Early Intervention and AAC

The importance of early intervention for young children with ASDs is not a matter for debate. In a comprehensive, evidence-based report, the U.S. National Research Council (NRC) Committee on Educational Interventions for Children with Autism (2001) strongly recommended that entry into intervention programs should begin as soon as an ASD diagnosis is seriously considered, rather than waiting until it is confirmed. The NRC Committee also concurred that "active engagement in intensive instructional programming" (p. 219) should be provided to children at least up to age 8 years for a minimum of 25 hours per week on a year-round basis, and should consist of "repeated, planned teaching opportunities" (p. 219) conducted in both one-to-one and very small group sessions. They also recommended that emphasis be placed on the use of evidence-based instructional techniques in six main instructional areas: 1) functional, spontaneous communication using speech and/or AAC; 2) developmentally appropriate social skills with parents and peers; 3) play skills with peers; 4) various goals for cognitive development, with emphasis on generalization; 5) positive behavior supports for problem behaviors; and 6) functional academic skills, as appropriate.

The NRC Committee (2001) acknowledged that a wide range of instructional approaches may be used to accomplish these goals. These approaches include structured teaching based on the principles of applied behavior analysis such as discrete trial teaching (Smith, 2001), incidental teaching (McGee, Morrier, & Daly, 1999), applied verbal behavior (Sundberg & Partington, 1998), and pivotal response training (Koegel & Koegel, 2006). They also include social/developmental approaches such as the Developmental, Individual-Difference, Relationship-Based (DIR) model (Greenspan & Weider, 1999) and the SCERTS Model (Prizant et al., 2005a, 2005b). Although the NRC Committee did not recommend a specific curriculum or approach, they stressed the importance of goal-directed, evidence-based, individualized programs that meet the needs of both children with ASDs and their families.

Because of these recommendations, immediately after receiving a diagnosis for their child, families are faced with the daunting task of deciding what to do for their child with ASD and how best to do it. Some of their decisions may affect the extent to which AAC techniques of various types will be accepted and used (e.g., in an applied verbal behavior approach, manual signing may be accepted but graphic symbols may not be; see Mirenda, 2003b; Sundberg, 1993). Even when there is agreement about the techniques to implement, AAC practitioners will almost always need to work with other professionals whose views may be quite divergent from (and perhaps even incompatible with) their own. The potential for controversy is considerable and the potential for conflict is high; therefore, the ability to negotiate and collaborate is required of all involved.

To AAC or Not to AAC?

If the goal of an AAC system is to "enable individuals to efficiently and effectively engage in a variety of interactions and participate in activities of their choice" (Beukelman & Mirenda, 2005, p. 8), it is critical that AAC interventions be maximally individualized. This principle raises a number of contentious issues, the first and foremost of which is that many parents of young children (and some practitioners as well) are reluctant to implement AAC interventions out of concern that they will prevent speech production (Cress & Marvin, 2003). Despite credible research evidence to the contrary (Chapter 6; see also Millar, Light, & Schlosser, 2006), this reluctance continues to limit the extent to which individuals who can benefit from AAC have access to it. In addition, AAC is no less immune to "one-size-fits-all" thinking than is any other type of educational intervention. Some practitioners who ascribe to this

way of thinking institute one or more AAC techniques with everyone whose social-communication interactions are lacking, regardless of whether AAC is actually required. Other practitioners espouse the superiority of a particular instructional technique over all others, regardless of the abilities and preferences of individuals with ASDs or their families. Still others may always prescribe the specific AAC modality with which they have experience, rather than considering the entire range of available options. For example, some practitioners claim that manual signing is the best AAC technique for all individuals with ASDs, based largely on theoretical arguments rather than on empirical evidence (Mirenda, 2003b). Regardless, this one-size-fits-all thinking invariably limits the communication options that are available to individuals with ASDs and can be avoided by adopting the general EBP approach that was described in a previous section of this chapter.

(Mis)conceptions About ASDs and AAC

Research has called into question at least two of the assumptions that most people accept about ASDs in general: 1) motor impairments are not part of the disorder and 2) in most cases, intellectual disability is. Mirenda (2008) noted that these two assumptions directly affect both the design and the goals of AAC interventions for many individuals with ASDs. Alternative access or instructional supports are rarely provided to compensate for the types of motor planning or coordination problems that appear to be more common than previously thought (e.g., Dziuk et al., 2007; Hardan, Kilpatrick, Keshavan, & Minshew, 2003; Ming, Brimacombe, & Wagner, 2007; Minshew, Sung, Jones, & Furman, 2004). AAC goals are often focused solely on basic requesting skills, under the assumption that most individuals with ASDs will be unable to acquire a broad range of communicative functions because of limited cognitive capacity. Edelson (2006) and others (e.g., Dawson, Soulières, Gernsbacher, & Mottron, 2007), however, have provided empirical evidence to challenge the conventional presumption that intellectual disability usually co-occurs with ASDs. In addition, some researchers have started to demonstrate that individuals with ASDs can become much more communicatively competent through the use of AAC than might be expected in the presence of intellectual disability (e.g., Light et al., 2005). Given all of this, Mirenda (2008) urged AAC clinicians and researchers to "question what we think we know about people with ASD in general and how we support those individuals whose speech does not develop to communicate through AAC in particular." It remains to be seen whether the AAC community will take up this challenge both to reconceptualize ASDs in general and to

design innovative AAC interventions that push traditional boundaries and presume the potential for competence.

CONCLUSION

Decision making related to AAC interventions for individuals with ASDs is a complex and challenging endeavor. Because of the wide heterogeneity of this population, decisions about appropriate AAC techniques cannot and should not be made in the abstract; rather, they must be made for specific learners, in specific contexts, to meet specific needs (Beukelman & Mirenda, 2005). It is clear that that the success or failure of any AAC intervention is not simply a matter of choosing symbols or devices; instructional variables are also critically important. Indeed, when AAC fails to result in spontaneous, functional communication, this failure usually reflects limitations in the procedures and methods used for instruction rather than an inherent problem with AAC itself. In the end, the combination of research-based modality selection, excellent instruction, and goodness-of-fit (Bailey et al., 1990) with regard to environments, communication partners, and communication needs are all needed to maximize the possibility of successful communication for individuals with ASDs.