

Book Review by

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Autism and Developmental Delays in Young Children

*Gerald Mahoney & James D. MacDonald,
PRO-ED, Inc, Texas, 2007*

Autism and Developmental Delays in Young Children (Mahoney & MacDonald, 2007) describes a child development curriculum that can be used with young children with disabilities and their parents called Responsive Teaching. This approach to developmental intervention is designed to encourage parents to engage in highly responsive interactions with their children during the course of daily routine activities as the primary means of enhancing children's development. Since this curriculum addresses three domains of child development, it can be used by various professionals who work with parents and children together, including early intervention specialists, special education teachers, speech pathologists, parent educators, nurses and child psychologists.

This book is organized into four sections that include 9 chapters and a complete set of curriculum materials that can be copied. The first section of this book, which includes the first 3 chapters, provides an overview of the curriculum. In chapter 1 the authors explain some of the general features and assumptions of this curriculum. This curriculum was derived from child development research and theory which primarily included research investigating the ways that parents influence the development of their children, particularly as related to parent-child interaction. Since this research indicates that parental responsiveness is one of the main factors associated with the developmental outcomes that both typically developing children and children with disabilities attain, this curriculum is focused on teaching parents how to interact more responsively with their children in their daily routine activities and social interactions. Responsive Teaching was developed and field tested with infants and preschool aged children with

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autism and other developmental disabilities. However, since it was derived from research conducted with a broad range of children, Responsive Teaching can be used as a general child development curriculum with all children.

Chapter 2 provides the rationale for why developmental intervention should focus on working with parents. A common practice in early intervention and early childhood special education is for professionals to work directly with children, and to pay limited attention to involving parents directly in their children's intervention. Chapter 2 argues that this practice may be a very ineffective procedure for implementing developmental intervention for at least three reasons. First, the strong attachment relationships that are particularly evident between parents and children during the early childhood years means that children are more attuned and responsive to the interactions and information provided by their parents than they are to other people. Second, children are apt to be learning developmental skills and concepts at any moment throughout the day. Parents and other primary caregivers are more likely than professionals to be with their children when their children are ready to learn. Third, the authors point out that during the course of a year parents engage in far more interactions with children than professionals. In fact, the authors present a hypothetical analysis of the opportunities professionals have to interact with a child compared to parents. At a minimum, parents engage in 20 times more interactions over the course of the year than professionals. Since children are more apt to learn from their parents than from professionals, the work that professionals are doing with children may be offset by the kinds of interactions and stimulation that parents provide. Rather than focusing on providing developmental learning experiences in the limited amounts of time they have to work with children, the authors maintain that professionals' would be more effective if they focused on encouraging parents to maximize the quality of their daily routine interactions with their children. In the third, chapter the authors provide an overview of the curriculum which is described in greater detail in subsequent chapters in this book.

The second section of this book describes the theoretical and empirical foundations for Responsive Teaching. Chapter 4 provides a comprehensive review of the research related to parental responsiveness and explains how this parenting quality is operationalized in the curriculum. The authors observe that although researchers have investigated how a wide range of the experiences that children receive at home effect children's rate of development, if children are receiving at least minimal levels of opportunities to play and communicate with their parents or caregivers, the only parenting quality that is reliably associated with children's development is parents' responsiveness. Numerous studies have documented that parental responsiveness is significantly associated with three domains of developmental functioning, including cognition, communication and social emotional functioning, regardless of the nature of children's disability or the economic status and culture of the parents. The authors point out that Responsiveness is a complex interactive behavior that has at least five components: Reciprocity (e.g., interactions that are characterized by a balanced, "give

and take” relationship); Contingency (e.g., interactions that have an immediate and direct relationship to a child’s previous behaviors that support and encourage the child’s actions, intentions, and communications; Shared Control (e.g., guidance and direction that facilitates and expands the actions and communications which the child initiates); Affect (e.g., expressive, animated and warm interactions that are characterized by enjoyment or delight with the child); and Match (e.g., interactions and requests that are adjusted to the child’s developmental level, interests, and behavioral style). In RT, the intervention strategies that are used to help parents learn and use each these components of responsive interaction are referred to as Responsive Teaching strategies. RT strategies are simple suggestions for parents to modify or monitor their interactions with their children. The curriculum includes 63 RT strategies that are designed to help parents increase their use of the five components of responsive behavior. For example, a strategy to promote reciprocity is “Take One Turn and Wait”; Contingency, “Respond immediately to little behaviors”; Shared Control, “Follow my child’s lead”; Affect, “Interact for fun”; and Match, “Do what my child can do”. These strategies provide practical and concrete suggestions about how parents can modify their interactions with their child to become more responsive. RT strategies help parents to experience the various components of responsive interactive behaviors before this is their spontaneous style of interacting with their child.

Chapter 5 addresses the question of “How does responsive interaction promote children’s development?” The notion of attempting to promote children’s development by focusing on interacting responsively is quite different from the instructional practices that are recommended in most other early intervention curricula. Most of the r curricula that are being used in this field today focus on providing children specially designed activities and directed instruction that are designed to teach them developmental skills and behaviors that they do not yet know. RT strategies focus less on encouraging children to learn new skills and behaviors and more on encouraging children to do things they already can do. The authors describe research which suggests that by engaging in responsive interactions, adults are encouraging children to learn and use the processes that are the foundations for developmental learning which are called pivotal developmental behaviors. The authors list 16 pivotal behaviors which contemporary child development theory has identified to be the learning processes children use to develop their cognitive, communication and social emotional behaviors (See Table 1). The authors argue, that although it is important for adults to help children learn new developmental skills and behaviors, the most important way they influence children’s development is by encouraging them to use the pivotal behaviors that are the foundations for developmental learning. The major portion of this chapter describes how these pivotal behaviors contribute to children’s developmental functioning in each of the three developmental domains addressed by RT.

Chapter 6 describes a research study (Mahoney & Perales, 2005) that the authors conducted to investigate the effectiveness of Responsive Teaching. It included 50

parent-child dyads in which the children were an average of 30 months old at the start of intervention. All of the children were diagnosed as having Autism (n=20) or other Developmental Disabilities (n=30). The study was conducted over a 12 month time

Table 1

Pivotal Developmental Behaviors that are used to promote children's development in Responsive Teaching

Developmental Domains			
	Cognition	Communication	Social-Emotional Functioning
Pivotal Behaviors	Social play	Joint activity	Trust
	Initiation	Joint attention	Empathy
	Exploration	Vocalization	Cooperation
	Problem solving	Intentional	Self-regulation
	Practice	Communication	Feelings of confidence
		Conversation	Feelings of control

period during which each parent-child dyad was offered weekly one hour intervention sessions that focused on teaching parents RT strategies. Results from this evaluation produced several findings that supported the effectiveness of this intervention. First, pre-post comparisons indicated that the intervention was effective at promoting parenting responsiveness. Second, there were also significant improvements in children's use of pivotal behaviors. Third, the intervention was associated with dramatic improvements in children's development. On average children's rate of cognitive development increased by approximately 60% and their rate of language development increased by nearly 150%. Fourth, there were also statistically significant improvements in children's social emotional functioning as measured by two standardized tests. Fifth, children with autism made significantly greater improvements in development and social emotional functioning than did children with developmental disabilities. Sixth the improvements that children made in developmental functioning were associated with both improvements in mothers' responsiveness and increases in their pivotal behavior. The authors argue that that this finding provides the strongest support for the causal relationship between RT and the developmental improvements that children attained during intervention

The third section of this book provides guidelines and recommendations for implementing RT with parents and children. Chapter 7 describes each of the components of the RT curriculum and the procedures for planning intervention sessions. RT was designed to conform to requirements to specify interventions goals, objectives, strategies and evaluation procedures. The goals of RT are defined in terms of the three developmental domains that it addresses. For example if there is a concern about a child's behavior problems, the goal would be" to promote the child's social emotional

functioning”; while if a child has delays in language development the goal would be “to promote the child’s communication functioning”. Intervention objectives are the pivotal developmental behaviors that are listed on Table 1 that are targeted to address the child’s intervention goal(s). RT also includes the Pivotal Behavior Wizard to help professionals identify the pivotal behavior that would be best suited for addressing the child’s developmental or social emotional needs.

Intervention strategies include the 66 RT strategies that are described above and more than 130 Discussion Topics that can be used to explain to parents what a pivotal behavior is and why it is important to children’s developmental functioning. For each pivotal behavior, the curriculum provides a detailed description of six to ten RT strategies that can be used for promoting the behavior and up to 10 Discussion Points for explaining the pivotal behavior to parents. For each pivotal behavior, there is a menu of RT strategies and Discussion Points that can be used to address it. Intervention session plans are developed by selecting one to two RT strategies and Discussion Points to present to parents.

Two procedures are recommended for evaluating children’s progress in RT. First, Pivotal Behavior Rating Scales are provided as a means of assessing children’s progress in the use of the pivotal behavior intervention objectives that are being addressed. Second, the authors recommend the use of standardized developmental tests as a means of documenting whether children are attaining their intervention goals. These tools should be administered at the beginning of intervention and at 6 to 12 month intervals.

Chapter 8 includes a recommended format for conducting RT sessions. The authors claim that this intervention can be implemented both with individual parent-child dyads as well as with larger groups of parents and children. They suggest that the individual format may be most effective because it allows interventionists to tailor the session to the unique developmental needs of the child as well as to the learning style and capacity of parents. In either case, they recommend that sessions include the following sequence of components:

Rapport: Greet parents and have informal conversations about how they are doing with the recommended activities from the previous session);

Purpose and Rationale: Explain the intervention objectives being addressed in the session and the rationale for targeting the pivotal behavior. The interventionist then describes the RT strategy that the parent will be asked to use with their child.

Demonstration and Practice of RT Strategies: The interventionist demonstrates a strategy and asks parents if they understand it. The parent is then invited to practice using the strategy with the child following which the interventionist provides the parent feedback and coaching.

Family Action Planning. The interventionist and parent develop a written plan for how the parent can use the RT strategies and information presented in the session during daily home activities.

Chapter 9 provides a more detailed discussion of several activities that professionals can suggest for parents to follow through with the content presented during the session. This chapter also discusses several common problems that prevent parents from using RT, and provides suggestions for addressing these.

The fourth section of this book provides reproducible copies of all the curriculum materials that are needed to implement RT. In addition to each of the curriculum tools describe above, this also includes the Curriculum Outline. This provides a complete description and rationale for each of the pivotal behaviors that can be targeted as intervention objectives to address children's developmental and social emotional needs. For of the 16 pivotal behaviors there is a definition of the pivotal behavior, a 4 to 10 page discussion of "facts to consider" about the pivotal behavior, as well as a complete description of the Discussion Points and RT strategies that can be used to address this behavior. The Curriculum Outline provides all of the information that interventionists need to develop intervention session plans.

In summary, *Autism and Developmental Delays in Young Children* presents one of the most comprehensive "relationship based" intervention curriculum published to date. There are several strengths to this curricula that make it noteworthy. First it describes a parent-mediated intervention that parents can carryout in the context of their routine activities with their children. In addition, it addresses three developmental domains and is based upon an intervention philosophy that is highly compatible with contemporary child development theory. This curriculum is well developed such that all of the tools and materials needed to implement it are included in this book. Perhaps, one of the most important strengths is its research base. Responsive Teaching has been derived directly from child development research findings, and the authors have conducted preliminary evaluations which are highly supportive of its effectiveness.

Despite these strengths, this curriculum is very different from the majority of curricula that are currently being used in early intervention programs. In particular, it is a radical departure from some of the more popular behaviorally oriented curricula. While professionals with a strong background in child development will likely feel comfortable with many of the intervention concepts included in this curriculum, professionals with strong preferences for behavioral interventions may find this to be confusing and challenging to use. Nonetheless, insofar as professionals are looking for an evidence based curriculum that can be used to involve parents in their children's intervention, particularly children with autism and other developmental disabilities, this book offers a highly promising method.

References

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