



# A National Gateway to Self-Determination

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## Promoting Self-Determination: A Practice Guide

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Self-determination and control over one's own life is critical for all individuals, including individuals with developmental disabilities (Kennedy, 1996). Self-determination provides the conceptual foundation for policy, vision, and social systems in the field of developmental disabilities. As the field has evolved from early assumptions about "handicap" and "disability" the central role of the individual has been captured by the construct of "self-determination." A need exists to link the vision with both existing empirical evidence, and overt description of the practices that will help us better realize a society in which self-determination represents the lifestyle of all citizens. Promoting self-determination has become best practice in the education of students with intellectual and developmental disabilities. The purpose of this practice guide is to review and summarize existing practices that enhance self-determination and the empirical support associated with those practices. Self-determination offers a broad vision with personal implications. It is a construct with multiple facets and as such there will be no single practice or package of practices for achieving self-determination that applies to all people or all contexts. We offer in this practice guide first a summary of the way in which self-determination has been conceptualized for the purposes of this Practice Guide and by the Gateway to Self-Determination project, then an organizational framework for linking practices that will enhance self-determination, and finally a brief summary of the research literature supporting use of these practices. Our hope is that this guide will not only provide recommendations for educators, but also prove useful in fostering research, policy, and systems efforts to expand the role of self-determination in the lives of people with disabilities.

## **Self-Determination Defined**

The concept of self-determination has its origins in the field of special education with the writings of Nirje (1972), who discussed individuals' rights to have control over decisions regarding their personal lives and access to information to make those decisions. Since Nirje, there has been a growing emphasis on the development of conceptual frameworks (e.g., Abery & Stancliffe, 2003; Deci & Ryan, 1985, 2003; Mithaug et al., 2003; Wehmeyer, 2001,2003,2006) to guide practices that promote the self-determination of individuals with disabilities. A full discussion of the definitional and theoretical frameworks that supports the work of the Gateway to Self-Determination project can be found in Wehmeyer et al. (2010). In summary, however, we approach self-determination within a social-ecological approach in which self-determination is a psychological construct that refers to self- (vs. other-) caused action—to people acting volitionally, based on their own will. Volition refers to the capability of conscious choice, decision, and intention. People who are self-determined, as such, are causal agents in their lives; they cause or make things to happen in their lives. They do that through self-caused action (causal agency) that has a clearly specified goal or purpose or through actions of others taken on one's own behalf, referred to as proxy agency. Core assumptions associated with this approach are:

- All people can engage in self-determination
- Disability or severity of disability does not preclude opportunities for people to become self-determined individuals
- Self-determination is a multidimensional construct

- Promoting self-determination for any person will require the unique combination or clustering of practices that meet the needs of that person. Delivering the promise of self-determination will seldom involve one practice, and will typically require individualized application of multiple practices.
- Self determination is affected by not only by the skills and beliefs of the individual but by the social and societal context in which they live.

Within our social-ecological approach, activities to promote self-determination (e.g., interventions) might focus on building a person’s capacity to perform actions leading to greater self-determination (problem solving, decision, making, goal setting, self-advocacy, etc.), focus on modifying the context or the environment in some way to better enable someone to make things happen in their own lives, or to provide supports (e.g., technology) that enhance self-determination. For purposes of understanding these activities, in addition to activities derived from the theoretical models described in Wehmeyer et al. (2010), we turn to The Developmental Disabilities Act of 2000, which defined “self-determination activities” as “activities that result in individuals with developmental disabilities, with appropriate assistance, having: (a) the ability and opportunity to communicate and make personal decisions; (b) the ability and opportunity to communicate choices and exercise control over the type and intensity of services, supports, and other assistance the individual receives; (c) the authority to control resources to obtain needed services, supports and other assistance; (d) opportunities to participate in, and contribute to, their communities; and (e) support, including financial support, to advocate for themselves and others, to develop leadership skills, through training in

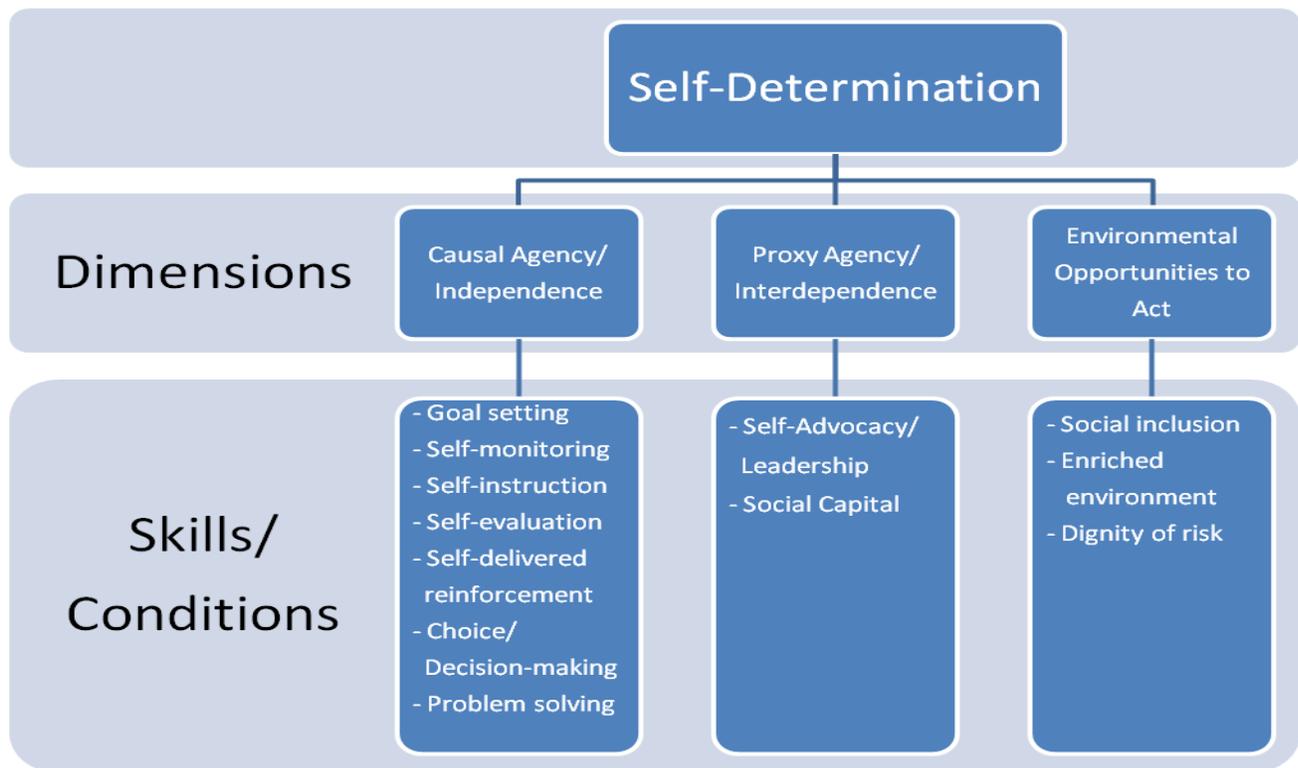
self-advocacy, to participate in coalitions, to educate policymakers, and to play a role in the development of public policies that affect individuals with developmental disabilities.”

### **Organizational Framework for this Practice Guide on Self-Determination**

The organizational framework for practices that enhance self-determination in this practice guide (Figure 1) is based upon the theoretical frameworks described in Wehmeyer et al. (2010) and the socio-ecological model for promoting self-determination adopted by the Gateway to Self-Determination project and described in detail in Walker et al. (2010). Walker et al. draw from three primary theoretical frameworks that have conceptualized the construct of self-determination: (a) functional theory of self-determination (Wehmeyer, 2003), (b) self-determined learning theory (Mithaug, 2003); and (c) ecological theory of self-determination (Abery & Stancliffe, 2003). The socio-ecological model (Walker et al., in press) emphasizes the promotion of one’s: “causal agency” (individual’s control of events); as well as “proxy agency” (provision of supports and assistance allowing the individual to control events); and “opportunities to act upon the environment.” Readers desiring more detail on the socio-ecological model and the other models of self-determination are encouraged to read Walker et al, in (press) and Wehmeyer (2003, 2005). This organizational framework structures interventions/practices within three core dimensions: (a) Causal agency/Independence, (b) Proxy Agency/Interdependence, and (c) Environmental Opportunities to Act. These dimensions reflect the personal, social, and contextual dimensions by which individuals interact with the world around them. Within each dimension, specific skills/conditions are used to enhance the self-determination of this interaction. Figure 1 (page 5) displays the dimensions and the specific skills/conditions that empower individuals to act as causal or proxy agents given

environmental opportunities to act. A description of each dimension and definitions of the skills/conditions that make up each dimension of the organizational framework are discussed in this next section.

Figure 1. Organizational Framework of Self-determination Dimensions and Skills/Conditions



## Dimension #1: Causal Agency/Independence

As noted earlier, causal agency refers to the individual as the agent for making decisions regarding their preferences and actions. The construct of "causal agent" emphasizes the inherent ability of all people to participate in self-determination. That said, the cluster of contextual conditions and personal strengths a person brings will shape how they exercise self-

determination options.. Skills that support causal agency/independence include (a) *self-management*, (b) *choice/decision-making*, and (c) *problem-solving*.

*Self-management* describes the behaviors a person uses to control their own behavior (Brooks, Todd, Tofflemeyer, & Horner, 2003). Self-management, for example, is a process by which the person who performs an undesirable behavior uses self-managed strategies and behaviors to increase targeted desirable behaviors (Todd, Horner, & Sugai, 1999). Self-management involves multiple skills such as: monitoring and regulating incoming stimuli, organizing the stimuli, and integrating the stimuli into current and future planning. Specific sub-skills associated with effective self-management include: (a) goal-setting: (short and long-term planning to achieve identified accomplishments) (Zimmerman, Bandura, & Martinez-Pons, 1992); b) self-monitoring: (recording events and actions associated with one's own behavior) (Kafner, 1970); (c) self-instruction: (the self-delivery of prompts or comments that set the occasion for performing targeted behaviors) (Mithaug, Mithaug, Agran, Martin, & Wehmeyer, 2007);(d) self-evaluation: (judging the quality of one's performance against a defined criterion) (King-Sears, 2006); (e) self-recruitment of reinforcement: (the increase in responding as a function of contingent self-delivery of a consequence) (Hughes, 1992; Mank & Horner, 1998); and (f) self-recruited feedback: the use of both self-evaluation and self-reinforcement: (recruitment of contingent feedback from the external environment) (Storey, 2007).

*Choice/Decision-making* and *problem-solving* are other skills underlying the dimension of *Causal Agency/Independence*. When faced with a number of diverging options, *choice/decision-making* involves recognizing and weighing decisions based upon understanding of potential challenges, needs, and benefits. *Problem-solving* involves the recognition of

potential barriers (short- and long-term) and the development of plans to circumvent or overcome these barriers. The main difference between *Choice/Decision-making* and *Problem-solving* is that no direct or obvious solutions are apparent in Problem-solving. Therefore, problem-solving tasks may be broken down into small instructional steps.

### **Dimension #2: Proxy Agency/Interdependence**

*Proxy Agency/Interdependence* is when an individual acts as an agent to influence others. This dimension differs from *Causal Agency/Independence* in that all individuals work with others in some situations or settings. This does not signify a dependence on another individual, but rather the expression of preference upon the dynamics of relationships (e.g., supportive, mutually beneficial, friendships). The skills within the *Proxy Agency* dimension include *self-advocacy* and *social capital*. *Self-advocacy/leadership* is the expression of preferences and needs to elicit support from others (e.g., allowing support, defining parameters of support, etc.). *Social Capital* recognizes that individuals have the opportunity to impact others lives, through social and tangible means. The concept of social capital (Bourdieu, 1986; Coleman, 1988; Putnam, 1993; Schalock et al., 2008) is closely related to both the dimensions of *Proxy Agency* and *Environmental opportunities to act*. Social capital relates to the resources available within communities as a function of networks of mutual support, reciprocity, and obligation (Franke, 2005), as well as specific processes that occur among people and organizations working collaboratively that lead to accomplishing a goal of mutual shared benefit (Putnam, 1993). In these ways, the idea of social capital is directly tied to the access that an individual has to an enriched social environment and, therefore, the ability to act as an influential agent on others in that environment.

### **Dimension #3: Environmental Opportunities to Act**

This dimension considers the access individuals have to recruit skills and supports that empower them to respond to the world around them. *Social inclusion* refers to the opportunities an individual has to participate and engage in activities available to everyone else. An *enriched environment* refers to exposure to a range of opportunities that encourage a plethora of options for an individual (as opposed to a prescribed range of opportunities outlined by someone else). *Dignity of risk* suggests that individuals have the opportunity to balance choices that are in their own interest but which may include risk to their health and safety.

#### **Understanding, Appreciating, and Actively Promoting Self-Determination**

Research has shown that the ability and opportunity of individuals with disabilities to shape their chosen outcomes has a positive impact on their future outcomes (Hadre & Reeve, 2003) and overall quality of life (Lachapelle et al., 2005; Wehmeyer & Schwartz, 1998). Such outcomes include: access to general education instructional settings (Agran, Blanchard, Wehmeyer, & Hughes, 2001), financial independence, independent living, and employment (Sowers & Powers, 1995; Wehmeyer & Palmer, 2003; Wehmeyer & Schwartz, 1997). Individuals with developmental disabilities who leave school as “self-determined young people” are more likely to: (a) be independent one year after graduation; (b) live somewhere other than where they lived in high school one year after graduation; (c) be employed for pay at higher wages one year after graduation; (d) be employed in a position that provides health care, sick leave, and vacation benefits three years after graduation; and (e) to live independently three years after graduation (Wehmeyer & Palmer, 2003; Wehmeyer & Schwartz, 1997). Furthermore, the

acquisition of skills often related to self-determination has been shown to impact academic skills, study skills (Copeland & Hughes, 2002; Konrad et al., 2007), and possible reductions in high school drop-out rates (Zhang & Law, 2005).

Unfortunately, research also indicates that youth and adults with disabilities are less self-determined than their non-disabled peers due to fewer opportunities to make choices and express preferences across their daily lives (Chambers et al., 2007). Additionally, teachers who work with students with disabilities believe that the skills and knowledge related to promoting self-determination are often too complex for their students to learn (Agran & Wehmeyer, 2003) and fail to delineate goals in a student's program specific to improving self-determination. Thoma, Pannozzo, Fritton, & Bartholomew (2008) found that, though many teachers could loosely define self-determination, identification of skill sets varied from teacher to teacher. Furthermore, teachers could identify instructional strategies that addressed some skills, but were unable to come up with methods to address others. Such data elucidates the point that teachers must be systematically taught the concepts and how these can be applied to create better student outcomes.

Given that the promotion of self-determination has a strong influence on life-long outcomes for people with disabilities, it is important to translate the hard work done to define the construct of self-determination into effective practices. In this practice guide we have used the organizational framework described above to link practices that have been shown, empirically, to enhance discrete and overall self-determination for individuals with disabilities. This practice guide provides a summary of the research literature supporting the use of these practices by practitioners, families, and individuals to enhance self-determination.

## **Purpose of Practice Guide**

The goal of this practice guide is to provide specific evidence-based recommendations that educators can use to promote the self-determination of individuals with disabilities. The primary focus of the guide is on school age youth and young adults, more specifically those youth who are approaching or are already engaged in the transition from schooling to the world of work and community living. Target consumers for the guide's content, strategies, and principles are teachers and other personnel having direct contact with students with disabilities such as transition specialists, and job coaches. Additionally, this practice guide may be of interest to administrators of school and community programs for students with disabilities. For each recommendation we define the level of empirical evidence, and the social validity associated with that recommendation.

## **Scope of Practice Guide**

The range of evidence considered in developing this practice guide was limited to peer-reviewed studies published between 1990 and 2009. Articles included in the formulation of the recommendations of this practice guide also met the following criteria: (a) were reported results of interventions (quantitative and/or qualitative designs), (b) included at least one participant with a disability, (c) included participants of ages 5 (school-aged) through adulthood, and (d) measured one or more of the conditions/skills based on our organizational framework of self-determination as a dependent variable in empirical research or as a research question in qualitative studies. Our search criteria consisted of the following keywords used in combination or exclusively (based on the dimensions and skills/conditions in Figure 1): *self-determination, disabilities, self-management, goal setting, self-monitoring, self-instruction, self-*

*evaluation, self-delivered reinforcement, self-recruited feedback, choice-making, decision-making, problem-solving, self-advocacy, social capital, dignity of risk, and social inclusion.*

Additionally, a number of sources were reviewed to conduct a more thorough review of the literature on self-determination practices recommended by a number of texts and literature reviews on self-determination (e.g., Wehmeyer, 2005; NSTTAC, Algozzine et al., 2001; Wood, Fowler, Uphold, & Test, 2005). These included: *social approaches/strategies, student-directed learning, peer-mediated instruction, teacher directed instruction, self-determination model of instruction, task sequencing strategies, assertiveness training, universal design for learning, person-centered planning, person-centered support, family supports, ecological interventions.* A number of electronic data-bases were used for these searches such as: Educational Resources Information Center (ERIC), Education Abstracts, PsycINFO, Academic Search Premier, and Google Scholar.

A total of 25 peer-reviewed research articles met the inclusion criteria for further review. These articles resulted in five recommendations described in this practice guide to enhance the promotion of self-determination. A large number of studies were excluded from our review because they examined the effects of self-determination skills/conditions as an independent variable on another skill rather than to directly improve self-determination skills.

## **Literature Review for Levels of Evidence**

Our aim in this practice guide is to provide an explicit and clear delineation of the quality and quantity of evidence that supports each recommendation. Studies were reviewed for content and quality of methodology. Content review forms included gathering information on (a) study design (e.g., single-subject multiple-baseline, group design pre/post, etc.), (b)

independent variables, (c) measurement frequency of independent variables, (d) dependent variables, (e) measurement frequency of dependent variables, (f) sample size, (g) sample selection procedures, (h) self-determination skill/condition addressed, and (i) results (e.g., statistical significance, effect size). To define the strength of supporting evidence, we have adapted a semi-structured hierarchy recommended by the Institute of Education Science (IES; Table 1 – p. 14). This classification system helps determine whether the quality, quantity, and social validity of available evidence supporting a practice is “strong,” “moderate,” or “emerging.” *Strong* refers to consistent and generalizable evidence that an approach or practice causes improved performance in a dimension or condition of self-determination (see Tables 1 – p. 14 and 3 – p. 41). *Moderate* refers either to evidence from (a) studies that allow strong causal conclusions but which cannot be generalized with assurance to the target population because, for example, the findings have not been sufficiently replicated, or (b) studies that are generalizable but have more causal ambiguity than that offered by experimental designs—for example, statistical models of correlational data or group comparison designs where equivalence of the groups at pretest is uncertain. *Emerging* refers to expert opinion based on reasonable extrapolations from research and theory on other topics and/or evidence from studies that do not meet the standards for moderate or strong evidence.

In evaluating the level of evidence of social validity for a practice, a practice had *Strong* social validity if the empirical support for it included (a) several clear demonstrations that the interventions used produced effects that met the defined clinical needs, (b) measures of stakeholder reports of acceptability of procedures, feasibility within available resources, and perceived effectiveness; and (c) follow-up measures demonstrating that typical intervention

agents continue to implement procedures with fidelity after formal support was removed.. A practice was considered to have *Moderate* social validity if empirical support for that practice included: (a) several clear demonstrations that the interventions used produced effects that met the defined clinical needs, and either b) measures of stakeholder reports of acceptability of procedures, feasibility within available resources, and perceived effectiveness; OR (c) follow-up measures demonstrating that typical intervention agents continue to implement procedures with fidelity after formal support is removed. A practice that did not meet the standards for *Strong* or *Moderate* social validity was considered as having an *Emerging* level of social validity.

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Table 1. Levels of Evidence

	Empirical Support	Social Validity
Strong	<p>Strong evidence for a recommended practice requires studies with both high internal validity (i.e., studies whose designs can support causal conclusions) and external validity (i.e., studies that in total include enough of the range of participants and settings on which the recommendation is focused to support the conclusion that the results can be generalized to those participants and settings). Strong evidence for this practice guide will be operationalized as:</p> <ul style="list-style-type: none"> <li>• A systematic review of research that generally meets the standards of the What Works Clearinghouse (see <a href="http://ies.ed.gov/ncee/wwc/">http://ies.ed.gov/ncee/wwc/</a>) and supports the effectiveness of a program, practice, or approach with no contradictory evidence of similar quality; OR</li> <li>• A sufficient number of well-designed, randomized, controlled trials or single-case research studies that meet the standards of the What Works Clearinghouse and support the effectiveness of a program, practice, or approach, with no contradictory evidence of similar quality; OR</li> <li>• One large, well-designed, randomized, controlled, multisite trial that meets the standards of the What Works Clearinghouse and supports the effectiveness of a program, practice, or approach, with no contradictory evidence of similar quality; OR</li> <li>• For assessments, evidence of reliability and validity that meets the Standards for Educational and Psychological Testing.</li> </ul>	<p>Characterization of a recommended practice as having strong social validity require that the empirical support for that practice include:</p> <ul style="list-style-type: none"> <li>• Several clear demonstrations that the interventions used produced effects that met the defined clinical needs; AND</li> <li>• Measures of stakeholder reports of acceptability of procedures, feasibility within available resources, and perceived effectiveness; AND</li> <li>• Follow-up measures that demonstrate that typical intervention agents continue to implement procedures with fidelity after formal support is removed</li> </ul>
Moderate	<p>Evidence for a recommended practice as moderate requires studies with high internal validity but moderate external validity, or studies with high external validity but moderate internal validity. In other words, moderate evidence is derived from studies that support strong causal conclusions but where generalization is uncertain, or studies that support the generality of a relationship but where the causality is uncertain. Moderate evidence for this practice guide will be operationalized as:</p> <ul style="list-style-type: none"> <li>• Experiments or quasi-experiments generally meeting the standards of the What Works Clearinghouse and supporting the effectiveness of a program, practice, or approach with small sample sizes, a limited number of single-case studies, and/or other conditions of implementation or analysis that limit generalizability, and no contrary evidence; OR</li> <li>• Comparison group studies that do not demonstrate equivalence of groups at pretest and therefore do not meet the standards of the What Works Clearinghouse but that (a) consistently show enhanced outcomes for participants experiencing a particular program, practice, or approach and (b) have no major flaws related to internal validity other than lack of demonstrated equivalence at pretest (e.g., only one teacher or one class per condition, unequal amounts of instructional time, highly biased outcome measures); OR</li> <li>• Correlational research with strong statistical controls for selection bias and for discerning influence of endogenous factors and no contrary evidence; OR</li> <li>• For assessments, evidence of reliability that meets the Standards for Educational and Psychological Testing 4 but with evidence of validity from samples not adequately representative of the population on which the recommendation is focused.</li> </ul>	<p>Characterization of a recommended practice as having moderate social validity require the empirical support for that practice include:</p> <ul style="list-style-type: none"> <li>• Several clear demonstrations that the interventions used produced effects that met the defined clinical needs; AND</li> <li>• Measures of stakeholder reports of acceptability of procedures, feasibility within available resources, and perceived effectiveness; OR</li> <li>• Follow-up measures that demonstrate that typical intervention agents continue to implement procedures with fidelity after formal support is removed</li> </ul>
Emerging (Needs additional research)	<p>Characterization of the evidence for a recommended practice as emerging means that the recommendation is based on expert opinion derived from strong findings or theories in related areas and/or expert opinion buttressed by direct evidence that does not rise to the moderate or strong levels. Emerging evidence is operationalized as evidence not meeting the standards for the moderate or high levels.</p>	<p>Practices that do not meet the standards for the strong or moderate levels will be characterized as having emerging social validity.</p>

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This practice guide provides 5 recommendations for promoting self-determination for individuals with disabilities (see Table 2). Those recommendations are: (a) use person-centered planning methods; (b) use teacher-directed instructional strategies; (c) teach students skills needed to self-direct learning; (d) create and maintain a system that involves family supports and family involvement; and (e) organize environments to provide enriched opportunities, supports, models, and resources. In the following sections, we provide for each of the 5 recommended practices in this guide, *a definition of the practice, level of evidence and social validity, a brief summary of support for the practice, how to implement the practice, and identified barriers or limitations of the practice.*

Table 2. Recommendations and Corresponding Levels of Evidence

	<i>Recommendations</i>	<i>Level of Evidence</i>	<i>Level of Social Validity</i>
1	Use Person-Centered Planning Methods	Moderate	Moderate
2	Use Teacher-directed Instructional Strategies	Strong	Moderate
3	Teach students skills needed to self-direct learning	Strong	Moderate
4	Create and maintain a system that involves family supports and family involvement	Moderate	Moderate
5	Organize environments to provide enriched opportunities, supports, models, and resources	Emerging	Emerging

## **Recommendation #1: Use Person-Centered Planning Methods**

### **Defined**

Person-centered planning (PCP) is a term describing a collection of similar approaches used to assist individuals in planning their futures. The goal of these approaches is to aid individuals in developing meaningful life goals based on their strengths and talents, utilizing individual, natural, and creative supports and services (See Mount, 2000). There are a number of packages that have been developed to help individuals and teams to create person-centered plans. Some of those discussed in the literature include Personal Futures Planning (PFP; Mount, 1987), Making Action Plans (MAPs; Forest & Lusthaus, 1989), Essential Lifestyle Planning (ELP; Smull & Harrison, 1992), and Planning Alternative Tomorrows with Hope (PATH; O'Brien & Forest 1995). The various person-centered approaches have been summarized as sharing common characteristics by: (a) viewing the student as a person first, rather than as a diagnosis or disability; (b) using everyday language, pictures, and symbols, rather than professional jargon; (c) planning centered around each person's unique strengths, interests, and capacities within the context of living in the community; and (d) giving strength to the voices of the student and those who know him or her most intimately in accounting for the student's history, evaluating his or her present conditions in terms of valued experiences, and defining desirable changes in his or her life (Kincaid, 2005).

### **Level of Evidence: Moderate**

We judge this recommendation as demonstrating a *Moderate* level of evidence based on studies evaluating the effectiveness of person-centered planning in facilitating students' skills related to self-determination. There were five published studies examining outcomes for

individuals who receive person-centered planning, and it is difficult for researchers to differentiate degrees of person-centeredness of the planning methods. As described below, only two studies have examined person-centered planning as it relates to self-determination outcomes.

### **Level of Social Validity Evidence: Moderate**

The level of social validity demonstrated in the studies related to person-centered planning was judged to fit the criteria for *moderate* evidence. The rating of moderate was based on the degree to which socially important outcomes were demonstrated in the studies examined, as well as the inclusion of follow-up measures demonstrating that procedures continued to be implemented following intervention. Studies that were longitudinal in nature demonstrated long-term changes in outcome with the implementation of person-centered supports.

### **Brief Summary of Support for Practice**

There has been much written about person-centered planning in the last two decades. Much of the published literature discusses theoretical advantages and qualitative changes in a person's outcomes based on supports stemming from this philosophy. To date, there are only a handful of studies that have quantitatively examined the outcomes of the use of person-centered planning techniques. Though some versions of person centered planning have existed since 1980, there has been little work on evaluating specific curricula.

Though there have been some quantified empirical studies that have involved the use of person-centered planning, there are few that examine change in aspects related to self-

determination. Many of the studies utilized surveys and examined changes in quality of life as perceived by the individual and those who are familiar with the individual.

Several studies examined outcomes that are aligned with increases in qualities related to self-determination. For example, Robertson, J., Emerson, E., Hatton, C., Elliott, J., McIntosh, B., Swift, P., et al. (2006) looked at variables such as choice-making, access to social networks and involvement in community-based activities and found increases across these domains with the utilization of person-centered planning. Dumas, De La Garza, Seay, and Becker (2002), examined changes in perception of self-efficacy as a product of person-centered planning with a sample of thirteen individuals with disabilities. They found qualitative changes in reported self-efficacy and also that sometimes small requests were most meaningful to the individual. However, the study also noted that case coordinators and facilitators of the person-centered planning process can actually impede self-efficacy of the individual if not properly prepared for their roles.

Holburn, Jacobson, Schwartz, Flory, & Vietze, P. M. (2004) noted that the use of person-centered planning in conjunction with positive behavior support planning led to better outcomes for participants. Everson and Reid (1999) discuss the importance of follow-up after initial planning meetings to ensure positive outcomes. Both Hagner,, Helm, & Butterworth, J. (1996) and Heller, Factor,, Sterns, & Sutton, (1996) noted that fidelity of implementation is vital for effective person-centered planning.

### **How to Implement**

Methodology recommended by each of the person-centered planning curricula follows a similar course. The individual first forms a team of supporters including members of school

and home. This often includes an individual who can act as an advocate for the focus individual. This person should have no vested interest in the outcomes of the planning sessions beyond those of the individual. Other team members may include family, teacher(s), school personnel, case manager(s), and vocational personnel as applicable.

- Over the course of two or more meetings, a plan is created that encapsulates the individual's preferences and goals regarding living arrangements, vocational/school goals, social interests and personal fulfillment.
- A quality person-centered plan includes a detailed action plan for achieving or approximating these goals as well as tracking discussion regarding the potential roadblocks as perceived by team members.
- The first meeting should be spent allowing the focus individual and other team members an opportunity to freely describe goals and objectives.
- In most person-centered planning programs, a forum is established in which team members can voice their concerns and discuss potential roadblocks in the action plan. These can be discussed with the team while allowing the individual's opinion to be the primary voice in the discussion.
- Follow up meetings are used to establish a course of action to work towards these goals.
- Teams should establish short-term goals and objectives and reevaluate them based on that student's progress along the stated objective.

- Each objective will look different, when tailored to the individual's needs, desires, and abilities; as well as the resources available to meet these demands.

### **Potential Barriers/Limitations and Solutions**

#### **Potential Barrier: The Individual's Preferences Change**

An individual's stated preferences may change throughout the course of person-centered planning sessions or following the sessions.

#### **Potential Solution: Develop a Flexible Plan**

A plan should be amenable to changes and the team should reevaluate goals and objectives accordingly. If the individual has limited expressive language ability, care must be taken to ensure that preferences are accurately recorded. The advocate may play a stronger role in these situations. Visual aids may also be utilized to ascertain or validate perceived preferences.

### **Summary**

We recommend the use of person-centered planning as a method to increase self-determination for individuals. Person-centered planning provides a framework in which a person can practice self-advocacy and in which opportunities are provided for: *goal setting, choice-making, decision making, planning for making a contribution in the family or the community, social inclusion, enriching an individual's environment, and dignity to the risk of undertaking desired living/work/leisure activities.*

## **Recommendation #2: Use Teacher-Directed Instructional Strategies to Teach Component Skills of Self-Determination (Example Used: Choice-Making Skills)**

### **Defined**

Self-determined individuals can participate in the causal agency processes necessary to make decisions that control and impact their lives. Thus, recognizing available options and learning to choose among those options is an integral component of being self-determined. Making choices based on one's preferences has been identified as one of the essential aspects of independent functioning in society (Shevin & Klein, 1984). Studies have demonstrated that individuals with disabilities can learn to participate in making choices that affect their lives. As with other previously discussed components of self-determination, the authors of this practice guide recommend that students with disabilities be systematically and explicitly taught choice-making skills and be given opportunities to utilize those skills to the fullest extent possible regardless of type or severity of their disability.

### **Level of Evidence: Strong**

We judge this recommendation as demonstrating a high level of evidence based on a significant number of well-designed, single-case studies clearly demonstrating a functional relation between the implementation of procedures for teaching choice-making and socially-significant outcomes for individuals with disabilities.

### **Level of Social Validity Evidence: Moderate**

The level of social validity demonstrated in the studies related to choice-making was judged to fit the criteria for moderate evidence. The rating of moderate was based on socially important outcomes clearly demonstrated in the studies we examined, and the inclusion of

generalization and follow-up measures demonstrating that procedures continued to be implemented after formal support was removed.

### **Brief Summary of Evidence to Support the Recommendation**

The self-determination literature has emphasized the importance of the choice making component perhaps more than all of the other elements combined (Wehmeyer et al., 1998). A large body of theoretical and empirical research literature supports the use of procedures for systematically teaching individuals with disabilities the skills needed to make choices and providing opportunities to do so. Choice-making skills include learning to: (a) recognize options, (b) evaluate those options, (c) select an option, (d) develop a plan of action, and (e) experience the chosen option (Illinois Planning Council on Developmental Disabilities, 1992).

Research has shown that individuals can learn to make choices regarding ‘everyday’ decisions, as well as major lifestyle choices. For example, several empirical studies have demonstrated that individuals with severe disabilities and limited verbal skills can learn to make choices about preferred foods, objects, and leisure activities (Cooper & Browder, 1998; Kennedy & Haring, 1993; Lim, Browder, & Bambara, 2001). Singh, Lancioni, O’Reilly, Molina, Adkins, & Olivia (2003) taught a 14-year-old girl with multiple physical disabilities and severe mental retardation to use a microswitch device to communicate her food and drink preferences and choices, and demonstrated that the skills continued to be used at home with the family members following the termination of training. Researchers have also shown that individuals with disabilities can learn to identify and make choices regarding types of work-related tasks on job sites (Reid, Parsons, Green, & Browning, 2001).

In addition to making decisions regarding everyday preferences and activities, choice-making research indicates that individuals with disabilities learn to make major lifestyle decisions, such as employment choices or choosing where to live. In 1996, Faw, Davis, & Peck taught 4 adults with disabilities to evaluate potential residential options upon leaving an institutional environment. The participants learned how to evaluate options by looking at pictures of specific residential characteristics and ask pertinent questions during tours of community group homes. Upon visiting potential group homes, all 4 of the individuals were able to successfully make choices based on the criteria they had learned.

In summary, a significant body of research has demonstrated that individuals can be taught the skills necessary to make choices and decisions that affect their lives in both minor and major ways. In order to exhibit self-determined behavior, an individual must be able to express his or her preferences. Choice making skills can be particularly important for individuals with moderate to severe disabilities. For individuals with limited verbal skills, the act of choosing is sometimes the most effective way to communicate preference (Skinner, 1971).

### **How to Implement**

- Prior to teaching choice-making, it is important to assess a student's current skill set. It may first be necessary to teach component/prerequisite skills in order for the student to learn to associate choice-making behaviors with the consequence for those actions, or for students with limited verbal skills to learn alternative communicative responses.
- Explicitly teach the skills of identifying, evaluating, and selecting options, along with how to develop a plan of action.

- Present choice-making tasks both in formal teaching situations and in more naturalistic contexts.
- Build choice-making opportunities into daily routines, so that students have multiple opportunities to practice those skills throughout the day.
- Teach students how to make choices in academic, leisure, and social contexts.
- Begin by providing a limited number of options in selected domains, then increase the number of options and domains in which choices are provided as students' skills improve.
- Clearly communicate the limits of choice-making (those situations/tasks which are non-negotiable).

### **Potential barriers/Limitations and Solutions**

**Barrier :** One common argument against allowing individuals with disabilities to make choices (particularly related to major lifestyle decisions) is that they do not have the skills necessary to make 'safe' decisions that will minimize risks.

**Solution.** It is important for educators to include teaching critical safety skills as part of the curriculum for students with special needs (e.g., safety in home and community living, fire and crime prevention, AIDS prevention, medication and substance use). In addition, teachers can work to help students identify dangerous situations associated with the specific lifestyle choices that they make and the actions that need to be taken to modify or exit those situations (Agran, 1997).

## Summary

We recommend the use of teacher-directed instructional strategies to increase self-determination for individuals. Teachers can directly teach individuals to: self-manage their behaviors (e.g., goal-setting, self-monitoring, etc.), make meaningful choices and decisions, solve problems, advocate for themselves to affect change in their environment and influence those around them.

### **Recommendation #3: Teach Individuals Skills Needed to Self-Direct Learning**

Self-directed learning refers to a process in which students learn to: (a) identify goals that they expect to meet, (b) help to develop a plan of action for meeting those goals (c) record and monitor their own behavior, and (d) evaluate their behavior against defined criteria. Self-directed learning can also include a self-reinforcement component in which a student independently selects a reward after evaluating his or her own behavior as meeting criteria.

Teaching students to set goals, and to self-monitor their performance on those goals has been demonstrated as an effective practice for increasing adaptive behavior and improving success in a variety of educational settings and work environments (Mithaug & Mithaug, 2003). Studies suggest that students involved in the selection of their own goals are more likely to actively pursue and attain those goals (Ardnt, Konrad, & Test, 2006). Additionally, students with disabilities who are taught to monitor and assume more responsibility for their own learning are more likely to access and have increased engagement in developmentally appropriate environments (Agran, Cavin, Wehmeyer & Palmer, 2008).

### **Level of Evidence: Strong**

We judge this recommendation as demonstrating a high level of evidence based on the results of one pretest-posttest control group design study, eight single-case studies, and supporting correlational research demonstrating the relationship between teaching a three-part problem solving approach and student assessments of self-advocacy, self-confidence, and goal setting.

### **Level of Social Validity Evidence: Moderate**

The level of social validity demonstrated in the studies related to peer-mediated instructional strategies was judged to fit the criteria for moderate evidence. The rating of moderate was based on socially important outcomes demonstrated in the studies we examined, and the inclusion of social validity assessments provided to students and/or educators following intervention in several of the studies identified.

### **Brief Summary of Evidence to Support the Recommendation**

Researchers have suggested that individuals who are self-determined have an improved quality of life and are ultimately more independent. Self-determination is in large part defined as people controlling their own lives (Wehmeyer & Schwartz, 1998). Although educators and parents often express that self-directed learning and self-determination skills are an important part of the curriculum, students are not often provided specific instruction on how to develop those skills (Agran, Snow, & Swaner, 1999). In addition, individuals with disabilities have historically had many decisions made for them by parents, teachers, and caregivers, which may be partly the reason that many individuals with disabilities lack self-determination skills. However, research has shown that individuals with disabilities can benefit

from systematic instruction on skills that are necessary to self-direct learning and that can ultimately lead to increased self-determination.

Studies have examined the effects of self-directed learning strategies on the attainment of student-selected academic and social goals. For example, Agran, Blanchard, Wehmeyer, and Hughes (2001) examined the differential effects of self-delivered versus teacher delivered reinforcement on the goal attainment of high school students with disabilities using self-directed strategies. In 2003, Wehmeyer, Yeager, Bolding, Agran, and Hughes demonstrated the effects of self-regulation and self-directed learning strategies on goal attainment of secondary students with disabilities in general education classrooms.

One instructional model for increasing student-directed learning, that has been empirically validated, is the Self-Determined Learning Model of Instruction (SDLMI; Mithaug, Wehmeyer, Agran, Martin, & Palmer, 1998). The SDLMI is a three-phase model for teaching a self-regulated problem-solving process that allows students to set goals, plan a course of action, evaluate their own performance, and make adjustments to plans or goals as needed (Agran, Cavin, Wehmeyer, & Palmer, 2006). The instructional process consists of teaching students to pose four questions during each phase of the process that require the student to (a) identify the problem, (b) identify potential solutions, (c) identify barriers to solving the problem, and (d) identify consequences of each solution (Agran et al., 2008).

The SDLMI instructional model has been shown to help secondary students with disabilities to increase appropriate behavior in classroom and jobsite settings and to achieve transition-related outcomes such as: improved job task performance, improved budgeting and personal hygiene skills, and increased success in making independent transportation

arrangements (Agran, Blanchard, & Wehmeyer, 2000; Agran, Blanchard, Wehmeyer, and Hughes, 2002; McGlashing, Agran, Sitlington, Cavin, & Wehmeyer, 2004). Additionally, SDLMI has been used to improve academic skills performance of students with disabilities in general education content classes (Agran et al., 2006; Agran et al., 2008).

Self-directed learning skills can also be useful in increasing active student participation in the IEP process. Lack of student involvement in the IEP process is not due to an inability to learn the skills necessary to do so. However, without systematic instruction of these skills, students attending their IEP meetings can fail to understand the purpose of the meeting and may not be recognized as an active member of the committee (Morningstar, Turnbull, & Turnbull, 1995). Published curricula are available and have been demonstrated effective in increasing the skills necessary for students to be involved in their IEP meetings and help in the selection of their own IEP goals. One such curriculum is the *Self-directed IEP* (Martin, Marshall, Maxon, & Jerman, 1997). The Self-directed IEP is a multi-media training program consisting of ten lessons designed to teach the skills necessary to participate in the IEP process including: making eye contact, stating goals in one's own words, asking questions, and asking for help when unsure how to answer a question. Research has shown the program to be effective in increasing secondary students' participation in IEP meetings, and in increasing students' reported interest in contributing to the process (Allen, Smith, Test, Flowers, & Wood, 2001; Ardnt et al., 2006; Snyder, 2002).

In conclusion, it is important for students with disabilities to learn to set goals for themselves, how to monitor progress towards those goals, and how to problem-solve solutions when progress is not being made. In order to accomplish this, it is crucial for educators to

systematically teach and to provide the opportunities and experiences that are necessary for students to learn how to work toward meeting self-directed goals.

### **How to Implement**

To increase student's skills in self-directed learning teachers can:

- Provide systematic training on skills such as goal-setting and problem solving, including providing students with a clear rubric to follow when faced with a challenging situation or behavior that they would like to change.
- Provide students with regular opportunities to practice self-directed learning skills in both contrived and real-world situations.
- Make use of published curricula for teaching self-directed learning and self-determination skills.
- Encourage students to participate in the IEP process and provide them with the skills necessary to be successful in doing so.
- Explicitly remind students to use self-directed strategies in challenging situations and with unfamiliar academic tasks.
- Regularly model the use of problem-solving strategies when teaching new material in the classroom or at the job-site.

### **Potential Barriers/Limitations and Solutions**

**Barrier.** Some educators may not feel prepared to provide training on skills needed for self-directed learning.

**Solution.** There are a number of books, research articles and published educational materials available that provide examples and ideas for incorporating training on self-directed learning skills into the everyday curriculum.

**Limitation.** The school day alone may not provide sufficient opportunities for students with disabilities to engage in/practice these skills, and practice in additional settings may be needed in order for skills to generalize outside of the school context.

**Solution.** Teachers should encourage parents/caregivers and employers of students with disabilities to provide opportunities to practice self-directed learning skills outside of school. Teachers can provide these individuals with ideas for how to practice these skills at home, on a job-site, or in community settings

### Summary

We recommend that individuals be taught self-directed learning strategies to enhance their self-determination. Self-directed learning strategies can be used to teach an individual skills important for self-determination such as: self-management (e.g., goal-setting, self-monitoring, etc.), choice/decision-making, problem-solving, and self-advocacy/leadership.

### **Recommendation #4: Create and Maintain a System That Involves Family Supports and Family Involvement**

#### Definition

Family involvement, as it is described in the self-determination literature, involves more than the required family participation in student meetings, but active collaboration in the development and reinforcement of skills associated with self-determination as well as provision of opportunities to practice these skills in home, school, and community contexts.

### **Level of Evidence: Moderate**

We judge this recommendation as demonstrating a *Moderate* level of evidence based on studies evaluating the effects of family involvement and support in the family environment in facilitating students' skills related to self-determination. A total of 62 peer-reviewed articles included some that discussed outcomes related to self-determination. Many pointed to the importance of the family's role in facilitating self-determination, though none utilized quantifiable methods to show a causal connection between family support and self-determination.

### **Level of Social Validity Evidence: Moderate**

The level of social validity demonstrated in the studies related to family support was judged to fit the criteria for moderate evidence. A number of studies pointed to supports that were naturalistic in nature and fit the specific needs of each individual and his/her family.

One of the key factors that influences self-determination with individuals having disabilities according to Wehmeyer (1999) is the extent of supports afforded the individual. Of these supports, family involvement provides an important role. Parents can provide expert opinions supported by their acute knowledge of family dynamics and the individual's biological and social history, as well as provide a listing of potential stress-inducing events or agents (Turnbull & Turnbull, 2001; Lucyshyn & Albin, 1993). Unfortunately, as described by Carter, Owens, Trainor, Sun, and Swedeen (2009), parents typically see their child as less capable of self-determined behavior than do educators.

Parents can also provide an expert opinion focused on their knowledge of family dynamics background factors, as well as potential stress-inducing agents (Turnbull & Turnbull,

2001; Lucyshyn & Albin, 1993). Family involvement in school has been shown to be related to increases in students' attitudes towards schoolwork (Kellaghan, Sloane, Alvarez, & Bloom, 1993) as well as to positive and prosocial forms of behavior (Comer & Haynes, 1991; Steinberg, Mounts, Lamborn, & Dornbusch, 1991). In addition to these benefits, increased family involvement has been shown to decrease suspension (Comer & Haynes, 1991) and dropout rates (Rumberger, 1995). Studies also have shown that there is less incidence of high-risk behavior in adolescents who have strong family involvement in school (Resnick et al., 1997). Cunconan-Lahr and Brotherson (1996) note that self-advocacy can be learned through parent modeling and support. Lastly, Hieneman & Dunlap (1999) argue that with family involvement comes greater integration of support, increased sense of support for both schools and families, and more opportunity to practice skills in different settings.

In a qualitative study of 12 individuals with physical disabilities (Stoner, Angell, House, & Goins, 2006), all participants noted family advocacy and opportunities provided by family members as central to gaining skills related to self-determination. Recommendations therein could also be applied to family supports, through the inclusion of self-determination goals in programs to be utilized across settings, helping each team member to recognize self-determination as a worthy goal, assessing individual preferences, and ensuring the individual's involvement in planning across settings.

### **How to Implement the Recommendation**

- Family support includes communication with and continuous involvement of family members in various aspects of schooling. This often includes family communication with teachers, assistants, and the student.

- Communication with family members should be ongoing; not just occurring during periods of transition or crisis.
- Plans of support should be developed that are applicable to settings outside of the school environment.
- Ensure that home supports are developed which are a contextual fit with the family setting, values and dynamics.
- Educate family members using language that embraces self-determination as a primary goal.
- Involve the student in planning that has direct impact on supports outside of the school environment.
- Parents provide independence as afforded given the cultural context of the situation.
- Parents take active interest in activities and reinforce responses that incrementally build self-determination.
- Parents model and coach behaviors and provide structure and consistency in responses.

### **Potential Barriers/Limitations and Solutions**

#### **Barrier: Cultural and language differences**

Cultural differences can be overlooked when addressing family involvement within the school setting.

#### **Solutions:**

We recommend that educators and schools not assume roles of family members based on experience with their own or other families. Many values may vary as they pertain to

independence, interdependence, and involvement with and by family members. Language use may also be a barrier. Avoid use of terms that can alienate family members or make them feel that their voice is less important than other team members. Ensure that someone is present who can interpret if English is not the primary language spoken in the home. At times, schools may need to assist with transportation or provide other resources to maximize participation. Do not assume that a mother and/or father are the only participating members from a household. Extended family members and others from outside of the immediate family may provide parenting or other vital support roles for the individual.

### **Recommendation #5: Organize Environments to Provide**

#### **Enriched Opportunities, Supports, Models, and Resources for Individuals**

Environmental contexts in which people live, learn, work, and socialize may impact their self-determination (Wehmeyer & Bolding, 1999). Therefore, we recommend that the four previous recommendations in this practice guide occur in natural, integrated settings with systems designed to promote the development of self-determination. Broader community factors may shape the opportunities for individuals to practice the skills that enhance self-determination. Enriched environments provide individuals with more opportunities to engage in self-determined behavior. Self-determination is typically exhibited through interactions with adults and peers; therefore, it is important to draw upon supports and resources from others as they identify their interests, set future goals, communicate their choices, take steps to achieve their plans, evaluate progress and adjust their actions (Carter et al., 2009).

Federal legislation has emphasized providing instruction for individuals with disabilities in general education settings (IDEA, 2004; NCLB, 2001). Therefore, along with others in the field (e.g., Browder & Spooner, 2006; Browder, Wakeman, & Flowers, 2006), we recommend that general education and typical community-based environments be considered the primary context for promoting self-determination for individuals with disabilities. To meet these federal mandates, many school settings and other support agencies are moving towards utilizing multi-tiered systems approaches to providing effective instruction (Response to Intervention [RTI], Sailor et al., 2009) and behavioral support (School-wide Positive Behavior Support [SWPBS], Sugai et al., 2000) for all students (including those with disabilities). The RTI and SWPBS approaches emphasize establishing consistent systems to provide a universal level of support for all students (e.g., general curriculum/expectations for all students), a secondary level of support to support those students who need more support (e.g., modified curriculum or additional supports), and tertiary level supports for those students needing individualized programs within the school-wide program (e.g., adapted curriculum and additional supports to enable students to be successful in general education settings).

### **Level of Evidence: Emerging**

We judge this recommendation as demonstrating a low level of evidence based on three group design studies demonstrating the relationship between integrated, natural settings on the outcomes for individuals with disabilities (Stancliffe, Abery, & Smith, 2000; Wehmeyer & Bolding, 1999/2001; Zhang, 2001). Additional empirical studies will provide stronger evidence for this recommendation.

## **Level of Social Validity Evidence: Emerging**

The level of social validity demonstrated in the studies related to integrated environments was judged to fit the criteria for *emerging* evidence. The rating of emerging was based on the criteria listed in Table 1 (p. 14). Despite the socially important outcomes of the studies reviewed, the number of demonstrations of the effect was limited and follow-up measures were absent in these studies.

## **Brief Summary of Evidence to Support the Recommendation**

The literature on self-determination emphasizes the importance of ecological factors that could potentially impact self determination (Walker et al., in press; Wehmeyer et al., 2003). Our search for empirical studies that analyzed this recommendation as it relates to promoting self-determination yielded only a few studies (Stancliffe, Abery, & Smith, 2000; Wehmeyer & Bolding, 1999/2001; Zhang, 2001). Stancliffe, Abery, and Smith (2000) evaluated the “personal control” (i.e. control that individuals exercise over what happens in their lives) and self-determination of 74 adults from community living settings. They concluded that environmental variables (e.g., less restrictive settings) made significant contributions to predicting the self-determination of an individual. Wehmeyer and Bolding (1999), in their first study, used a matched samples design to study self-determination across living and working environments for individuals with intellectual disabilities. Their analyses indicated that an individual’s self-determination, autonomy, and satisfaction as well as opportunities for choice-making differed according to settings (e.g., supported or independent living, supported or competitive employment). In their second study, Wehmeyer and Bolding (2001) analyzed the self-determination, autonomy, and life choices of individuals with intellectual disabilities before

and after they moved from a more restrictive work or living environment. Their results indicated there were significant positive improvements in self-determination, autonomous functioning, and live choices when individuals moved to a less restrictive setting.

Zhang (2001) examined the level of self-determination of students with mild intellectual disabilities in regular classrooms. Zhang's results were contrary to the other studies as she found that students with disabilities had more opportunities to engage in self-determined behavior in more restrictive settings (e.g., resource rooms) than they did in general education classrooms. However, the results of this study should be considered tenuous as only the "expression of self-determined behaviors" were measured. Zhang explained that the results may not have been due to the environment, but rather to the difficulty students with intellectual disabilities may have had in expressing themselves in general education classrooms (due to the lack of knowledge of the general educator on how to support the expression of self-determined behavior).

### **How to Implement**

- Consider natural, least restrictive settings (i.e., general education, community), as the primary contexts for designing and delivering instruction to promote self-determination.
- Provide instruction with a range of examples that are rich, relevant, and engaging for individuals to be able to generalize skills in multiple situations and settings.
- Ensure that the general education curriculum includes instruction designed to promote self-determination (this creates a school environment that utilizes consistent terminology, expectations, and prioritizes instruction promoting self-determination in all students).

- Organize systems of supports for students who need additional supports (using strategies discussed in recommendations 2 through 4).
- Consistently screen and assess student skills related to the promotion of self-determination to identify whether lack of these skills are a result of fidelity of implementation of approaches, environmental barriers (e.g., lack of opportunities or access to opportunities), and/or the need for additional resources to address individual student factors (e.g., need for explicit instruction, staff trained to teach skills that promote self-determination).

### **Potential Barriers/Limitations and Solutions**

**Barrier :** Schools may be reluctant to incorporate the promotion of self-determination into their general education curriculum. Teachers may be concerned that this will cut into their time to teach much needed academic skills.

**Solution:** Schools and teachers should not interpret these recommendations as suggesting that the focus of instruction is to promote self-determination. Rather, teachers should be trained to understand how to imbed the use of component skills of self-determination within their daily lessons. For example, teachers can teach students how to self-manage their behaviors in achieving content standards for the upcoming unit by having the students set goals, self-monitor their achievement towards their goals, self-evaluate progress, self-reinforce achievement, and provide self-feedback to improve performance. Similar features can be embedded into instruction to promote choice/decision-making, problem solving, self-advocacy, leadership, and contribution.

**Barrier:** Schools and teachers do not have the time to screen and assess the self-determination skills of students.

**Solution:** Certainly it is a challenge to screen and assess student's skills that promote self-determination. However, schools are already engaged in systematically reviewing academic progress data as well as behavioral data through the use of RTI and SWPBS approaches. Therefore, embedding the aspects and features of self-determination within these systems structures may prove helpful in effectively supporting students not only in developing better skills to being self-determined, but also improving behavioral and academic outcomes.

### Conclusion

In conclusion, we have made five recommendations herein to promote self-determination among individuals with disabilities. We reemphasize that we have defined self-determination as a multi-dimensional construct comprised of a number of component skills or conditions (see Table 1 – p. 14). As shown in our presentation of practices within the dimensions and conditions of self-determination (Table 3 – p. 41), there was no one practice reviewed that addressed all 3 dimensions (*Causal Agency, Proxy Agency, and Environmental Opportunities to Act*) of self-determination. Therefore, it is our overall recommendation that our five recommendations be used concurrently to ensure the promotion of self-determination for individuals with disabilities.

Our first recommendation is to utilize person-centered planning methods to empower individuals to self-advocate and set relevant personal goals. Person-centered planning methods address the following conditions/skills in the organizational framework of self-determination:

goal setting, choice/decision making, social inclusion, enriching an individual's environment, and dignity to the risk of undertaking desired living/work/leisure activities. Our next two recommendations focus on instructional strategies (teacher-directed and self-directed) that educators can use to teach students component skills that promote the following skills to enhance self-determination: self-management skills, choice/decision-making, problem-solving, and self-advocacy/leadership. Next, we recommend creating and maintaining a system that involves family supports and family involvement to address the following conditions to enhance self-determination: social capital, social inclusion, enriched environment, and dignity of risk. Finally, we recommend that educational agencies organize their environments to provide enriched opportunities, supports, models, and resources to promote the self-determination of all students (especially those with disabilities).

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**Table 3.**

***Presentation of Practices within the Dimensions and Conditions of Self-Determination***

	Self-Determination												
	Causal Agency/ Independence						Proxy Agency/ Interdependence		Environmental opportunities to act				
	Self-management						Choice/ decision-making	Problem solving	Self-advocacy/ Leadership	Social Capital	Social Inclusion	Enriched Env.	D. of Risk
Practices	Goal-Setting	Self-monitoring	Self-instruction	Self-evaluation	Self-reinforcement	Self-Feedback							
Person-centered planning methods	X						X		X	X	X	X	X
Teacher-directed instructional strategies	X	X	X	X	X	X	X	X	X				
Self-directed learning strategies	X	X	X	X	X	X	X	X	X				
Family Supports										X	X	X	X
Organize environmental systems											X	X	X

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