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## Foundations for Self-Determination in Early Childhood: An Inclusive Model for Children with Disabilities

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# Foundations for Self-Determination in Early Childhood: An Inclusive Model for Children With Disabilities

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## Abstract

This article introduces the Early Childhood Foundations Model for Self-Determination and provides a rationale for the need to consider the foundations of self-determination behavior that begin early in life. This model is based on the premise that young children with disabilities benefit from a collaborative partnership between important adults in the lives of children to provide a supportive, stimulating, and coordinated environment between inclusive classrooms and home settings. Within partnership, the Foundations Model establishes the proposition that the basic foundational skills for developing self-determination in later life require young children with disabilities to gain skills in (a) choice-making and problem solving, (b) self-regulation, and (c) engagement. In this position paper, the authors review literature related to these three foundational constructs and present a rationale for use of the Foundations Model as a guide to developing systematic interventions to start young students with disabilities on the road to building a foundation for self-determination.

## Keywords

self-determination, self-regulation, choice, engagement, family–professional partnership, early childhood

Discussion among families, practitioners, and researchers about self-determination in early childhood is relatively recent in the self-determination literature (Brotherson, Cook, Erwin, & Weigel, 2008; Shogren & Turnbull, 2006). The term *self-determination* is generally associated with secondary transition, but Wehmeyer and Field (2007) suggested “an instructional focus across the life span is critical for student success” (p. 1). Palmer and Wehmeyer (2002) described actions for adolescents that are self-determined, but young children can be supported by adults to start the process of

1) making choices and decisions as needed (acting autonomously); 2) having some personal control over actions (behavior is self-regulated); 3) feeling and acting capable (initiating and responding to events in a psychologically empowered manner; and 4) understanding the effects of actions (acting in a self-realizing manner). (p. 1)

To describe the process of becoming self-determined, component elements such as problem solving, choice-making, goal setting, and other aspects of becoming a causal agent

in one’s life (volitional action) and having a good quality of life as an adult are important (Wehmeyer, 1999, 2005). Wehmeyer’s (1999) functional model of self-determination stresses providing opportunities to practice elements of self-determination (e.g., problem solving or goal setting) through facilitation within the environment (i.e., people and places) and experiences of individuals with disabilities. Bullock and Lutkenhaus (1988) studied the developmental pattern of volitional activity in play and clean-up activities in children between the ages of 15 and 35 months and concluded that young children *can* act to achieve a particular outcome or goal. In this case, the goal was framed by adults, but the volitional activity aspect of Wehmeyer’s

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definition of self-determination begins to unfold in the early childhood years.

In the past 20 years, conceptual articles described the roots of self-determination in early childhood and suggested that children learn many aspects of self-determination over time with facilitation and support by others (Brown & Cohen, 1996; Erwin & Brown, 2000, 2003; Palmer & Wehmeyer, 2003). Erwin and colleagues (2009) agreed that “simply growing older does not provide all the needed opportunities to acquire the abilities to make choices and decisions that promote later self-determination” (p. 28). Because the components of self-determination have roots during the early years, adults can facilitate this development (Doll, Sands, Wehmeyer, & Palmer, 1996; Palmer, 2010; Wehmeyer & Palmer, 2000). It would be developmentally inappropriate for preschool-age children to be expected to exercise independent choices, decisions, and problem solving as self-determination is defined for adolescents and young adults. The task in early childhood is to note the specific and developmentally appropriate skills that are the *precursors*, or *foundations*, of self-determination so that adults in the lives of children with disabilities may provide targeted support. Throughout their child’s schooling, a parent could continue to advocate for services and supports that will help their son or daughter be self-determined when they finish their education.

A focus on the foundations of self-determination while children are young has many advantages. First, a systematic approach to develop skills leading to self-determination encourages significant adults to provide young children with practice and guidance in needed skills. Second, there is time during early childhood to practice and refine abilities before becoming independent. Third, earlier introduction of concepts related to self-determination may prevent overdependence, a low sense of self-efficacy, and external locus of control. Finally, learning opportunities can easily be infused into the developmental structure of early childhood to support the acquisition of skills needed for self-determination (Abery & Zajac, 1996).

Families and professionals *together* can support young children with disabilities in preparation for later self-determination. Building a foundation for self-determination that is coordinated across early childhood settings as well as the home will have optimal results for children with identified disabilities, including children with severe intellectual disability. This coordinated approach requires a strong family–professional partnership that acknowledges and respects family beliefs and cultural values.

The purpose of this article is to propose a model as a rationale for the *why*, *what*, and *how* (King, 2009) of a systematic approach to building a foundation for self-determination in the early years. Models are necessary to visualize the big picture illustrating how families and practitioners can help children with intellectual and other disabilities

begin the journey toward self-determination that starts in preschool. King (2009) provided a succinct set of reasons why service delivery models such as Foundations are necessary: to provide clarity about which elements of services are needed or necessary, to guide service planning and development, to decide how to allocate resources, and to change organizational culture. Morrison and Morgan (1999) explained that administrators can use models to grasp the overview of services, focus on essential parts of service delivery, and permit more efficient and effective targeted intervention.

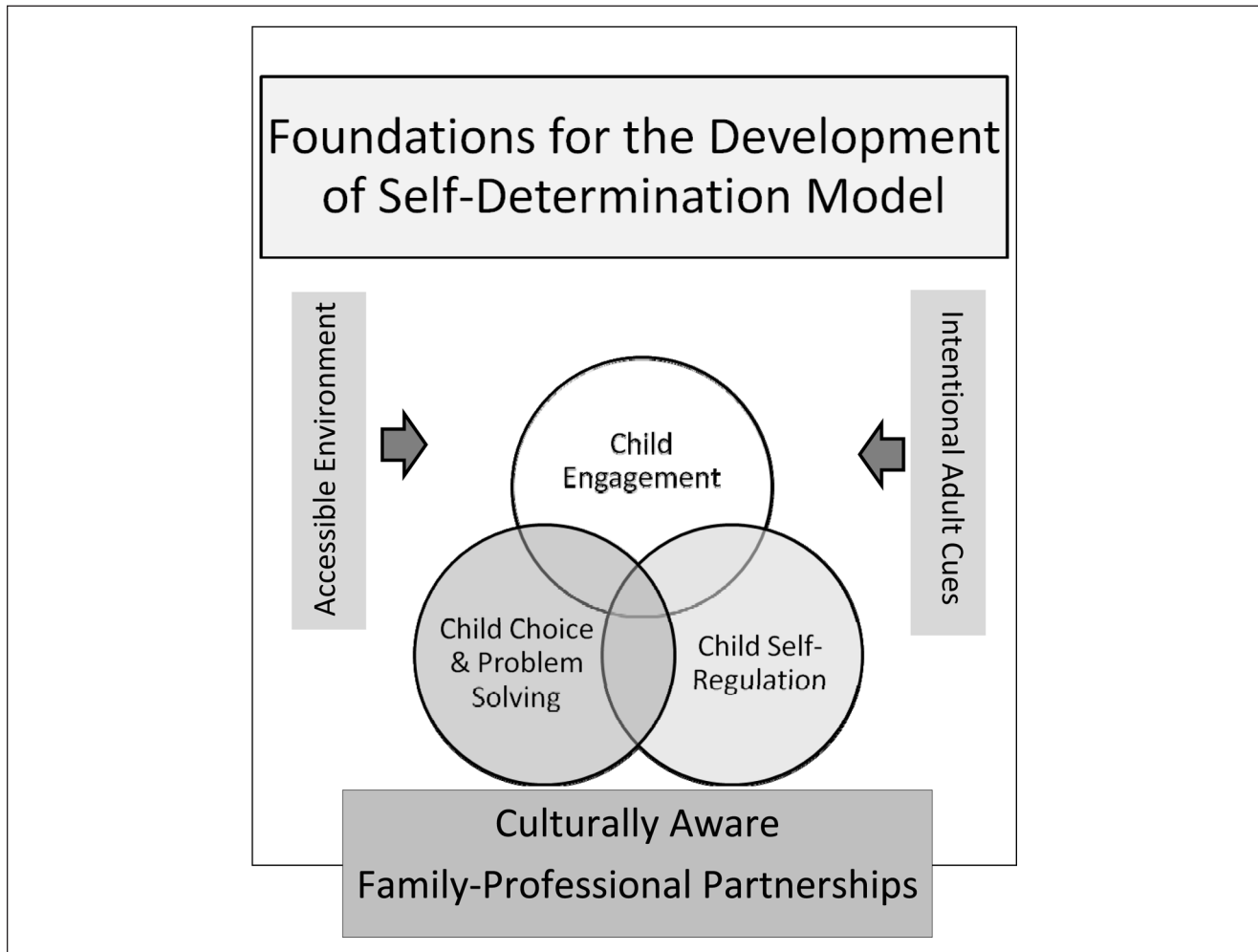
In the sections that follow, we present a description of the *why* and the *what*, a rationale and literature-based description of the proposed critical skills that we believe form the early childhood foundations for later self-determination. Next, we present the *how* component of the Self-Determination Foundations Model—the inclusive, culturally relevant, and partnership-based context, which we propose as the optimal basis for developing these foundational skills in young children with disabilities.

### **The Why and the What: Early Childhood Foundational Skills for Self-Determination**

The three circles at the center of Figure 1 illustrate the relationships among overlapping constructs that we propose as critical components of foundations for later development of self-determination for young children with disabilities: (a) child opportunities for expressing and making choices or engaging in simple problem solving, (b) self-regulation, and (c) engagement. We envision these constructs as interactive rather than discrete and separate elements. In the following sections, we provide a literature base and rationale for the inclusion of each of these three constructs as foundations for self-determination in early childhood.

### **Opportunities for Choice-Making and Problem Solving**

Choice-making and problem solving represent skills for self-determination that can be nurtured in early childhood (Doll et al., 1996). Many parents observe young children making choices early in life and expressing interests related to activities, people, and food. However, some children with disabilities are less likely to express preferences unless prompted. Some, but not all children, begin to communicate to express their choices, first in pointing to objects and then in naming the objects. However, choice and problem solving are structured by the adults who set up the young child’s environment, reflecting a family’s beliefs or cultural values or the time available for choices to be made. Wehmeyer (1995) noted that choice-making is “a process of selecting



**Figure 1.** Foundations for Self-Determination Model.

between alternatives based on individual preferences” (p. 14) and recognizes that people with disabilities are sometimes less likely to be offered choices due to perceptions of limited capacity.

Choice also is closely associated with autonomy. At an early age, young children’s options are often and understandably controlled by others in their environments. Liso (2010) noted that choice should be offered so that young children with disabilities can begin to form preferences and decide what they like and do not enjoy. At some point, it is important to engage children with disabilities in identifying preferences through choice to combat learned helplessness (Seligman, 1975), a phrase used to describe individuals who do not actively seek additional input or try to improve learning long term without prompting from others. Zimmerman (1990) used the idea of “learned hopefulness” to focus on positive psychological aspects of perceived control and empowerment, also identified as part of the self-determination construct

(Wehmeyer, 1996). McCormick, Jolivette, and Ridgley (2003) stated “Choice-making opportunities provide young children with ownership of their daily activities and routines, and are the beginning of independence and autonomous decision making” (p. 4). For most of us, the more life-changing decisions are made within familial or cultural constraints. Even if families do not want to offer choices on a regular basis, children continuously make choices either to comply with requests or not.

Choice is commonly used in language development activities during early childhood with the child, to expand language by pointing, signing, or verbalizing a preference for a drink, snack, or toy. Dunlap and Liso (2004) suggested that choice and preference can be used to promote more socially appropriate behavior as well. Preschoolers with disabilities might struggle to make choices that tend to be incidental for some children (e.g., choosing a preferred toy or playmate) and need more intentional support from

families and service providers. The child's ability level may influence whether choices are offered verbally, through picture representations, or through other methods of presentation (Dunlap & Liso, 2004).

Hauser-Cram, Bronson, and Upshur (1993) found the degree to which children with disabilities were able to exercise choice in their activities is significantly related to increased social interaction, higher rates of engaging peers, higher levels of task persistence, and less distraction from tasks. With choice-making, children can exercise control over their environment and begin to understand the consequences of certain choices. Erwin et al. (2009) recognized the role of choice-making in children's ability to solve problems, acquire confidence, and explore their environment. Jolivet, McCormick, McLaren, and Steed (2009) studied choice-making in young children's daily environments finding that "children with and without disabilities made selections based on the choices that were initiated by adults with specific goals in mind" (p. 288). However, some caregivers or preschool teachers made choices *for* the child with a disability rather than assisting them in making choices because it was "easier" than facilitating choice (Clark & McDonnell, 2008).

Wehmeyer and Palmer (2000) suggested that in addition to choice-making, adults should help children identify problems and come up with simple solutions through scaffolding a discussion or situation. In fact, many preschool children can engage in simple problem solving, but children with disabilities may need targeted support to develop these skills. Using concrete language or representations of the key ideas will be helpful to encourage rudimentary problem solving. Problem solving is the ability to use information on hand to generate and implement solutions (Agran, Blanchard, Wehmeyer, & Hughes, 2002). This process usually has four steps: identifying the problem, identifying solutions, noticing obstacles to solving the problem, and identifying effects to each solution (Agran et al., 2002). Problem solving can be taught in early childhood (Joseph & Strain, 2010; Webster-Stratton & Hammond, 1997) especially related to supporting the development of social competence (Denhem et al., 2003; Webster-Stratton, 1999) through interpersonal problem solving.

Landy (2002) provided a developmental sequence for concentrating, planning, and problem solving starting between birth and 6 months when a child initiates movement to activate a mobile, intentionally brings a fist to mouth, and signals by cry, gesture, or smile when something is needed. By 12 months, most children have the skills to indicate preferences and make a selection. Child abilities increase over time so that between ages 3 and 5 years, children's language is more functional and the ability to use choice and rudimentary independent problem solving is present. In addition, Landy suggested that using some flexible routines provides children with the opportunity to express preferences to contribute ideas and grow in responsibility with adult guidance.

Choice and problem solving are also associated with self-regulation and increased engagement because a child working on a favored activity with a purpose may be more inclined to stay focused (Reinhartsen, Garfinkle, & Wolery, 2002).

## Self-Regulation

The second critical component in our Foundations Model is self-regulation. Bronson (2000) mentioned many varied definitions of self-regulation, including control of one's own behavior and emotions, use of cognitive processes, and engaging in prosocial behaviors. All of these definitions highlight traits that are hallmarks of competent mental health and social emotional development. Components of social emotional development include the "capacity. . . to form close and secure adult and peer relationships; experience, regulate, and express emotions in socially and culturally appropriate ways; and explore the environment and learn. . . in the context of family, community, and culture (Center on the Social and Emotional Foundations for Early Learning, n.d.). Self-regulation is also seen as a key component of sensory-processing concerns. Dunn (2010) described self-regulation as the manner in which someone reacts to sensory input (light, sound, touch, and busy environments) by either remaining calm or actively restructuring input to enable tolerance and remain calm.

Self-regulation is an important part of self-determination (Karvonen, Test, Wood, Browder, & Algozzine, 2004; Wehmeyer, 1996) and has been linked to later academic success (Blair & Diamond, 2008), usually through self-regulated goal setting (Palmer & Wehmeyer, 2003) and self-monitoring (King-Sears & Carpenter, 2005). The ability of a child to self-regulate has been deemed a "cornerstone" of early childhood development and can be seen in all areas of behavior (Gillespie & Seibel, 2006; Shonkoff & Phillips, 2000). Bronson (2000) explained that self-regulation begins in infancy when children begin to calm themselves for brief periods and have a rudimentary sleep/wake cycle established by 3 months of age with the help of others. By age 2 years, children begin to be more socially responsive and affiliate with other children and adults in a more positive manner. Landy (2002) suggested that between ages 3 and 4 years, young children are likely to comply about 80% of the time but still tend to be noncompliant and challenge the rules at times.

Adults, especially parents, play an important role in defining and organizing tasks for children and controlling the self-regulation strategies used (Bullock & Lutkenhaus, 1988). For our Foundations for Self-Determination Model in early childhood, we see self-regulation as the way in which children process and respond to input or stimuli received from their environment through the management or control over their own emotions (Kochanska, Philibert, & Barry, 2009), behavior (Ponitz, McClelland, Matthews,

& Morrison, 2009), and attention (Posner & Rothbart, 2009; Sheese, Rothbart, Posner, White, & Fraundorf, 2008), within the contexts and interactions provided by and engaged in with others. Particularly, we are interested in understanding how children respond to difficult situations at home, school, or community (changes in routine, needing to share toys with a peer, dealing with environmental triggers such as a fire alarm) and are able to monitor their own emotions, behaviors, and attention.

For young children with disabilities, the origins of difficulties with self-regulation may be a combination of behavioral challenges and sensory preferences. Regardless of origin, however, the relationship of self-regulation to development of later self-determination is that the ability to calm down and manage impulses is needed to make choices, and that the ability to filter out distractions and avoid sensory overload is clearly an important factor in learning to engage appropriately with activities.

## Engagement

Promoting children's engagement is one of the most important tasks related to the development of self-determination (Erwin & Brown, 2003; Odom & Bailey, 2000). Children's active and meaningful engagement is important for school success (Skinner, Kindermann, & Furrer, 2009). McWilliam and Casey (2008) operationalized engagement as "the amount of time children spend interacting with their environment in a developmentally and contextually appropriate manner" (p. 3). Much of the research on child engagement has focused on how adults (mostly teachers) can enhance engagement and interaction in children (Mahoney & Wheeden, 1999; Wimpory, Hobson, & Nash, 2007). A developmental sequence of engagement begins with nonengagement or unoccupied behavior and casual or undifferentiated attention that are unsophisticated forms of engagement. Then, across time, focused attention becomes more differentiated and leads to constructive, encoded, symbolic, and persistence, signifying more sophisticated engagement levels (McWilliam & Casey, 2008). Thus, if an infant displays nonengagement, that is fine, but for an older child to consistently lack focus is problematic. One would expect a 5-year-old to use constructive engagement more often than a toddler.

Children who experience more positive interactions with caregivers are more likely to explore the environment and have more opportunities to learn. de Kruif, McWilliam, Ridley, and Wakely, 2000 found that caregiver sensitivity is essential to the relationship between environmental quality and mastery of engagement. If caregivers support and encourage the production of new competencies, children's learning is enhanced (Dunst et al., 2001). Moreover, the features of the environment are an important factor contributing to the development of sustained engagement for children. Adults provide opportunities through everyday

life experiences to enable children's learning and engagement in activities. Children's learning is enhanced by interest in practicing existing skills, exploring environments, and learning and mastering new skills (Dunst et al., 2001).

In summary, engagement and self-regulation coexist with choice-making in our Foundations for Self-Determination Model. Engagement is an outcome of being self-regulated; thus, self-regulation is needed to enable a child to focus attention and enhance his or her engagement with others, the environment, or materials. Reciprocally, a child who is engaged with an activity may be able to tolerate more distracting external stimuli and to self-regulate more successfully. Furthermore, children may engage more fully in activities when they are allowed to choose from among several options. Opportunities to choose may contribute to reducing behavior outbursts or may allow the individual to restrict sensory overload. In turn, engagement and self-regulation are needed to enable a child to focus on options and take the time to identify their preferences to make choices.

Having established the *what* and the *why* for these three skills as the foundations for future self-determination, we turn now to the *how* aspect of our Foundations for Self-Determination Model, that is, the components necessary to *develop intentionally* choice-making, self-regulation, and engagement skills in young children with disabilities. Specifically, we will propose that a collaborative and culturally responsive partnership between families and practitioners serves as a necessary starting point to establish a consistent environment across home, school, and the community. Within a partnership context, adults may provide appropriate cues and make environmental accommodations needed to nourish development of the three foundational constructs.

## The How: Culturally Responsive Partnerships to Facilitate Foundation Skills

The outer components of Figure 1 illustrate a process for optimal and intentional development (the *how*) of the three foundation component constructs (the *what*). The critical requirement for optimal development of self-determination foundation skills for young children with disabilities is a strong and culturally aware family-professional partnership. Through such a partnership, it is possible to coordinate between home and school to provide consistent adult cues, environmental accommodations, and other supports. Specifically, these cues and accommodations are strategies that have been shown to influence enhanced self-regulation, engagement, and choice-making. In the following sections, we present a definition and rationale for culturally responsive family-professional partnerships, followed by examples of effective, coordinated adult

strategies and environmental accommodations needed to develop self-determination foundational skills in young children with disabilities.

### **Culturally Responsive Family–Professional Partnerships**

Family–professional partnerships are defined as equal collaborative relationships that benefit the family and professional as well as the child through mutual agreement to defer to each other’s judgment and expertise (Turnbull, Turnbull, Erwin, Soodak, & Shogren, 2011). Family–professional partnerships are considered important for promoting effective home–school relationships, which lead to meaningful and positive outcomes (Brotherson, Summers, Bruns, & Sharp, 2008). In the context of Foundations for Self-Determination Model, we proposed that effective family–professional partnerships lead to the outcomes of (a) mutual trust; (b) support for both family and school culture; (c) coordinated effort to embed complementary activities into existing routines at home, at school, and in the community; (d) effective communication between families and professionals; and (e) an increased sense of competence and confidence on the part of both families and professionals (Trivette, Dunst, & Hamby, 2010).

Families play a key role in providing, maintaining, and supporting opportunities for children’s development of self-determination (Cook, Brotherson, Weigel-Garrey, & Mize, 1996; Weigel-Garrey, Cook, & Brotherson, 1998). Families and caregivers make decisions each day regarding the types of experiences and learning opportunities their children will have, thus creating opportunities to practice choice, engagement, and self-regulation. When a child begins attending child care, preschool, or other educational settings, families and professionals can work closely together to promote choice-making, engagement, and self-regulation across home, school, and community contexts. Positive family–professional relationships play a fundamental role as organizers of development and vehicles for learning (King, 2009).

We define a culturally aware partnership as a condition where families and professionals have a mutual understanding self-determination—within the context of the family’s culture. Self-determination as a social value may be more consistent with some cultures than others. Families exercise their personal beliefs in many different ways (Kalyanpur & Harry, 1999; Lynch & Hanson, 2004) and may hold different beliefs and expectations regarding their child’s development (Frankland, Turnbull, Wehmeyer, & Blackmountain, 2004; Kalyanpur & Harry, 1999; Rogoff, 2003). The increasing attention to cultural and linguistic diversity within the United States has led to discussion of the impact of culture on self-determination skills (Zhang & Benz, 2006). Although the broad conceptual framework of

self-determination is seen by some as more representative of Anglo-European values (Frankland et al., 2004; Zhang, Landmark, Grenwelge, & Montoya, 2010), Wehmeyer and his colleagues (2011) suggested that self-determination has a common meaning across cultures but will be operationalized uniquely within and across various cultural belief systems. Another way to think about this is that first and foremost, families of children with disabilities want their children to be productive citizens, but the meaning and milestones of independence versus interdependence may be different from family to family. Elliott and Gonzalez-Mena (2011) noted “the term *self* attached to any word triggers feelings in some people who react to what they consider too strong an emphasis on individualism” (p. 32). However, self-determination should not be abandoned due to the cultural understanding and values of independence and interdependence.

According to Rogoff (2003), interdependence can simultaneously emphasize individual autonomy. In collectivist cultures (e.g., Asian, Latino), “children are socialized to interdependence, i.e. responsive coordination with the group—rather than separate individualism” (Rogoff, 2003, p. 200). Rather than absolute independence, for our model, self-determination is more about capacity building and being competent within family or community life. Several authors agree that a gap is evident between Western and non-Western thought about what it means to be self-determined (Browder, Wood, Test, Karvonen & Algozine, 2001; Zhang & Benz, 2006). For example, Huer, Parette, and Saenz (2001) found that Mexican American children with disabilities are encouraged to engage in the performance of chores to support family functioning (e.g., learn to sew and wash the dishes at home), whereas European American parents might focus more on their child’s own interests or communication abilities in the wider community. In both cases, however, children are learning to function more autonomously. Therefore, Brown, Gothelf, Guess, and Lehr (1998) suggested that educational services for individuals with disabilities should consider autonomy within the context of interdependence.

### **Adult Strategies and Accommodations to Foster Foundation Skills**

There are a number of examples in the early childhood special education and related literature of effective strategies to enhance one or more of the three abilities (choice and problem solving, self-regulation, and engagement) in our Foundations for Self-Determination Model. They consist primarily of two types of approaches: (a) intentional and consistent adult cues to elicit choice, direct engagement, and promote self-regulation and (b) environmental, material, or instructional accommodations to provide access to choices or settings that reduce distractions and are con-



ductive to engagement and self-regulation. The following examples are not intended to be all-inclusive but rather to illustrate how the adults in the lives of young children with disabilities may be able to foster optimal skill development in the three foundations model constructs.

### **Adult Strategies**

Frequent opportunities to indicate preferences and make choices can increase abilities when the opportunities to use these rudimentary skills arise (Dunlap & Liso, 2004; McCormick et al., 2003). Brown and colleagues found that opportunities for choice-making could be embedded throughout the day by presenting options for materials or activities, opportunities to participate or refuse to participate in an activity, and choices within an activity such as the location of an activity, and time an activity occurs/ends (Brown, Belz, Corsi, & Wenig, 1993). Encouraging children's choices can be facilitated in classrooms during play, centers, small groups, or class discussions. At home, families can include children in simple or more complex choices to build capacity for learning how to express preferences and make choices. Examples might include supporting the child to select his clothes for the day or encouraging the child to express her preferences for the games she would like to play.

Similarly, a number of strategies are available to promote self-regulation in young children. For example, advance visual cues are important tools for helping young children with autism spectrum disorders or communication needs anticipate transitions and avoid losing control. Various social stories (e.g., Tucker Turtle; Lentini, 2007) provide children with rubrics to help check their emotions and "cool off." It is especially critical for these cues to be coordinated between home and school so the young child can apply the stories and cues in both settings. Strategies related to promoting self-regulation by responding to sensory-processing challenges are also available (e.g., yoga, rubbing, soft lighting). Strategies for promoting engagement include the use of cues, prompts, and fading strategies. Because engagement is defined in terms of the length of time children attend to stimuli, adults may provide cues encouraging gradual increases of time spent on tasks over time (McWilliam & Casey, 2008).

### **Environmental Accommodations for Foundation Skills**

To express preferences and make choices, young children with disabilities will need to have access to options for choice-making (Brotherson et al., 2008). As a result, encouraging choice-making also requires that adults arrange the child's environment both at home and at school, to facilitate easy access to options for choice-making. This may include placing clothing on low hangers, providing

step stools for accessing a sink, or placing objects for choices within reach of the child. For children with low vision, it may require placing objects available for choice in the child's line of sight with a high-contrast background or light box. In both home and classroom, adults may facilitate a child's choice-making by placing toys and other materials in low baskets or see-through containers.

Environmental accommodations to promote self-regulation may include designating a "quiet place" (e.g., a soft bean chair) where a child may go to recover himself if he or she is feeling overwhelmed. Alternatively, the child may have a place and/or objects where she may go to express loud emotions, pound drums, run or climb, or otherwise work off emotions. Cook et al. (1996) noted that providing a space in each room of the home that a child may consider his or her "own space" that is in proximity to adults (e.g., a child-sized chair and table in a corner of the kitchen) may encourage both a sense of security and autonomy. Similar environmental accommodations may also promote appropriate engagement. For example, providing the child with his or her own "toy shelf" may serve a cue to encourage engagement.

### **Discussion and Conclusion**

In this article, we have stated that preschool-aged children with disabilities need systematic support to develop skills that are the precursors to developing self-determination in later years. To address this need, we have proposed the Foundations for Self-Determination Model, identifying the critical skills of choice-making, self-regulation, and engagement. We provided evidence from the literature to demonstrate that each of these three critical skills encompass essential elements of later self-determination. Furthermore, we explored the interactive and reciprocal role of choice-making in enhancing engagement and self-regulation, and vice versa, the value of self-regulation and engagement in developing the ability of young children with disabilities to make appropriate choices and learn to problem solve.

The Foundations for Self-Determination Model is also intended to provide guidance in how to support optimal development of the three critical foundational skills within the context of a culturally responsive family-professional partnership. Culturally aware partnerships include a recognition of different perspectives of choice-making, engagement, and self-regulation leading to greater autonomy and interdependence within the acceptable boundaries of a family's culture. Especially for young children with disabilities, an effective partnership is critical to the development of a home and school environment that is consistent across both of these settings and within the larger community. Families and professionals can work together to provide effective adult cues and environmental accommodations that lead to optional development for young children with disabilities. The family's unique ability to interpret cues from their

children can inform professionals about children's expressions of preferences. Similarly, professionals have access to resources and information families can use to help foster self-regulation and engagement at home.

A successful partnership experience in building foundations for self-determination may establish an expectation for future enhanced collaboration and satisfaction with partnerships between both families and professionals. Because we consistently find associations between home-school collaboration and children's academic outcomes in professional literature (e.g., Nye, Turner, & Schwartz, 2006), this expected outcome is in itself a valued result. Increased awareness about the development of self-determination on the part of families and practitioners may lead to the inclusion of children's preferences in decisions within the child's educational program and, as the child grows older, meaningful participation by the student and family in planning for educational goals, settings, and plans for transition to adulthood.

Ultimately, the question of whether the three critical abilities we have identified in our model are indeed the precursors to developing self-determination is an empirical one that may only be validated through long-term longitudinal research. In the meantime, the next step is to operationalize the Foundations for Self-Determination Model in Early Childhood by using it as a guide to develop an effective intervention process for developing these foundational skills. Such an intervention would provide families and practitioners with the tools to work together to optimize choice-making, self-regulation, and engagement for young children with disabilities within an inclusive preschool setting.

### Authors' Note

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