et al., 2013b. The Predictor Implementation School/District Self-Assessment, which includes operational definitions and characteristics of each evidence-based predictor, can be found at http://psocenter.org/content_page_assets/content_page_3/Predictor_Self-Assessment.final_06_24_13.pdf.

Table A3

Evidence-Based Predictors by Post-School Outcome Area

Predictor/Outcome	Education	Employment	Independent Living
Career Awareness	X	X	
Community Experiences		X	
Exit Exam Requirements/High School Diploma Status		X	
Inclusion in General Education	X	X	X
Interagency Collaboration	X	X	
Occupational Courses	X	X	
Paid Employment/Work Experience		X	X
Parental Involvement		X	
Parental Expectations	X	X	
Program of Study		X	
Self-Advocacy/Self-Determination	X	X	
Self-Care/Independent Living	X	X	X
Social Skills	X	X	
Student Support	X	X	X
Transition Program	X	X	
Vocational Education	X	X	
Work Study		X	

Note. Evidence-based predictors of post-school success were identified by NSTTAC (Test, Mazzotti, et al., 2009). Predictor resources related to literature review procedures, research base, and operational definitions can be found at http://www.nsttac.org/content/predictor-resources.

Appendix B

Essential Components for Transition

Essential Components for Transition

1. Student-Focused Planning
    1.1 Involving students in transition IEPs
        Using curricula and EBP to promote student involvement in transition IEP
        Self-Advocacy Strategy
        Self-Directed IEP
    1.2 Teaching transition planning skills (practice and predictors)
        Knowledge of transition planning
        Skills to set and attain goals
    1.3 Including a comprehensive and relevant program of study in IEP (predictor)
    1.4 Including appropriate and measurable transition goals in IEP (predictor)
    1.5 Including systematic age-appropriate transition assessment (predictor)

2. Student Development
    2.1 Teaching independent living skills (all practices)
        Home maintenance skills (e.g., cleaning)
        Leisure skills
        Food preparation and cooking skills
        Laundry skills
        Self-management skills
        Safety skills
        Communication skills
        Self-care skills (practice and predictor)
        Social skills (practice and predictor)
    2.2 Teaching community participation skills (all practices)
        Restaurant purchasing skills
        Grocery shopping skills
        Community experience and instruction skills (practice and predictor)
        Life skills (practice)
            Finance skills (practice)
            Community integration across multiple skills (e.g., social, domestic, public transportation, on-the-job) (practice)
            Banking skills

2.3 Employment skills and experiences
    Providing school-based work experiences
        Teaching how to complete job applications (practice)
        Offering career awareness experiences (predictor)
        Encouraging enrollment in occupational courses (predictor)
        Encouraging enrollment in vocational education (predictor)
    Providing work-based experiences
        Teaching job-specific employment skills in the community (practice)
        Teaching job-related social skills in the community (practice)
        Teaching on-the-job self-management skills (practice)
        Encouraging participation in paid and unpaid work experiences (e.g., work study, internships)

2.4 Teaching academic skills (all practices)
    Teaching academic skills using specific instructional strategies
        Mnemonics
        Peer-assisted instruction
        Self-management
        Technology
        Visual displays
    Teaching functional academics for students for whom it is appropriate
        Teaching functional math (e.g., purchasing skills, budgeting skills, money skills)
        Teaching functional reading
        Teaching self-determination skills (e.g., choice-making skills, goal-setting skills, decision-making skills, problem-solving skills)

3. Family Involvement
    3.1 Facilitating parental involvement/engagement/support for post-school outcomes (predictor)
    3.2 Encouraging parent involvement in transition planning (predictor)
    3.3 Understanding student perceptions of positive family support (predictor)
    3.4 Promoting positive parental expectations for post-school employment and education (predictor)
    3.5 Implementing parental training in transition (practice)

4. Program Structure
- 4.1 Promoting opportunities for extended transition services (18-21 programs)
- 4.2 Promoting inclusion in general education
- 4.3 Ensuring effective transition programs/services are in place
  - Transition planning methods
  - Transition services
  - Models of transition programs (e.g., YTP, employment programs, career education, college training)
- 4.4 Promoting student supports (predictors)
  - Understanding and encouraging informal support networks (family, friends)
    - Time with friends outside of school
  - Ensuring positive formal supports
    - Satisfaction with high school programs
  - High occupational guidance and support (formal)
- 4.5 Promoting completion of exit requirements/high school diploma status (predictors)
  - High school diploma
  - High scores on tests (e.g., academic, adaptive, functional)
  - High GPA
- 4.6 Implementing drop-out prevention interventions for at-risk youth
  - Check and Connect

5. Interagency Collaboration (predictors)
- 5.1 Connecting students and families to outside agencies (from this predictor: assistance from multiple agencies)
- 5.2 Understanding critical elements of interagency collaboration
  - Transition councils
  - Interagency agreements
  - Directories of services
  - Local business partnerships
  - Parent networks
  - Procedures for school personnel to implement interagency collaboration
- 5.3 Implementing cross-disciplinary planning (both intra-agency and interagency collaboration