

STRAIGHT TALK About *Autism*

Barry M. Prizant, Ph.D., CCC-SLP
and Eve Mullen, M. Ed.

Thinking Developmentally

Part One of a Two-Part Article

Educational and treatment approaches for students with ASD are often categorized as either *developmental* or *behavioral*. The Autism Speaks website defines each in the following way:

Behavioral approaches fit within the framework or are derived from applied behavior analysis (ABA). ABA was developed in the late 1960s and is now used to help children with ASD change their behavior to more adaptive ways of responding to situations. ABA uses behavioral methods to measure behavior, teach functional skills, and evaluate progress.

Developmental approaches are generally spontaneous and natural in the way that adults respond to a child or the child's behavior. ...Developmental approaches look at the whole child and take into consideration typical and atypical development, family strengths and dynamics, cultural diversity, and appropriate practices.

In this two-part “Straight Talk” column, we will contend that “thinking developmentally” goes well beyond what most practitioners consider when the term *developmental approach* is used. We believe that all practitioners should learn—indeed be obligated to—think developmentally, as the dangers of not doing so are numerous and profound. This assertion is based

on more than 60 years of combined experience: one of us (BMP) as a consultant to numerous programs using a variety of intervention approaches, and the other (EM) either as a teacher or director of a program that serves individuals with ASD, many of whom had been previously exposed to a variety of intervention approaches. Based upon our considerable experience, we share the concern of many colleagues that practitioners who are now being trained to support people with ASD—with some even being “anointed” as autism specialists—have minimal or no background in child and human development, and therefore, little to no training in how to think developmentally or work within a developmental framework. We believe that service providers and family members must learn to think developmentally if they are to be respectful and effective in supporting the development of persons with ASD.

Thinking Behaviorally versus Thinking Developmentally

The focus of behavioral approaches for persons with ASD is to increase desirable behaviors and decrease undesirable behaviors based upon the principles and practices derived from Learning Theory, and most commonly, the principles of operant conditioning. The dynamic aspects of behavior change are considered to be under the control of teachers, parents, and other partners. Behavior change is believed to occur primarily by manipulating consequential variables (seen as the primary determinant of “learning”) such as reinforcing (positively or negatively) or ignoring behaviors. Learners are considered to play a relatively passive role in learning, and unobservable factors such as a person’s understanding, emotional experience, and/or communicative intent are considered to be outside of the context of scientific inquiry, and therefore, invalid subjects of discussion or inquiry.

It is unfortunate that many practitioners and agencies continue to insist on rigidly adhering to one category of practice, while claiming that other practices are ineffective and/or invalid, despite evidence to the contrary.

In fact, B. F. Skinner, arguably the most influential behavioral psychologist of the past century, admonished members of the American Psychological Association in his retirement address for lapses into what he termed unscientific inquiry into such domains as cognition and emotional development, both of which have been major thrusts of psychological research over the past three decades. Skinner's work, in particular, is significant in the context of autism, as his theories were the foundation for the work of those who established ABA as a treatment approach for children with ASD—the most notable being Ivar Lovaas. Moreover, Skinner's work is still cited as foundational to some of the more recent behavioral approaches such as *Verbal Behavior* (named for Skinner's 1957 book).

In these approaches, progress is understood primarily in terms of the demonstration of an increasing repertoire of skills. From a behavioral perspective, ASD is the result of a child's inability or limited ability to learn skills due to the challenges caused by neurological differences, as well as inadequate/inappropriate contingent responsiveness of caregivers (e.g., history of reinforcement). The focus of behavioral approaches regarding intervention is primarily skill-based; that is, practitioners use behavior plans and teaching programs designed to increase desirable behaviors and decrease undesirable behaviors.

In contrast, the aim of developmental approaches is to support the development of children and persons with ASD based upon principles and practices derived from research and theory on typical and atypical child and human development. Developmental approaches view the individual as an active learner (i.e., participant), who progresses through a variety of developmental stages throughout life. This developmental progression is considered to be a hard-wired, genetically-based, neurological endowment that enables an individual to seek out social and non-social learning opportunities. In turn, partners are hard-wired to respond, "guide participation," and promote the development of trusting relationships in everyday activities. Hence, development is understood as a process of evolving abilities that reflect movement through various stages of communication, language, cognition, social cognition, and other domains of development. Furthermore, child and human development is understood as a transactional process in which there is a constant interplay between genetically-determined individual characteristics—for example, learning style and relative learning strengths and weaknesses—and environmental influences, with social experience being of primary significance in development.

In developmental approaches, observable patterns of behavior are always considered within the context of our rich,

research-based knowledge of child and human development, and unique differences observed in ASD. In contrast to behavioral approaches, unobservable factors and constructs such as differences in learning style, emotional experience, communicative intent, and the development of trust in relationships are considered valid, if not essential areas of inquiry. From a developmental perspective, ASD is understood as a disability in which the trajectory of development is hindered, derailed, or significantly different due to constitutional factors such as neurological differences. For persons with ASD, the focus of education / treatment is to enhance progress, mitigate areas of weakness, and put development "back on track" by supporting individuals through the acquisition of abilities that represent increasingly sophisticated developmental stages.

It is important to note that over the past 30 years there has been an intermingling of the two approaches. Specifically, some behavioral approaches have increasingly drawn from the developmental literature, and some developmental approaches have integrated practices from the behavioral literature. Notwithstanding, in many situations, especially in the USA, it is unfortunate that many practitioners and agencies continue to insist on rigidly adhering to one category of practice, while claiming that other practices are ineffective and/or invalid, despite evidence to the contrary (see "Is ABA the Only Way?," ASQ, Spring, 2009).

What Does Thinking Developmentally Entail?

The two elements that are identified most frequently as definitive of developmental approaches are the following: 1) Sequences of developmental milestones in child development guide practices, including the selection of developmentally appropriate goals and objectives; and 2) Programming is carried out in more natural social contexts, activities, and routines, using a facilitative approach—for example, teaching, responding, and guiding flexibly in order to build on a child's intent, interests, and motivations. As noted by Bruner, a preeminent developmental psychologist, "A theory of development should go hand in hand with a theory of instruction."

Other essential elements involved in thinking developmentally are discussed below.

Understanding Developmental Sequences and Setting Appropriate Developmental Expectations—

Perhaps the most recognized aspect of thinking developmentally is that of being mindful of developmental sequences in a range of developmental domains. Child development texts are replete with tables of developmental sequences in communication and

... examining observable behavior plays an essential role, but *interpreting* what is observed requires a developmental perspective.

language, play, social development, motor development, and other domains. Despite the availability of an extensive research literature in all of these domains—including some differences that have been documented in ASD—it is not uncommon to observe violations of developmental thinking in practice. A few simple examples we often observe include 1) prompting *only* speech and not accepting or responding to the *intentional* use of communicative gestures for students who are not yet at a symbolic level of communication; 2) prompting students to *say the whole sentence* even though the student's spontaneous language level may be at only the one- or two-word level; 3) prompting students to engage in more advanced sequences of play trained by rote, even though, developmentally, they may be at earlier stages of single-scheme play; and 4) either “ignoring” or reprimanding students when they are distressed (i.e., emotionally dysregulated), even though they do not yet have

the self-regulatory strategies to maintain a well-regulated state. Many years ago, Vygotsky, a leading developmental psychologist of the last century, introduced the developmental notion of the “zone of proximal development.” This refers to the next expected and reasonable developmental achievement, given a child's current developmental status, and underscores the importance of teaching skills that the child is developmentally ready to learn.

Developmental Processes and Expectations—Decades of research on individuals with and without special needs have documented universal, cross-cultural developmental processes that are most influential in supporting development. A crucial component of thinking developmentally is not only to be cognizant of but also to operate according to these developmental processes. Examples demonstrated by caregivers include responsive caregiving, establishing joint attention, and using scaffolding techniques (i.e., finely-tuned strategies to support children's language, play, and learning to the next levels). Developmental growth in children is demonstrated by their growth in spontaneous imitation and the progression from use of external language to internal language to support goal-directed behavior. Additionally, the capacity to maintain a well-regulated emotional state emerges and progresses from mutual-regulation (regulation supported by

others) to the ability to self-regulate, resulting in a child's ability to remain most available for learning and engaging when challenged by dysregulating factors.

Developmentally Appropriate Supports—The use of developmentally appropriate supports, including the use of interpersonal and learning supports is another indicator of thinking developmentally. Interpersonal supports include the way in which partners adjust their behavior in order to be responsive, model appropriate language, and provide developmental support to foster initiation and independence. Learning supports include structuring activities in a predictable manner, providing visual and organizational supports, and modifying both activities and the learning environment. Learning supports are calibrated to a child's developmental needs and therefore evolve over time as the child progresses.

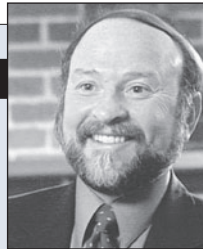
Thinking from the Child's Perspective—Thinking developmentally also entails thinking from the child's or person's perspective. In our experience, the most talented teachers and therapists, and the most successful parents, attempt to understand a child's experience in order to guide their own actions and reactions. As noted previously, traditional behavioral approaches consider it "unscientific"—indeed an anathema—to take into account unobservable variables or personal experience, holding instead to the premise that observable behavior is the only legitimate source of inquiry. In contrast, thinking developmentally requires that in order to respond appropriately, partners must attempt to read communicative intent, be cognizant of an individual's interests and attentional focus, and attempt to understand his or her emotional experience and emotional regulatory state. Certainly, examining observable behavior plays an essential role, but *interpreting* what is observed requires a developmental perspective. For example, the behavioral pattern of leaving a desk and bolting out of the classroom may be categorized and understood as escape-motivated behavior from a behavioral standpoint. With developmental thinking, we must go beyond the strictly observable and ask: "Given the child's developmental status, **WHAT** are the child's developmental needs; **WHY** is the child trying to "escape;" and **WHAT** are the developmentally-appropriate supports that are needed to help the child remain engaged?" or possibly, "Given the child's developmental status, does he/she need a scheduled break from engagement after a designated period of time?" The interpretation of the child's experience that led to "bolting" may be very different when observed in a nonverbal kindergarten student in contrast to a verbal eighth grade student. In other words, an important consideration is that a child's behavior and

needs may be reflective of an earlier stage of development. For example, even for individuals with HFA and Asperger's who may demonstrate age-appropriate or superior abilities in some areas (science, math), social understanding and social skills may reflect significant developmental lags relative to chronological age, and not simply rude or stubborn behavior. Thus, an important consideration is that a child's behavior and needs are reflective of his/her stage of development and knowing this guides adults in using appropriate teaching strategies.


In summary, we have argued that thinking developmentally is an essential perspective in supporting individuals with ASD. In part two of this article, we will discuss, in greater detail, the benefits of thinking developmentally and the risks in not doing so. We also will provide vignettes that demonstrate how thinking developmentally can have a positive impact on children and older persons with ASD. 🌟

Author's note: I would like to thank Eve Mullen for her contributions as a co-author to this two-part article. Eve's commitment to research-based, developmental thinking has resulted in an effective program rich with staff expertise and innovative practices in supporting students and families.

BiO



Dr. Barry Prizant has more than 40 years experience as a clinical scholar, researcher and international consultant to children and adults with ASD and their families. He is an Adjunct Professor, Brown University, and Director of Childhood Communication Services, a private practice. Barry is co-author of *The SCERTS Model: A comprehensive educational approach for children with ASD* (Prizant, Wetherby, Rubin, Laurent & Rydell, 2006) and the assessment instruments, CSBS, and CSBS-DP (Wetherby & Prizant, 1993, 2002). He has published more than 100 articles and chapters and has presented more than 700 seminars and keynote addresses in the US and internationally. Barry developed and co-facilitates an annual weekend retreat for parents of children with ASD, and is the recipient of the 2005 Princeton University-Eden Foundation Career Award for "improving the quality of life for individuals with autism." For further information, go to www.barryprizant.com, or contact Barry at Bprizant@gmail.com.



Eve Mullen, M.Ed.—Eve is a former special education teacher, and is currently the Program Administrator of the Preschool-Primary Learning Center autism program at Cooperative Educational Services, a position she has held for more than 20 years. Eve holds a Master's Degree from both NYU and Teacher's College, Columbia University. She has devoted 34 years to teaching students with autism, training teachers, and managing a program for children with ASD.