

Unless otherwise noted, the publisher, which is the American Speech-Language-Hearing Association (ASHA), holds the copyright on all materials published in Perspectives on Language Learning and Education, both as a compilation and as individual articles. Please see Rights and Permissions for terms and conditions of use of Perspectives content: <http://journals.asha.org/perspectives/terms.dtl>

Vol. 20, No. 3, pp. 75–119

August 2013



In This Issue

Coordinator's Column, by LaVae Hoffman.....	77
Guiding Parents From Diverse Cultural Backgrounds to Promote Language Skills in Preschoolers With Language Disorders: Two Challenges and Proposed Solutions for Them by Anne Van Kleeck.....	78–85
More Than Words®—The Hanen Program® for Parents of Children With Autism Spectrum Disorder: A Teaching Model for Parent-implemented Language Intervention by Elaine Weitzman.....	86–95
Parents as Communication Partners: An Evidence-Based Strategy for Improving Parent Support for Language and Communication in Everyday Settings by Ann Kaiser and Megan Roberts	96–111
A Model for Coaching Parents to Implement Teaching Strategies With Their Young Children With Disabilities, by Julia Stoner, Hedda Meadan, and Maureen Angell.....	112–119

[Perspectives on Language Learning and Education](#) is a member publication for affiliates of American Speech-Language-Hearing Association Special Interest Group 1, Language Learning and Education. Planned publication months are January, March, July, and October. Affiliates of any of ASHA's 18 SIGs now have access to read all SIG *Perspectives*. To learn more about joining a SIG, visit <http://www.asha.org/SIG/join/>. Contact *Perspectives* at sigs@asha.org.

Disclaimer of warranty: The views expressed and products mentioned in this publication may not reflect the position or views of the American Speech-Language-Hearing Association or its staff. As publisher, the American Speech-Language-Hearing Association does not warrant or guarantee the accuracy, completeness, availability, merchantability, fitness for a particular purpose, or noninfringement of the content and disclaims responsibility for any damages arising out of its use. **Advertising:** Acceptance of advertising does not imply ASHA's endorsement of any product, nor does ASHA accept responsibility for the accuracy of statements by advertisers. ASHA reserves the right to reject any advertisement and will not publish advertisements that are inconsistent with its professional standards.



Vol. 20, No. 3, August 2013

SIG 1 Editor: Donna Boudreau

SIG 1 Associate Editor: Brenda Beverly

SIG 1 2013 Editorial Review Board Members:

Melissa Allen • Brenda L. Beverly • Amy Costanza-Smith • Elizabeth Burroughs • Jennifer Larsen • Maura Moyle • Elizabeth Rusnak • Lizbeth Stevens

SIG 1 CE Content Manager: Erin Taylor-Stone

SIG 1 2013 Coordinating Committee:

LaVae Hoffman, *SIG Coordinator* • Lisa Hammett Price, *Associate Coordinator* • Donna Boudreau, *Perspectives Editor* • Erin Taylor-Stone, *CE Content Manager* • GERALYN TIMLER • Susan Karr, **ASHA SIG 1 Ex Officio**

ASHA Board of Directors Board Liaisons: Donna Fisher Smiley, *Vice President for Audiology Practice* • Gail J. Richard, *Vice President for Speech-Language Pathology Practice*

ASHA Editorial Assistant: Tori Koulakjian

ASHA Advertising Sales: Pamela J. Leppin

ASHA Board of Directors: Patricia A. Prelock, *President* • Elizabeth S. McCrea, *President-Elect* • Shelly S. Chabon, *Immediate Past President* • Donna Fisher Smiley, *Vice President for Audiology Practice* • Perry F. Flynn, *Speech-Language Pathology Advisory Council Chair* • Wayne A. Foster, *Audiology Advisory Council Chair* • Howard Goldstein, *Vice President for Science and Research* • Carlin F. Hageman, *National Student Speech Language Hearing Association (NSSLHA) National Advisor* • Carolyn W. Higdon, *Vice President for Finance* • Barbara J. Moore, *Vice President for Planning* • Robert E. Novak, *Vice President for Standards and Ethics in Audiology* • Gail J. Richard, *Vice President for Speech-Language Pathology Practice* • Shari B. Robertson, *Vice President for Academic Affairs in Speech-Language Pathology* • Theresa H. Rodgers, *Vice President for Government Relations and Public Policy* • Neil T. Shepard, *Vice President for Academic Affairs in Audiology* • Jennifer B. Watson, *Vice President for Standards and Ethics in Speech-Language Pathology* • Arlene A. Pietranton, *Chief Executive Officer (ex officio to the Board of Directors)*

Coordinator's Column

LaVae M. Hoffman

As this August issue of *Perspectives in Language Learning and Education* is released, ASHA elections are underway for Special Interest Group (SIG) Coordinating Committee members. The SIG 1 Language Learning and Education Coordinating Committee has two positions open for election this year. If you are a SIG 1 affiliate, please take a few minutes to vote for the candidates of your choice. Every vote has an impact.

June 2013, was certainly busy for your SIG 1 Coordinating Committee. Two of our members, Geralyn Timler and Erin Taylor-Stone, completed ASHA Capitol Hill visits in Washington D.C. They talked with their congressional representatives about topics related to speech-language pathology to inform them about current issues that matter to SIG 1 affiliates. In addition, the SIG 1 Coordinating Committee conducted its annual Face-To-Face meeting at the ASHA National Offices in Rockville, Maryland. Over the course of one and a half days, we completed multiple work sessions to support the development and production of continuing education activities and offerings. Our highest priority is ensuring that the interests and needs of SIG 1 affiliates are addressed through conferences, special projects, publications, and online venues. Every year, in addition to producing *Perspectives in Language Learning and Education*, SIG 1 offers a short course and sponsors invited sessions at the ASHA Annual Convention, and conducts an annual Web-based event in October. At the 2014 ASHA Annual Convention in Chicago, Bonnie Singer, Ph.D., CCC-SLP, will present the SIG 1 short course. Dr. Singer will address issues of executive function and self-regulation in written language intervention with adolescents. SIG 1 will also be co-sponsoring invited sessions with the Infant, Toddler, and Preschool Language Topic Planning Committee, as well as the School Age Language Topic Planning Committee. If you attend the convention, please join us for these special sessions.

SIG 1 focuses on language learning throughout the life span with regard to all aspects of language form, language content, and language use. This focus also includes speech sound production. We plan to offer additional continuing education opportunities related to articulation and phonology in upcoming events. As you are about to see, this issue of *Perspectives in Language Learning and Education* is devoted to the topic of early intervention, particularly with regard to supporting parents of young children who are having difficulty learning language. Our SIG 1 editorial team has done a superb job in gathering an ensemble of authors who offer important insights and guidance to support practitioners who work with young children and their families. Anne van Kleeck has written an article about multicultural considerations when working with families of young children. Ann Kaiser and Megan Rogers describe an evidence-based intervention for use by parents. Elaine Weitzman provides guidance about how to scaffold parental interactions to build language skills, and Julia Stoner and her colleagues, Hedda Meadan and Maureen Angell, offer a coaching model for SLPs to use with parents. The topic choice for this issue came from comments and suggestions provided by SIG 1 affiliates. We are happy to gather and publish the information that affiliates request. We always welcome your input via e-mail or through the SIG 1 community. Every affiliate matters in SIG 1. Let us hear from you!

Comments/questions about this article? Visit our [ASHA Community](#) and join the discussion!

Guiding Parents From Diverse Cultural Backgrounds to Promote Language Skills in Preschoolers With Language Disorders: Two Challenges and Proposed Solutions for Them

Anne van Kleeck

Callier Center for Communication Disorders, School of Behavioral and Brain Sciences,
University of Texas at Dallas
Dallas, TX

Disclosure: Anne van Kleeck has no financial or nonfinancial relationships related to the content of this article.

Abstract

In providing culturally sensitive services for the families of young children with language disorders, the SLP is often confronted with a set of challenges. The first relates to avoiding making assumptions about the communication practices of any particular family, and is called the “avoid stereotyping” challenge. The solution offered is to repurpose the routines-based interview that is becoming more widely used in early intervention services (e.g., Bernheimer & Weisner, 2007; McWilliam, 2012; McWilliam, Casey, & Sims, 2009) in order to help the SLP determine (in a nonjudgmental fashion) the frequency and specific nature of interactions that occur in the home. When families do not display interaction patterns that evidence suggests foster language development and school success, how does the SLP both value the family’s preferred practices and offer suggestions for interaction that may contradict them? The solution offered for this challenge, referred to as the “avoiding mixed messages” challenge, is to talk with parents about how such interactions will better prepare their child for the language demands of school. This is referred to as the “blaming the schools” solution.

In this article, I suggest solutions for a set of related challenges that often confront the speech-language pathologist (SLP) when attempting to provide services that are culturally sensitive to the backgrounds of parents of young children and that also promote the development of language skills using evidence-based practices. The dilemma arises when the parents’ typical interaction pattern with their child, because of their cultural values and beliefs, differs from the kinds of interactions with preschoolers that evidence suggests promote early language development and later school success. So, how do we show respect for cultural differences, but also suggest that families engage, at least some of the time, in interactions patterns that are not typical for them?

The first challenge in dealing with this dilemma relates to actually knowing, rather than assuming, that cultural differences do in fact exist for any particular family. In other words, how does one determine potential cultural differences in a culturally sensitive way? I refer to this as the “avoid stereotyping families” challenge. To address this first challenge, I turn for guidance to work that uses interviews of families regarding their daily routines (e.g., Bernheimer & Weisner, 2007; McWilliam, 2012; McWilliam, Casey, & Sims, 2009) and suggest that these interviews can be repurposed to help determine a specific family’s practices

regarding communication with their toddler or preschooler who has a language disorder. The reader is also directed to work on ethnographic interviewing that can help in further adapting the interview process to families from a variety of cultural backgrounds (e.g., Westby, Burda, & Mehta, 2003).

The second challenge relates to finding ourselves unintentionally communicating contradictory messages to families whom we learn do not tend to engage their preschoolers in the interaction patterns known both to facilitate language development and to be the patterns of language use found in school. On the one hand, SLPs wish to acknowledge and hope to communicate to families that they appreciate the cultural values and beliefs that shape how parents communicate with their child. On the other hand, as SLPs, we find ourselves understandably wanting these families to practice interaction styles known to foster basic language skills (e.g., following the child's lead) and to begin incorporating aspects of language use (e.g., using decontextualized language) that will be important to their child's future successful academic functioning. This might lead us to send indirect but contradictory messages that basically communicate, "I value your culture and child rearing practices, including the way you talk with your child, but please talk differently." I refer to this as the "avoiding mixed messages" challenge.

On a global level, such differences in interaction patterns hinge in part on differences in values and beliefs found in more individualistic versus more collectivist cultures (see van Kleeck, 2006). The interaction patterns found in schools are shaped by more individualist cultural values (emphasizing independence and therefore valuing self-reliance, personal achievement, and self-determination) as opposed to more collectivist cultural values (emphasizing a person's interdependence with others and therefore valuing dependence, as well as related traits of harmony, social reciprocity, obligation, and obedience; see van Kleeck, 2006, for a discussion of parent-child communication typical of these two cultural orientations). Schools in the United States hold more individualistic cultural values because schools reflect the values typical of people who hold the most power in the overall society. In the United States, those with more power have higher education levels and the associated higher income levels. So, for example, Peña and Fiestas (2009) discuss how "individualism is associated with Western culture, higher education, income, social class, urban environment, and second- and later-born generations (Marshall, 1997; Oishi et al., 2005). In contrast, collectivism is associated more highly with Eastern culture, lower income, limited educational background, [lower] social class, rural environments, and first (immigrant) generation (Marshall, 1997; Matsumoto, Kudoh, & Takeuchi, 1996; Phaet & Schönplug, 2001; Sanchez-Burks et al., 2003)" (Peña & Feistas, 2009, p. 80).

In earlier work (van Kleeck, 2006), I reviewed research that illuminated some of the differences in parent-child interaction that might result from having a more individualist versus a more collectivist cultural orientation. A couple of examples of potential communication patterns in families with a more collectivist cultural orientation include having multiparty (rather than dyadic) interactions and believing that learning is better accomplished by observing (rather than commenting on events as they unfold). Some additional examples are provided later in this article.

To address this second challenge, "avoiding mixed messages," I turn to a long tradition of work with school-aged children focused on what is sometimes called academic language—the specific ways in which language is used in school for the purposes of teaching and learning—but I depart from the previous work by discussing why it is critical that we begin considering this type of language with preschoolers (see van Kleeck, 2012; van Kleeck & Schwarz, 2011, for overviews). I call this type of language "academic talk," and consider it to be a separate register that is distinguishable from everyday "casual talk." I also provide substantial evidence that families in which parents (and in particular mothers) who have higher educational levels (associated with individualist cultural values) tend to interweave both registers in their interactions with their young infants, toddlers, and preschoolers, whereas

families in which parents have lower educational levels (associated with more collectivist cultural values) are more likely to use the casual talk register (van Kleeck, 2012). I believe that my efforts to reframe preschoolers' language skills as consisting of two different registers—one that is critical to later academic success—have the additional benefit of allowing us as SLPs to “blame the schools” for the kinds of adult-child interaction patterns we might wish to promote.

The Avoid Stereotyping Challenge

The first challenge involves avoiding the propensity we may have, in spite of our good intentions, to stereotype families on the basis of their cultural background. This can result from gaining some knowledge about potential differences in cultural beliefs and practices in families from a variety of cultural backgrounds, then assuming these differences hold for a specific family we might work with. Research regarding potential differences in adult-child interaction patterns has been available in our discipline for some time, beginning with an article I published in 1994. In that article (van Kleeck, 1994), I synthesized literature from a variety of disciplines on different ways parents might socialize their children regarding conversational interactions.

I organized this discussion around the cultural biases that might be inherent in several key assumptions an American SLP might make regarding parent-child interaction. These assumptions underlie a focus on intervention with parents and on parent-child interactions in order to increase both initiations of communication and the overall amount a child communicates. To this end, parents are encouraged to adjust their communication to the child's level and follow their child's lead regarding the topic of the discussion, filling in when necessary by translating the child's perceived intentions into language. The assumptions include believing that (a) a parent is the primary caregiver of the child in the home, (b) dyadic interaction is most common, (c) adults value children talking a lot, (d) children should initiate and be allowed to direct conversations with adults, (e) adults should make accommodations to young children, (f) one can know another person's unspoken intentions, and (g) children learn best by active participation.

Alternate views include valuing children who listen to and quietly observe more competent members of their culture. As I discuss in the 1994 article, these views are often embedded in practices that involve frequent multiparty interaction and may also include older siblings as the young child's primary caregivers in the home. Furthermore, the more competent members of more collectivist cultures may not be nearly as prone to verbal explanation and back-and-forth discussions with young children as are their counterparts who hold more individualist cultural values (see van Kleeck, 2006, for further discussion).

These potential differences in parent-child interaction, however, are just that—potential. Cultural groups are by no means homogeneous. First of all, we often clump enormous varieties of cultures under one group. For example, Asian Americans represent different ethnicities and countries of origin and a wide array of different languages. They often have very different political histories and immigration experiences. Included among them would be people originally from China, Japan, Korea, any of the mainland Southeast Asian countries (Cambodia, Laos, Myanmar, Thailand, Vietnam, and Peninsular Malaysia), the Maritime Southeast Asian countries (Brunei, East Malaysia, East Timor, Indonesia, Philippines, Christmas Island, and Singapore), and the entire Indian subcontinent.

Even within a specific cultural group, a multitude of factors potentially create a great deal of variation regarding the practices that are followed. These include such things as exposure to education system through one's children, one's own education level, social class, region of country where one lives, generational status, the degree of acculturation, and so forth.

In modern societies, “information, commodities, and people move with formerly unimaginable speed, effectively transforming the world . . . [resulting in] the emergence of

hybridized and blended forms of identity and human expression” (Carrington & Luke, 2003, p. 235). As a result, many modern cultural groups are influenced by a complex web of both local and transnational entanglements (Clifford, 1997; Indo & Rosaldo, 2002). Given the many sources of heterogeneity, SLPs should assume nothing regarding the practices of any particular family encountered in clinical practice. To avoid stereotyping any family, it is essential to learn what their actual communication practices with their young children are. How are we to do this?

I mentioned earlier that I believe we can repurpose a technique that has been gaining in popularity in early intervention circles, namely, the routines-based interview (e.g., Bernheimer & Weisner, 2007; McWilliam et al., 2009; McWilliam, 2012). Routines in the home are the activities that are typically engaged in each day and include such things as getting up and ready for school, dinnertime, TV watching, and the bedtime routine. The current goal of these interviews, which ask families to describe their daily routines in the home, is to “plan and implement interventions that will better support the family’s daily routine” (Bernheimer & Weisner, 2007, p. 192). They allow the interviewer to assess family needs and to elicit the family’s goals for the child in a more concrete manner by providing a context (McWilliam, 2012). This is often easier for families than answering more abstract or decontextualized questions, such as “Tell me about your needs with your child.” Although it is not currently an explicitly stated goal of such interviews, I believe that they could also allow us to gather information on family practices related to communication with their child, and to do so in a nonthreatening manner that makes no assumptions regarding what such interactions should look like.

Indeed, daily routines in the family depend to a large extent on cultural values and beliefs (Gallimore, Weisner, Bernheimer, Guthrie, & Nihira, 1993; Gallimore, Weisner, Kaufman, & Bernheimer, 1989; Kellegrew, 2000). The questions SLPs might ask during a routines-based interview would focus on the kinds of communication the adult and the child typically engage in during the routine. McWilliam et al. (2009) briefly touched on this when they listed the six areas the interviewer wants to get information about regarding each routine, only one of which (the fifth) is of interest here. [The other areas include, (1) “What everyone does at this time,” (2) “What this child does,” (3) “What the child’s engagement is like” (i.e., how much he or she participates), (4) “What the child’s independence is like,” and (6) “How satisfied the family is with this routine,” p. 227]. For the fifth area, the authors suggested asking about, “What the child’s social relationships are like; this consists of information about how the child communicates and gets along with others” (p. 227). The intended outcome of this information, however, is not to discern the extent to which adult–child interaction patterns are similar to or different from parent–child interactions typical in families with more individualist cultural values. I suggest a number of questions the SLP might ask that would likely elicit specific information about interaction patterns in the home.

The SLP might first ask a global question about daily routines, such as, “Tell me about some activities you and your child participate in together nearly every day, like getting ready for school or bed, having breakfast or dinner, watching TV, or visiting with relatives.” If information about communication that takes place during these routine activities is not supplied spontaneously, the first follow-up questions could specifically ask whether or not the parent and child tend to talk during these activities, since we know that some cultures are far less “chatty” with their young children (e.g., van Kleeck, 1994). So, we might ask, “Do you and your child tend to talk together during dinner (in the car on the way to school, while getting the child ready for school in the morning or for bed at night, while visiting with your relatives, etc.), or do you mostly just quietly enjoy each other’s company?”

If the parent says “yes” to the first part of this question, the SLP might then ask a variety of additional follow-up questions, such as: (a) “Can you give me some examples of the kinds of things you might say to the child, and the kinds of things the child might say to you?” (b) “Who usually starts these conversations, you or your child?” (c) “If you don’t understand

what your child is trying to say or what he or she is talking about (which happens quite a bit with young children), do you generally prefer to just let it pass, or do you prefer to try to get the child to tell you again or tell you more, so you can try to figure out what they are talking about?” (d) “We’re all different when it comes to having a young child around when we’re trying to get work done. If you are doing a household task when your child is around you, such as cooking dinner, do you prefer that the child leave you alone so you can get your work done, or do you prefer to explain what you are doing to the child, or do you prefer just having the child nearby and observing you? Or maybe this varies from time to time, and you can tell me about that.” (e) “As you are going about your daily routines in the home, does your child prefer to be mostly quiet and observe you or does he or she prefer to ask questions? Do you tend to prefer to be quiet, or do you prefer to talk to him or her and also ask him or her questions?”

If the parent answers “no” to the first question above, the SLP might follow up with two lines of questions. The first would be aimed at garnering information about the style of communication that occurs when the parent does interact verbally with the child, even if engaging in lots of discussion is not typical of the family. So, for instance, the SLP might ask, “When your child wants something, how does he or she typically let you know, and how do you typically respond?” “If you want the child to do something, how do you typically ask and how does your child typically respond?” Research shows that cultural group differences in interaction style occur even in messages such as these, in which mothers are attempting to exert some kind of control over the child (see Hasan, 2009, as discussed in van Kleeck, 2012).

A second line of inquiry for parents who indicate that they do not engage in very much discussion with their child would be to determine whether the child frequently talks with others. So here, the SLP might ask “Does your child tend to talk with his brothers and sisters (or cousins, or aunts and uncles) during (name specific routine activities)?” The SLP could then continue with the various follow-up questions such as those posed in a–e above, but this time regarding child–child or other adult–child conversations, rather than the parent–child conversations.

To further determine whether book sharing or other kinds of preliteracy activities are a typical part of the family routine, the SLP might specifically ask about the bedtime or naptime routine to see whether books are shared at those times. It might be best not to specifically ask whether books are read, though, as it might imply that they should be. Instead you might ask something along the lines of, “Tell me a little bit about your bedtime routine?” Or the SLP might ask how the parent and child pass the time if they have to sit for a period with little else to do. This might occur, for example, in a doctor’s office waiting room or while riding on a bus or other public transportation. If such things as sharing children’s books, or thumbing through a magazine and talking about pictures in it, are a routine part of any of these kinds activities, it will likely come out in the parent’s description. The SLP could then ask about the nature of any discussions that might occur during these activities.

If we did this kind of questioning for several routines, we would undoubtedly begin to garner insight into the frequency and nature of parent–child, or perhaps child–child, interactions in the home. We would do so without implying that how often and how the parents interact with their children in these contexts is somehow inadequate or wrong. So by re-purposing the routines-based interview to focus specifically on the kinds of parent–child or child–child interactions that might occur in these contexts, we can avoid making assumptions about any particular family. We do this by directly asking them, in a nonjudgmental way, to provide specific examples regarding how they or others interact with their child in the home on a daily basis.

The Avoiding Mixed Messages Challenge

Once we have a clearer picture of typical communication patterns in the home, we may learn that the parents or other people who regularly spend time with the child are not prone to

the kinds of interaction patterns we know will likely spur the child's language growth. That is, they may not be very likely to do many of the kinds of interactions that SLPs frequently suggest they engage in with their child. At the very heart of our suggestions is the idea that parents should communicate with and encourage the child to communicate as frequently as possible. This very basic and seemingly unbiased suggestion, however, is not "culture free." Some cultural groups may instead value a quiet child (e.g., Crago, 1990; Dumont, 1972; John, 1972; Scollon & Scollon, 1981; Ward, 1971). As such, following the suggestion to talk to your child as much as possible may not come naturally to some parents, and thus may be unlikely to be heeded. Our subsequent suggestions—such as asking parents to follow the child's conversation lead, to talk slightly above the child's level, to interpret what they think the child might be trying to communicate, to respond enthusiastically to any of the child's attempts to communicate, and to try to achieve balanced turn-taking—may also not be aligned with cultural practices regarding talking to young children (van Kleeck, 1994).

Beyond these basic parent-child interaction patterns, typically more common in homes with more individualist cultural orientations, those parents (because they tend to have higher education levels) are also significantly more likely than parents with more collectivist cultural orientations (because they tend to have lower education levels) to engage their preschoolers in academic talk. This is true not only in the book-sharing context, in which such talk abounds in families with higher parental education levels (van Kleeck, 2006), but also in activities of daily living in the home (van Kleeck, 2012). In contrast to everyday casual talk, academic talk involves a higher frequency of a co-occurring set of language features found in the research to support later academic success. This includes such things as mental-state talk (e.g., Degotardi & Torr, 2007) and decontextualized language, or language that becomes increasingly removed from the social and physical context in which it is used (e.g., Curen-ton & Justice, 2004; De Temple & Beals, 1991; McKeown & Beck, 2003; Snow, 1983; Snow & Dickinson, 1991; Watson, 2001).

As noted above, schools are institutions that reflect the values, beliefs, and practices of those who hold more power within the broader society. In the United States, these are people who have higher education levels and associated higher socioeconomic status. As noted earlier, they also tend more toward individualistic cultural values. Because schools share values with the hegemonic group in the society, SLPs are provided with a convenient "blame the schools" reason for suggesting individualistic interaction patterns to families less familiar with using them. That is, the SLP can discuss how it would benefit the young child with a language disorder to learn two registers of language:—the patterns of language use typical of the home, and the patterns of language use typical of school. Having this reason might make families less familiar with these interaction patterns more likely to try to use them.

Indeed, the National Early Intervention Longitudinal Study (NEILS) survey revealed that low-income families and families from diverse cultural backgrounds were less satisfied than white and higher income families with early intervention services (Turnball et al., 2007). Peña and Fiestas (2009) believed this dissatisfaction may have come "in part from cultural mismatches in how parents are expected to and therefore 'trained' to interact with children" (p. 79). Hopefully, an understanding of how such interactions patterns may benefit their child in school will provide parents with a justification for sometimes practicing unfamiliar communication patterns with their child, and do so without denigrating the parents' current practices. That "sometimes" might best be restricted to certain activities, such as book sharing, that have an obvious link to school, so that parents can also continue at other times to engage in communication practices that better support their cultural values and beliefs.

In summary, I believe the SLP can avoid stereotyping any family by simply asking a series of questions about how interaction with a young child with a language delay takes place in the home. Should such interactions differ from those known to support a young child's language growth in general, and from the kinds of uses of language known to be important for school, the SLP can discuss the need to prepare the child for school by engaging, at least some

of the time, in academic talk with the child. If these patterns are less familiar to the family, it will likely take repeated modeling and coaching before parents are more comfortable with them, as lifelong patterns will not be easily shifted into new patterns of interaction.

Comments/questions about this article? Visit our [ASHA Community](#) and join the discussion!

References

- Bernheimer, L. P., & Weisner, T. S. (2007). "Let me just tell you what I do all day . . ." The family story at the center of intervention research and practice. *Infants and Young Children*, 20(3), 192–201.
- Carrington, V., & Luke, A. (2003). Reading, homes, and families: From postmodern to modern? In A. van Kleeck, S. A. Stahl, & E. Bauer (Eds.), *On reading to children: Parents and teachers* (pp. 231–252). Mahwah, NJ: Erlbaum.
- Clifford, J. (1997). *Routes: Travel and translation in the late twentieth century*. Cambridge, MA: Harvard University Press.
- Crago, M. (1990). Development of communicative competence in Inuit children: Implications for speech-language pathology. *Journal of Childhood Communication Disorders*, 13, 73–83.
- Curenton, S. M., & Justice, L. M. (2004). African American and Caucasian preschoolers' use of decontextualized language: Literate language features in oral narratives. *Language, Speech, and Hearing Services in Schools*, 35, 240–253.
- De Temple, J. M., & Beals, D. E. (1991). Family talk: Sources of support for the development of decontextualized language skills. *Journal of Research in Childhood Education*, 6(1), 11–19.
- Degotardi, S., & Torr, J. (2007). A longitudinal investigation of mothers' mind-related talk to their 12- to 24-month-old infants. *Early Child Development and Care*, 177(6 & 7), 767–780.
- Dumont, R. (1972). Learning English and how to be silent: Studies in Sioux and Cherokee classrooms. In C. B. Cazden, D. Hymes, & V. John (Eds.), *Functions of language in the classroom* (pp. 334–369). New York, NY: Teacher College Press.
- Gallimore, R., Weisner, T. S., Bernheimer, L. P., Guthrie, D., & Nihira, K. (1993). Family responses to young children with developmental delays: Accommodation activity in ecological and cultural context. *American Journal of Mental Retardation*, 98, 185–206.
- Gallimore, R., Weisner, T. S., Kaufman, S. Z., & Bernheimer, L. P. (1989). Family construction of ecology and everyday activities: How families accommodate developmentally disabled children. *American Journal of Mental Retardation*, 94, 216–230.
- Hasan, R. (2009). *Semantic variation: Meaning in society and sociolinguistics* (Vol. 2). London, United Kingdom: Equinox.
- Indo, J., & Rosaldo, R. (Eds.). (2002). *The anthropology of globalization: A reader*. London, United Kingdom: Blackwell.
- John, V. (1972). Styles of learning-styles of teaching: Reflections on the education of Navajo children. In C. B. Cazden, D. Hymes, & V. John (Eds.), *Functions of language in the classroom* (pp. 331–345). New York, NY: Teachers College Press.
- Kellegrew, D. H. (2000). Constructing daily routines: A qualitative examination of mothers with young children with disabilities. *American Journal of Occupational Therapy*, 54, 252–259.
- Marshall, R. (1997). Variances in levels of individualism across two cultures and three social classes. *Journal of Cross-Cultural Psychology*, 28(4), 490–495.
- Matsumoto, D., Kudoh, T., & Takeuchi, S. (1996). Changing patterns of individualism and collectivism in the United States and Japan. *Culture & Psychology*, 2(1), 77–107.
- McKeown, M., & Beck, I. (2003). Taking advantage of read-alouds to help children make sense of decontextualized language. In A. van Kleeck, S. A. Stahl, & E. Bauer (Eds.), *On reading to children: Parents and teachers* (pp. 159–176). Mahwah, NJ: Erlbaum.
- McWilliam, R. A. (2012). Implementing and preparing for home visits. *Topics in Early Childhood Special Education*, 31(4), 224–231.

- McWilliam, R. A., Casey, A. M., & Sims, J. (2009). The routines-based interview: A method for gathering information and assessing needs. *Infants & Young Children*(22), 3.
- Oishi, S., Hahn, J., Schimmack, U., Radhakrishnan, P., Dzokoto, V., & Ahadi, S. (2005). The measurement of values across cultures: A pairwise comparison approach. *Journal of Research in Personality*, 39(2), 299–305.
- Peña, E. D., & Fiestas, C. (2009). Talking across cultures in early intervention: Finding common ground to meet children's communication needs. *Perspectives on Culturally and Linguistically Diverse Populations*, 16(3), 79–85.
- Phalet, K., & Schönplflug, U. (2001). Intergenerational transmission of collectivism and achievement values in two acculturation contexts: The case of Turkish families in Germany and Turkish and Moroccan families in the Netherlands. *Journal of Cross-Cultural Psychology*, 32(2), 186–201.
- Sanchez-Burks, J., Lee, F., Choi, I., Nisbett, R., Zhao, S., & Koo, J. (2003). Conversing across cultures: East-West communication styles in work and nonwork contexts. *Journal of Personality & Social Psychology*, 85, 363.
- Scollon, R., & Scollon, S. (1981). *Narrative, literacy, and face in interethnic communication*. Norwood, NJ: Ablex.
- Snow, C. E. (1983). Literacy and language: Relationships during the preschool years. *Harvard Educational Review*, 53, 165–189.
- Snow, C. E., & Dickinson, D. K. (1991). Some skills that aren't basic in a new conception of literacy. In A. Purves & T. Jennings (Eds.), *Literate systems and individual lives: Perspectives on literacy and schooling* (pp. 175–213). Albany, NY: SUNY Press.
- Turnball, A. P., Summers, J. A., Turnball, R., Brotherson, M. J., Winton, P., Roberts, R.,... Stroup-Rentier, V. (2007). Family and supports and serviced in early intervention: Bold vision. *Journal of Early Intervention*, 29(3), 187–206.
- van Kleeck, A. (1994). Potential cultural bias in training parents as conversational partners with their language-delayed children. *American Journal of Speech Language Pathology*, 3, 67–78.
- van Kleeck, A. (2006). Cultural issues in promoting interactive book sharing in the families of preschoolers. In A. van Kleeck (Ed.), *Sharing books and stories to promote language and literacy* (pp. 179–230). San Diego, CA: Plural Publishing.
- van Kleeck, A. (2012, November). *Social versus academic oral language skills in nonmainstream culture preschoolers*. Paper presented at the American Speech-Language-Hearing Association Annual Convention, Atlanta, GA.
- van Kleeck, A., & Schwarz, A. L. (2011). Making “academic talk” explicit: Research directions for fostering classroom discourse skills in children from nonmainstream cultures. *Revue Suisse des Sciences de l'Éducation*, 33(1), 1–18.
- Ward, M. (1971). *Them children: A study in language learning*. Prospect Heights, IL: Waveland.
- Watson, R. (2001). Literacy and oral language: Implications for early language acquisition. In S. B. Neuman & D. K. Dickinson (Eds.), *Handbook of early literacy development* (pp. 43–53). New York, NY: Guilford.
- Westby, C., Burda, A., & Mehta, Z. (2003, April 29). *Asking the right questions in the right ways: Strategies for ethnographic interviewing*. The ASHA Leader, 8, 4–17.

More Than Words—The Hanen Program for Parents of Children with Autism Spectrum Disorder: A Teaching Model for Parent-implemented Language Intervention

Elaine Weitzman

Disclosure: Elaine Weitzman is the Executive Director of the Hanen Centre but has no other financial interest in the More Than Words resources or workshops.

Abstract

There has been an increased emphasis on caregiver-implemented intervention in the field of early intervention. However, this form of intervention can be effective only if the provider has the skills to teach, scaffold and coach the caregiver within a supportive, collaborative partnership. This article describes More Than Words—The Hanen Program for Parents of Children With Autism Spectrum Disorder, a manualized parent-implemented intervention for groups of parents and caregivers. In this program, the speech-pathologist assumes the role of mediator, utilizing specific techniques and activities based on adult education principles, providing a multifaceted, collaborative learning experience that enables parents to become effective language facilitators for their child.

Current best practice dictates that early intervention services be family centered, promoting a collaborative partnership between provider and caregiver, with the ultimate goal of empowering families and enhancing their sense of competence and self-worth (Friedman & Woods, 2012; Prelock & Hutchins, 2008). More recently, there has been an increasing emphasis on caregiver-implemented intervention, which “extends the scope of family engagement and, in turn, broadens our conceptions of family-centered practice” (Friedman & Woods, 2012, p. 62). This shift toward caregiver-implemented intervention requires early intervention providers to work with and through the child’s caregivers in order to strengthen the caregiver–child relationship and build caregiver capacity to foster the child’s development in the context of everyday activities and routines (Friedman & Woods, 2012; Salisbury & Cushing, 2013). For caregiver-implemented interventions to be effective, the provider must assume the role of facilitator, who engages in explicit teaching, coaching, and scaffolding with the caregiver, drawing on practices known to be effective with adult learners so that the caregiver can effectively apply the learning to interactions with the child (Salisbury & Cushing, 2013).

Caregiver-implemented social communication intervention has been shown to produce positive results for children with autism spectrum disorder (ASD; Aldred, Green, & Adams, 2004; Boyd, Odom, & Humphreys, 2010; Siller & Sigman, 2002). This type of intervention is consistent with the recommendation that children on the autism spectrum be offered intensive intervention as early as possible, with a focus on functional, spontaneous communication (National Research Council Committee on Educational Interventions for Children With Autism, 2001). Given that parents of children with ASD have been shown to be less satisfied with the services their child receives and to experience more stress than parents of children with other disabilities (Prelock, Calhoun, Morris, & Platt, 2011), it is important to provide this option to parents of children with ASD.

Despite the fact that public policy dictates that early intervention services support and strengthen caregivers' capacity to facilitate their child's development, this has not always translated into professional practice. Studies have shown that many providers, including speech-language pathologists (SLPs), continue to teach the child directly, while the parent observes (Peterson, Luze, Eshbaugh, Jeon, & Kantz, 2007; Wilcox, 2012). When the parent does interact with the child, providers rarely use explicit, purposeful teaching practices to support parents' acquisition of skills (Colyvas, Sawyer, & Campbell, 2010; Wilcox, 2012), nor do they embed interventions into families' daily activities and routines (Sawyer & Campbell, 2009).

Although there are many recommended practices with regard to how to support parents within a caregiver-implemented intervention framework, there is a lack of clarity with regard to the behaviors that constitute effective coaching or teaching (Friedman & Woods, 2012). More Than Words—The Hanen Program for Parents of Children With Autism Spectrum Disorder, a manualized parent-implemented intervention (Sussman, Honeyman, & Lowry, 2007), overcomes many of these challenges because its teaching model ensures that the SLP engages in explicit teaching and coaching, using an approach based on adult education principles. This article describes the teaching model and format of the More Than Words program and how this parent-implemented intervention provides parents with an effective, individualized learning experience. It highlights specific techniques and learning activities that the SLP uses to facilitate parents' acquisition and generalization of responsive strategies, so that they become effective language facilitators for their child.

More Than Words: A Manualized Parent-implemented Early Language Intervention Program for Children With ASD

More Than Words is a family-centered, social-pragmatic intervention program for parents of young children with ASD, the goal of which is to build capacity in parents so they can support their child's social, communication, and vocabulary development in naturalistic, everyday contexts (More Than Words Research Summary, 2013; Prelock et al., 2011). It is one of four Hanen programs for parents, the others being It Takes Two to Talk- The Hanen Program for Parents of Children With Expressive and/or Receptive Disorders (Pepper & Weitzman, 2004); Target Word-The Hanen Program for Parents of Children Who Are Late Talkers; and TalkAbility-The Hanen Program for Parents of Verbal Children on the Autism Spectrum (Sussman, 2006). The latter program aims to improve the theory of mind of children with ASD who speak in sentences in order to foster their conversational and peer-interaction skills.

More Than Words is offered to groups of parents and other caregivers, usually eight families at one time. It is led by an SLP who has received certification training from The Hanen Centre in the delivery of the program. This certification includes training in responsive interaction strategies, how to lead group sessions according to adult education principles, and how to coach and provide feedback effectively during videotaping and feedback sessions. The program has a set of supportive resources consisting of a guidebook for parents (Sussman, 2012) and a leader's guide for the SLP (Sussman et al., 2007), which contains detailed descriptions for how to facilitate each component of the program. The SLP also has a PowerPoint slides DVD with embedded video clips of examples for use in each group session of the program (Girolametto & Weitzman, 2006).

In addition to an orientation session and a preprogram consultation, More Than Words consists of a series of eight 2.5-hour group sessions for parents and caregivers, interspersed with three individual videotaping and feedback sessions. During the program, parents learn to optimize the child's opportunities to communicate in everyday activities and routines by using responsive interaction strategies.

Whereas all Hanen programs for parents aim to increase parents' responsiveness and have the "follow your child's lead" strategy at their core, More Than Words has a number of features that address the specific needs of children with ASD. Parents learn to identify their children's sensory preferences so that these can be accommodated in interactive routines. For example, children who are hyposensitive to movement can be engaged in routines that include large, repetitive movements such as jumping or rocking. In addition, whereas the It Takes Two to Talk and Target Word programs encourage interaction in open-ended play and daily activities, More Than Words focuses on activities that are repetitive and highly routinized, accommodating the child's need for structure and predictability. Many play activities are scripted and adult directed at the beginning of the program, especially when the child is difficult to engage, has little or no toy play, or perseverates in one activity. As children acquire play skills and become more interactive, parents reduce their direction and spend more time following the child's lead.

Key strategies taught in a More Than Words program are (a) observe, wait, listen to encourage child initiations; (b) follow your child's lead with the Four Is: Include your child's interests, Interpret what your child does as if he is sending you a message, Imitate what your child says and does, Intrude—insist on joining in; (c) ROCK when you play people games and ROCK in your routines: Repeat what you say and do, Offer opportunities to take a turn, Cue to take a turn, Keep it fun, keep it going; (d) help your child understand what you say by using the the Four Ss: Say less, Stress, go Slow, and Show (Sussman, 2012). The "Intrude" and ROCK strategies are specific to the More Than Words program.

Studies have shown More Than Words to have a significant and positive effect on young children with ASD. A controlled trial comparing the outcomes of parents and children who participated in a More Than Words program with a delayed treatment control group showed that More Than Words increased parent responsiveness and had a significant effect on children's vocabulary (McConachie, Randle, Hammal, & LeCouteur, 2005). A randomized controlled trial of 62 toddlers showed that parents who attended More Than Words were more responsive immediately post-treatment and 4 months post-treatment than parents whose children participated in "business as usual" treatments. Children who demonstrated low interest in toys pretreatment showed significant gains in their communication, generalizing these skills to unfamiliar contexts and people and maintaining these changes for 4 months post-treatment (Carter, Messinger, Stone, Celimli, Nahmias, & Yoder, 2011). Children who showed greater interest in toys did not make significant gains in their communication, resulting in program adaptations being undertaken for this group of children.

SLP as Adult Educator in the More Than Words Program

In the More Than Words program, building parents' capacity involves increasing their competence and confidence in their ability to implement program strategies flexibly and across contexts (McCollum & Hemmeter, 1997; Swanson, Raab, & Dunst, 2011). The manualized process of teaching and coaching parents is based on the following adult learning principles: Adults learn best when they are actively involved in the learning process; adults have strong preferences as to how they learn best (learning styles); learning styles must be accommodated at least some of the time, requiring a variety of learning methods and techniques; and the skills adults learn must be immediately relevant and applicable to their own situation, with positive effects (Geisel, 2011). This means that, as adult educator, the SLP provides each family with individualized information that accommodates each parent's and child's strengths and preferences.

Preprogram Consultation

The individualized experience begins during the preprogram consultation, when parents are seen by the SLP with their child. This consultation provides an opportunity for parents to share information about their child and family. This includes describing their child's everyday life, the family's typical interactions during daily routines, their child's favorite activities, and their concerns about their child's social and communication skills (Woods & Lindeman, 2008). The SLP also videotapes the parents interacting with their child during typical play, book reading, and daily activity, which serves as an informal baseline of child and parent behaviors. The SLP observes the quality of the parent-child interaction, as well as the child's communication and play skills. Parents are asked to complete the MacArthur-Bates Communicative Development Inventory (Fenson et al., 1993), as well as checklists from the *More Than Words* guidebook (Sussman, 2012) on the child's social-conversational and expressive and receptive language skills and to bring these to the first group session.

During the preprogram consultation, the SLP begins the process of goal setting by asking the parents what they would like their child to learn. This provides important insight into the parents' understanding of communication development, as well as their concerns and hopes for their child. The SLP provides some broad direction regarding the child's communication goals, based on her observations and what the parents have said. She explains that all child goals are tied to parents' use of specific strategies to be learned in the program, and that the goals will be refined with parental input as the program progresses (Girolametto & Weitzman, 2006).

Individualized Teaching in More Than Words Group Sessions

Adults' preferences for how they are engaged in a learning situation vary according to their individual learning styles. The model of teaching used in *More Than Words* group sessions is designed to accommodate four learning styles, which are reflected in the following four learning preferences: those who learn best by seeking personal meaning and through social interaction; those who want "the facts" from an expert and who then think through and evaluate what they have learned; those who integrate theory and practice by finding out the basics of how things work so they can use the information to experiment and solve problems; and those who learn by trial and error, preferring to try things out and reflect on the information gained from their own experience (McCarthy, 1987).

In addition to accommodating the four learning styles, the teaching model used in *More Than Words* is designed to facilitate effective learning and application of strategies. It involves a four-part learning cycle, with each quadrant having a specific purpose and engaging the learner in a different way, the ultimate goal of which is to help parents acquire new skills (Girolametto & Weitzman, 2006). The activities in the first two quadrants of the cycle address the acquisition of declarative knowledge, which involves understanding of the concepts taught. The second two quadrants address the acquisition of procedural knowledge, which reflects the ability to utilize the new skill effectively (ten Berge & van Hezewijk, 1999).

First Quadrant: Establishing Personal Meaning

The activity in the first quadrant of the learning cycle is experiential and starts parents thinking about the topic within their current frame of reference, with a view to helping them better appreciate their child's perspective. This part of the cycle satisfies the learner who seeks personal meaning and learns through social interaction. For example, before introducing the "follow your child's lead" strategy, the SLP shows parents an exciting clip from a movie. While they are watching, she stands beside the screen and performs some actions and shows them some objects. When she turns off the movie, she asks parents to tell her what they saw her

doing. When most parents can't recall more than one or two actions or objects, she asks them to explain why they did not notice her actions. Parents typically say that they were so occupied with the movie, they either didn't see or and didn't want to be distracted. The SLP then relates parents' reluctance to disengage from something that held their interest to how their child might feel when he is intensely interested in something and they try to distract him. She also explains that children with ASD have more difficulty than other children switching their attention from one thing to another. A group discussion ensues as parents consider the similarity between the experience they just had and their child's perspective in a similar situation. The SLP draws from this discussion to introduce the concept of following the child's lead, which involves responding to what the child is interested or engaged in to support his learning (Sussman et al., 2007). First quadrant activities provide the rationale for learning the strategy and form the link to the next quadrant, which involves providing specific information about the strategy.

Second Quadrant : Providing Relevant Information About a Strategy

The SLP links the conclusions from the introductory activity to the second quadrant of the learning cycle, in which parents are provided with detailed information about a specific strategy or strategies. This quadrant appeals to parents who learn best by gaining the facts from an expert and then processing them. The SLP uses an interactive presentation format and a variety of techniques and multimedia to explicitly teach the components of the strategy, as well as when and how to use it. The strategy is always demonstrated with videotaped examples, showing effective application of the strategy with children at different stages of communication development.

Given that adults learn best when they are actively involved in the learning (Dunst & Trivette, 2009), the SLP engages the parents by eliciting some of the information from them. For example, she may ask, "Think of an example of when you recently followed your child's lead. What did you do and how did your child respond?" She then uses their comments to supplement and support the information being provided. She ensures learner engagement by establishing a clear focus before showing a demonstration video and then solicits parents' answers to the focus question after watching the video. For example, she might say, "Paulo loves to turn the lights on and off. Watch how his mom follows his lead. Then we'll discuss how Paulo responded when mom followed his lead."

In order to individualize the information, the SLP reminds parents of their child's communication goal and encourages them to think about how and when they could apply the strategy in relation to their own child. For example, she may ask parents to think about specific activities in which they could apply the "follow the lead" strategy, given the child's interests and sensory preferences. Or, if she knows that a child enjoys a specific activity, she may mention it and ask the parent if they think this would be a good place to start. She also encourages parent-to-parent sharing, suggesting that one parent share something they have tried successfully, especially when children are at similar stages of development or have similar preferences. This type of group sharing facilitates social support and learning (Mackeracher, 1996).

The multiple learning experiences provided within this quadrant establish a foundation for the development of a deeper understanding of the strategy over time (Dunst & Trivette, 2009). At this point in the learning cycle, parents have gained important declarative knowledge, which reflects understanding but is not yet sufficient for application.

Third Quadrant: Opportunities for Application

The third quadrant of the learning cycle includes multiple opportunities for parents to apply and practice the strategy, beginning the acquisition of procedural knowledge. The

activities in this quadrant appeal to parents who prefer to integrate theory and practice by gaining enough information to try it out.

In a More Than Words group session, application activities include practicing the strategies in a role-play, as well as evaluating and problem solving regarding use of the strategy in video examples (Dunst & Trivette, 2009). When doing role-plays, parents simulate an interaction or situation that occurs frequently in the home, making it easier to apply the strategy in real life. The SLP reminds parents to bear in mind their child's communication goal and how use of the strategy facilitates the achievement of that goal. All parents have an opportunity to role-play themselves applying the strategy with someone who role-plays their child. The role-play is followed by a debriefing, facilitated by the SLP. The debriefing facilitates parents' adoption of a self-reflective approach to their application of newly-learned strategies. The SLP may ask parents to describe how well they think they applied the strategy, how difficult or easy it was and how the "child" responded. The SLP suggests that parents plan to monitor their use of the strategy during interactions with their child by choosing personal mental reminders.

Fourth Quadrant: Planning for Real-Life Application

The last quadrant of the cycle involves parents completing a "to do at home" plan to guide their application of the strategy during interactions with their child the following week. This part of the cycle appeals to parents who prefer to learn by trying things out in real-life situations. It also ensures that what they learn is applicable to their personal situation. Parents are asked to follow the plan frequently each day so they can see the impact of the strategy on their child over the week. They are also given a "report-back" form to complete, in which they comment on the child's response to their first use of the strategy, as well as any changes in his response by the end of the week. They are asked to reflect on what seemed to help the child most and any modifications made to the plan to accommodate the child (Sussman et al., 2007). This process of actively involving parents in applying, processing, and evaluating their newly learned skills has been shown to be associated with positive learner outcomes (Dunst & Trivette, 2009).

Individual Video Feedback Sessions: Consolidating Newly Learned Skills

Each participating parent or caregiver receives three individual videotaping and feedback sessions from the SLP over the course of the More Than Words program. These take place after Sessions 2, 4, and 7 and are conducted in the home or clinic, requiring approximately 1 hr per parent. Each session consists of the SLP videotaping approximately 5 min of a parent-child interaction, during which the parent applies the strategies taught and practiced in the previous weeks. This is followed by shared viewing of the videotaped interaction, with discussion and feedback. The video feedback sessions constitute a critical component of the individualized learning experience, building on the learning from group sessions and home practice, as well as facilitating consolidation of skills within the family's own context. These sessions also give parents an opportunity to review their own and their child's goals.

There is a strong coaching component to the video feedback sessions. The first type of coaching involves in vivo suggestions given while the parent interacts with the child (Dunst & Trivette, 2009). This involves the SLP offering quick, concise suggestions for how the parent can modify her behavior to better support the child's ability to interact and communicate (Kaiser & Hancock, 2003). For example, if the parent is engaging the child in a social routine but is not pausing to give the child an opportunity to take a turn, the SLP might say, "Play the game again, and this time wait for a few seconds after you say 'Down!' so he has a chance to tell you to lift him up again." This kind of specific coaching usually results in an immediate

change in the parent's behavior, which leads to an improved response from the child, giving the parent an opportunity to view a more successful interaction when reviewing the videotape with the SLP (Girolametto & Weitzman, 2006).

The broader interpretation of coaching applies when the SLP and parent discuss the videotaped interaction while they view it together. This discussion provides a context for sharing skills, knowledge, and experiences and for promoting the parent's self-discovery in order to increase mastery of the strategies (Rush, Shelden, & Hanft, 2003). During this component of the session, the SLP supports the parent's integration of new and existing skills; promotes increased awareness of parent and child behavior; and enhances the parent's ability to self-monitor, self-evaluate, and adjust her interactive behavior (Girolametto & Weitzman, 2006).

Viewing and discussing the videotape with the parent requires skilled facilitation by the SLP. It involves using the videotape effectively, engaging the parent in a reflective discussion, asking targeted questions, and actively listening to the parent's responses in order to gain insight into her views and her level of self-awareness. The model of feedback used in the More Than Words program is one of guiding the parent's learning with informational feedback and fostering self-discovery when possible.

The most useful type of feedback is informational, providing "knowledge of results" (Bruner, 1968; Mackeracher, 1996), which details the specific actions and changes in the parent. It also attributes changes in the child to changes in the parent's interactive behavior. For example, when a parent has been practicing engaging the child in a social routine to help him learn to initiate a nonverbal request (the child's communication goal), the focus of the session is to build on the parent's strengths by facilitating identification of instances in which the strategy was applied effectively, resulting in the child making a request. In this case, the SLP might pause the videotape and say, "Look what happened here when you waited." The SLP and parent review that section of the video, which shows the child making a request when the parent waited at a key juncture in the routine. Once the parent recognizes that she waited and the child then made a request, the SLP provides "knowledge of results," saying, "You made an effort to wait there, and you can see that it gave him a chance to take a turn. Your waiting made it possible for him to make that request." This kind of feedback is very powerful because it increases the parent's sense of competence and motivation. The SLP is advised against using positive reinforcement such as, "You did a good job," because this type of feedback does not provide specific information that guides future behavior, can increase reliance on external reinforcement, and undermines the collaborative nature of the SLP-parent relationship (Girolametto & Weitzman, 2006; Wlodkowski, 1993).

When viewing the videotape, if the parent demonstrates awareness of when she does and does not use the strategies by making comments such as, "I know I didn't..." or "I see that I did..." the SLP uses this awareness to increase consistency of strategy application. She may discuss the use of metacognitive strategies, which serve as mental reminders during interactions. For example, a parent who is struggling to wait long enough to give her child a chance to take a turn may choose to count to five silently to ensure that the child has time to communicate. The SLP may also ask the parent to think of specific situations in which to use the strategy, which is easier than trying to use it at all times.

When the parent uses the strategy infrequently and is unaware of when she does and does not, the SLP increases awareness by highlighting the sections of the video in which the parent was coached to use the strategy successfully, as well as highlighting the child's positive response. She also facilitates the parent's awareness of missed opportunities. She stops the video frequently and guides the parent to reflect on instances when she did or did not use the strategy. By using a targeted comment such as, "Look at what happened here when he drove the train over to you. Let's see what you did," the SLP focuses the parent's attention and helps her identify her behavior and its impact on the child. If the parent is able to identify the fact that she missed an opportunity to imitate the child, this becomes a good opportunity for the

SLP to highlight the importance of imitation as a means of engaging the child. She can also ask the parent to think of a mental reminder to help her remember to use imitation in the future.

Each parent is supported by the SLP to create a plan at the end of the video feedback session, which specifies what she will do to apply strategies more consistently and incorporate them into new activities and daily routines in order to facilitate generalization (Prelock, 2011).

Conclusion

Caregiver-implemented intervention has been identified as an effective means of engaging parents in their child's intervention and building their capacity to promote their child's development. This type of intervention requires the provider to utilize explicit teaching and coaching practices that draw upon adult education principles. More Than Words—The Hanen Program for Parents of Children with Autism Spectrum Disorder is structured so that the SLP utilizes an integrated adult education approach to support parents' acquisition of the necessary skills to facilitate their child's communication development. From the outset, parents are involved in setting goals for their child, with the understanding that the child's achievement of his or her communication goal is tied to the parents' consistent application of program strategies. Parents learn responsive strategies during group sessions, whose highly interactive format includes use of multimedia and multiple opportunities to practice and apply the strategies. This format accommodates varied learning styles and addresses adult learners' need to gain skills that are relevant and immediately applicable. Three individual video feedback consultations provide additional practice opportunities and informational feedback, which further consolidate and individualize each family's learning.

Parent-implemented interventions for families of children with ASD have been shown to produce effective outcomes for parents and children. More Than Words is an example of such an intervention whose structure places the SLP in a mediator role and utilizes an approach grounded in adult learning principles to support parents' individualized learning in order to become effective language facilitators for their child.

Comments/questions about this article? Visit our [ASHA Community](#) and join the discussion!

References

- Aldred, C., Green, J. & Adams, C. (2004). A new social communication intervention for children with autism: Pilot randomized controlled treatment study suggesting effectiveness. *Journal of Child Psychology and Psychiatry*, 40, 1–11.
- Boyd, B. A., Odom, S. L., & Humphreys, B. P. (2010). Infants and toddlers with autism spectrum disorder: Early identification and intervention. *Journal of Early Intervention*, 32, 75–98.
- Bruner, J. (1968). *Toward a theory of instruction*. New York, NY: W.W. Norton.
- Carter, A., Messinger, D., Stone, W., Celimli, S., Nahmias, A., & Yoder, P. (2011) A randomized controlled trial of Hanen's "More Than Words" in toddlers with early autism. *Journal of Child Psychology and Psychiatry*, 52, 741–752.
- Colyvas, J. L., Sawyer, B. E., & Campbell, P. H. (2010). Identifying strategies early intervention occupational therapists use to teach caregivers. *American Journal of Occupational Therapy*, 64, 776–785.
- Dunst, C. J., & Trivette, C. M., (2009). Let's Be PALS: An evidence-based approach to professional development. *Infants & Young Children*, 22(3), 164–176.
- Fenson, L., Dale, P., Reznick, S., Thal, D., Bates, E., Hartung, J.,... Reilly, J. S. (1993). *MacArthur communicative development inventories: User's guide and technical manual*. San Diego, CA: Singular.
- Friedman, M., & Woods, J. (2012). Caregiver coaching strategies for early intervention providers: Moving towards operational definitions. *Infants & Young Children*, 25(1), 62–82
- Geisel, P. (2011). *Training adult learners for behavior change*. University of California, Agriculture and Natural Resources. Retrieved from <http://ucanr.org/sites/camg2011/files/101992.pdf>

- Girolametto, L., & Weitzman, E. (2006). It Takes Two to Talk—The Hanen Program for parents: Early language intervention through caregiver training. In R. McCauley & M. Fey (Eds.), *Treatment of language disorders in children* (pp. 77–103). Baltimore, MD: Paul H. Brookes.
- Guralnick, M. J. (2001). A developmental systems model for early intervention. *Infants and Young Children*, 14(2), 1–18.
- Kaiser, A., & Hancock, T. (2003). Teaching parents new skills to support their young children's development. *Infants and Young Children*, 16, 9–21.
- Mackeracher, D. (1996). *Making sense of adult learning*. Toronto, Canada: Culture Concepts.
- McCarthy, B. (1987). *The 4MAT system: Teaching to learning styles with right/left mode techniques*. Barrington, IL: EXCEL.
- McCollum, J. A., & Hemmeter, M. L., (1997). Parent-child interaction intervention when children have disabilities. In M. J. Guralnick (Ed.), *The effectiveness of early intervention* (pp. 549–576). Baltimore, MD: Paul H. Brookes.
- McCollum, J. A., & Yates, T. J. (1994). Dyad as focus, triad as means: A family-centered approach to supporting parent-child interactions. *Infants & Young Children*, 6, 54–63.
- McConachie, H., Randle, V., Hammal D., & Le Couteur, A. (2005). A controlled trial of a training course for parents of children with suspected autism spectrum disorder. *Journal of Pediatrics*, 147(3), 335–340.
- More Than Words Research Summary. (n.d.). Retrieved from <http://www.hanen.org/SiteAssets/Helpful-Info/Research-Summary/More-Than-Words-Research-Summary.aspx>
- National Research Council Committee on Educational Interventions for Children with Autism. (2001). *Educating children with autism*. Washington, DC: National Academies Press.
- Pepper, J., & Weitzman, E. (2004). *It takes two to talk: A practical guide for parents of children with language delays* (3rd ed.). Toronto, Canada: The Hanen Centre.
- Peterson, C. A., Luze, G. J., Eshbaugh, E. M., Jeon, H. J., & Kantz, K. R. (2007). Enhancing parent-child interactions through home visiting: Promising practice or unfulfilled promise. *Journal of Early Intervention*, 29, 119–140.
- Popp, T. K., & Wilcox, M. J. (2012). Capturing the complexity of parent-provider relationships in early intervention: The association with maternal responsivity and children's social-emotional development. *Infants & Young Children*, 25(3), 213–231.
- Prelock, P. A., Calhoun, J., Morris, H., & Platt, G. (2011). Supporting parents to facilitate communication and joint attention in their young children with autism spectrum disorders: Two pilot studies. *Topics in Language Disorders*, 31(3), 210–234.
- Prelock, P. A., & Hutchins, T. (2008). The role of family-centered care in research: Supporting the social communication of children with ASD. *Topics in Language Disorders*, 28(4), 323–339.
- Rush, D. D., Shelden, M. L., & Hanft, B. E. (2003). Coaching families and colleagues: A process for collaboration in natural settings. *Infants & Young Children*, 16(1), 33–47.
- Salisbury, C. L., & Cushing, L. S. (2013). Comparison of triadic and provider-led intervention practices in early intervention home visits. *Infants & Young Children*, 26(1), 28–41.
- Sawyer, L. B., & Campbell, P. H. (2009). Beliefs about participation-based practice in early intervention. *Journal of Early Intervention*, 32, 326–343.
- Siller, M., & Sigman, M. (2002). The behaviors of parents of children with autism predict the subsequent development of their children's communication. *Journal of Autism and Developmental Disorders*, 32(2), 77–89.
- Sussman, F. (2006). *TalkAbility*. Toronto, Canada: The Hanen Centre.
- Sussman, F. (2012). *More Than Words: Helping parents promote communication and social skills in children with autism spectrum disorders*. Toronto, Canada: The Hanen Centre.
- Sussman, F., Honeyman, S., & Lowry, L. (2007). *Making Hanen happen: Leaders guide for More Than Words—The Hanen Program for Parents of Children with Autism Spectrum Disorder*. Toronto, Canada: The Hanen Centre.
- Swanson, J., Raab, M., & Dunst, C. J. (2011). Strengthening family capacity to provide young children everyday natural learning opportunities. *Journal of Early Childhood Research*, 9, 66–80.

ten Berge, T. & van Hezewijk, R. (1999). Procedural and declarative knowledge: An Evolutionary Perspective. *Theory & Psychology*, 9(5), 605–624.

Wilcox, M. J. (2012, November). *A look inside early intervention: What is going on?* Presented at the annual conference of the American Speech-Language-Hearing Association, Atlanta, GA.

Wlodkowski, R. J. (1993). *Enhancing adult motivation to learn: A guide to improving instruction and increasing learner achievement*. San Francisco, CA: Jossey-Bass.

Woods, J. & Lindeman, D. (2008). Gathering and giving assessment information with families. *Infants and Young Children*, 21, 272–281.

Parents as Communication Partners: An Evidence-Based Strategy for Improving Parent Support for Language and Communication in Everyday Settings

Ann P. Kaiser

Megan Y. Roberts

Department of Special Education and Department of Hearing and Speech Sciences, Vanderbilt University
Nashville, TN

Disclosure: Ann P. Kaiser and Megan Y. Roberts have no financial or nonfinancial relationships related to the content of this article.

Abstract

This article describes the Teach-Model-Coach-Review approach for teaching parents to implement Enhanced Milieu Teaching (EMT), an evidence-based naturalistic intervention for young children with language impairment. The article discusses the evidence for parent training as an effective early language intervention approach, the principles and procedures of EMT, the empirical basis of the Teach-Model-Coach-Review approach, and the skills needed to implement this approach.

An Effective Strategy for Teaching Parents to Implement Enhanced Milieu Teaching to Promote Children's Language and Communication in Everyday Settings

Parents are children's first communication partners. Beginning in the first months of life, children engage in communicative interactions with their parents. Communication emerges out of nonverbal turn-taking, joint attention to objects and partners, and early emerging gestures and vocalizations. Parents' responses to their children's behavior as if the behavior were intended to communicate not only supports the sharing of early intention, but also shapes undifferentiated behavior into culturally and linguistically recognized communication forms. Before children reach their first birthday, parents have become language teachers who model words for objects and actions and provide feedback for child communicative attempts. Although parents vary widely in the extent to which they intentionally model and teach new language forms to their young children, nearly all parents support their children's emergent communication and language skills.

When children are delayed or impaired in the development of language and communication, parents continue to be children's first and perhaps most important communication partners and language teachers. However, parents' strategies for supporting language development that occur naturally and are highly effective for typical children may be less effective and sometimes difficult to use when children have significant language impairment. For example, verbal modeling of new language for a child with hearing impairment

may not be sufficient to promote rapid vocabulary learning. Responding with related language may be challenging when the child communicates at a low rate and is often unintelligible, as is the case for many children with developmental disabilities. Systematic training to use effective interaction strategies, modeling language and instruction, may be needed to optimize parent support for emerging language. Often, speech-language pathologists (SLPs) are the primary professionals who have the opportunity and the responsibility to provide such parent training. Teaching parents effective approaches to supporting their children's communication provides the child with more opportunities to learn, promotes generalization of language and communication skills taught in other contexts, and may have a positive impact on the child and parents as social communication partners. The long-term effects of parent training may be more enduring than any short-term intervention provided by SLPs or other interventionists.

Parent Training Is an Evidence-Based Strategy for Improving Child Language Outcomes

Teaching parents to be effective communication partners has been widely studied. The effects of parent-implemented language intervention were summarized in a recent meta-analysis (Roberts & Kaiser, 2011). Eighteen group-design studies examined the effects of teaching parents to use language support strategies on child communication skills. Across studies, measures, and child populations, the findings indicated that parent training had positive effects on children's language. For example, children whose parents received training had an average of 53 more spoken words than those whose parents did not receive training, which is equivalent to an effect size of $g = 0.48$. Parent training also had positive effects on receptive vocabulary ($g = 0.38$) and expressive morphosyntax ($g = 0.82$). Across studies, the most common strategies taught to parents were responding to child communication, using specific language models, expanding and recasting child communication, and balancing child and adult turns.

The effects of parent training have also been examined within the context of single-subject designs that have allowed for a more detailed examination and description of specific parent training procedures (Gillett & LeBlanc, 2007; Kashinath, Woods, & Goldstein, 2006). For example, in a recent single-subject design (Roberts, Kaiser, Wolfe, Bryant, & Spidalieri, 2013), four caregivers (three parents, one grandparent) were taught four Enhanced Milieu Teaching (EMT; Kaiser, 1993) strategies using the Teach-Model-Coach-Review parent training procedures (described in detail below). All four caregivers learned to implement EMT in the clinic and generalized their use of strategies to home interactions with their children. Children showed changes in their language use concurrent with the parent-implemented intervention. Therapist training of caregivers was carefully monitored, and parent use of EMT strategies and child language were measured in each session, as well as across settings and over time. Results from this study indicated that systematic parent training is effective for teaching parents to use specific language support strategies and that such training results in improved child language outcomes.

Although both group and single-subject design studies have indicated that parent training can be an effective intervention for improving child communication, most studies have provided very little information about the specific strategies used to teach the parent. Thus, there is a need to describe parent training procedures that have been used in research studies more explicitly in order for clinicians to use these procedures effectively.

Purpose and Objectives

The purpose of this paper is to discuss an evidence-based model for parent training used to teach EMT and to consider the skills and training that SLPs need to be effective in implementing this parent training approach. Specifically, the paper addresses five objectives:

- A. To be knowledgeable about the evidence for parent training as an effective early language intervention approach

- B. To understand the roles parents of young children with language impairments can play in supporting their children's communication and language development
- C. To have a basic understanding of EMT as naturalistic intervention appropriate for parent implementation
- D. To have a basic understanding of the Teach-Model-Coach-Review parent training approach
- E. To identify the skills, strategies, and professional development needed to implement evidence-based parent training strategies

Roles for Parents of Children With Language Impairments

All parents are communication partners and language teachers for their young children. In the context of these natural roles, there are opportunities for parents of young children with language impairment to assume other, more specifically defined roles to support their children's language and communication development. The roles fit along a continuum from most similar to typical parenting roles to most like a systematic interventionist teaching specific language skills.

The most natural role is one of a communication partner who teaches language informally through modeling and responding, as is typical of parents of young children. Parent training may be important to sustain parents of children with language impairments in this role. Communication is a dyadic process; when children have few communication skills, are having difficulty learning the forms of language (sounds, words, sentences), or are not responsive to parents' typical communicative behaviors (as might be the case with a child with autism), the communication between parent and child is disrupted. Specific training will enhance parents' effectiveness in communicating with their child; assist them in adapting their use of normative parent-child interaction strategies; and contribute to building a strong, more connected communicative relationship with their child. By helping parents fine tune their use of normative strategies, parent training may improve children's language and communication skills. The SLP observes parents and children interacting; considers children's needs for support; and may offer information, informal training, and limited coaching to help parents respond, model, and communicate with their children more effectively. The emphasis is on maintaining the natural roles of communication partner and teacher.

A second role for parents is one of cointerventionist, working closely with the SLP to promote generalization of newly learned skills across settings and people. This role maintains the normative parent as communication partner and first language teacher and incorporates some additional naturalistic supports for child communication. In this role, parents continue to model language in context and include language that is similar to the language forms and functions being taught by the SLP. Parents in the role of cointerventionist are fully integrated into their children's language intervention. However, SLPs direct the intervention, provide systematic training for the parent in the clinic and at home, and evaluate parent implementation and child progress.

Parent training may include a review of child targets, analysis of family routines and activities in which these targets can be modeled by the parent and used by the child, and training in naturalistic intervention procedures that can be used in daily living contexts. SLPs plan and lead the intervention and continue to intervene with children in clinic or classroom settings. Parents support the SLP-directed intervention by providing opportunities for practicing language at home and in the community within everyday activities. Specific parent training is needed to support parents in this role. However, the amount, duration, and scope of specific training may vary. Limited training would include providing the parent with a list of

targets, reviewing home activities in which these targets might be modeled, and teaching modeling as a strategy that can be used to support children's use of language. Systematic training would include teaching parents strategies such as modeling and expanding communication and prompting use of specific language forms in functional contexts.

A third role for parents is one of primary interventionist. Parents in this role may be their children's primary or only interventionist. SLPs train parents in systematic teaching strategies; conduct assessments; assist the parent in planning intervention; and may continue to support parents' implementation of a direct instruction protocol or a more naturalistic, embedded teaching plan, but they do not provide direct intervention for children. This role might be chosen by parents in different circumstances. For example, the parent of a toddler with expressive language delays might want to teach her child at home because he does not yet attend preschool. After systematic training and with support of the SLP, a parent might feel confident that she can provide sufficient intervention for a period of time (e.g., 3-6 months) until it is certain her child needs more intensive intervention in a clinic or preschool setting. Such a treatment might be an alternative to traditional speech therapy; however, the SLP would be closely involved in assessments, training the parent in language support strategies, and evaluating child progress.

Parents may move among these roles with their young children's changing needs for communication support on the basis of their interests and skills, the time they have available for supporting their children's communication, and the training and support SLPs can provide. In each role, the amount of systematic parent training needed for parents to confidently support their children's communication varies as a result of both the children's needs and parents' extant skills. For example, providing support for a child who uses an AAC system may require intensive parent training because of the child's unique communication needs. Alternatively, a parent who has been very successful as a cointerventionist and who has a child with mild expressive delays might require very little additional training and support to serve as her child's primary interventionist during the summer vacation, when preschool-based SLP services are limited.

When Parent Training Is Appropriate

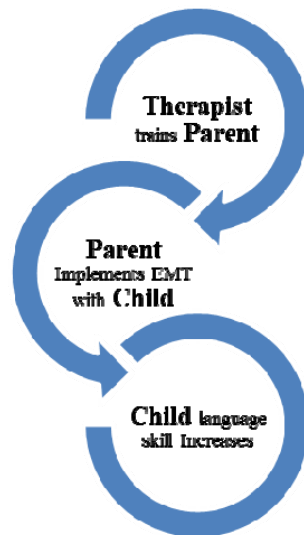
Parent training is most likely to be effective when parents are interested, motivated to learn new communication support strategies, have time to use language intervention strategies with their children, and have sufficient time to carry out the other roles and activities required in their lives. Parent training is not always timely or appropriate; however, parents are in the best position to choose when parent training is feasible and what type of training (formal or informal, group or individual) best suits their needs. In general, parent training will vary based on the roles parents choose and their children's need for communication support and intervention. Regardless of parents' chosen roles, all parent training should be based on effective adult instructional strategies and should focus on language intervention procedures that are evidence based. The duration of training should match parents' goals and time commitments. Most importantly, the training should be practical; it should teach parents the skills they need in their chosen role.

Parent Training Is a Cascading Intervention Model in Which SLPs Play a Critical Role

The goal of parent training is ultimately to provide systematic support for the development of children's functional communication skills. A secondary goal is to promote positive, successful parent-child communication in everyday settings. Teaching parents to use specific language support strategies to improve language skills in their children is a cascading intervention model (see Figure 1). This model involves skilled interventionists, typically SLPs, teaching parents to use specific language intervention strategies, which in turn improve children's use of language and communication. The effects on children's language depends on (a) effective parent training and (b) parent use of language support strategies with sufficient frequency and accuracy to influence their children's development. The specific language support strategies taught to parents may vary on the basis of the children's needs and the

parents' chosen role. Most evidence-based strategies taught to parents have been derived from descriptions of the caregiver–child interactions (Girolametto, Weitzman, Wiigs, & Pearce, 1999; Tamis-LeMonda, Bornstein, & Baumwell, 2001; Tomasello & Todd, 1983; Vigil, Hodges, & Klee, 2005), behavioral learning principles (Schreibman & Koegel, 2005), or a hybrid of these (Dawson et al., 2010; Kaiser, 1993).

Figure 1. Cascading Model of Language Intervention



Implementing cascading interventions requires skills in parent training in addition to skills as an effective child clinician. Fluency in the child language intervention model is necessary to effectively teach parents through didactic instruction, to model the intervention for the parents, and to troubleshoot difficulties in implementation or slow child progress. SLPs have skills for teaching parents the specific language intervention strategies and target content that fit their children's communication development. Further, they must be prepared to monitor the effectiveness of their approach for teaching individual parents, the parents' implementation of intervention strategies, and children's language and communication progress.

EMT: An Evidence-Based Language Intervention

EMT is a naturalistic communication intervention that combines elements of responsive interaction with systematic modeling and prompting to promote spontaneous, functional communication. EMT is derived from both behavioral and developmental principles to teaching communication to young children (Hancock & Kaiser, 2006). EMT is based on two key premises: (1) communication is learned in the context of interactions with partners, and (2) when partners use effective behavioral and developmental strategies for teaching and supporting child communication, children can learn functional and elaborated language and communication skills in the context of everyday interactions.

EMT strategies include following the child's lead in conversation and play, responding to communicative initiations from the child with target language, expanding child utterances by adding words to increase complexity while maintaining the child's meaning, arranging the environment to support and elicit communication from the child, and systematic use of milieu teaching prompts (model, mand-model, time delay, and incidental teaching). Each of the seven

core EMT strategies teaches new functional language skills while building social interaction and activity engagement. Table 1 provides a summary of the key EMT strategies.

Table 1. Components of EMT, Parent Goals, and Sample Schedule

Component	Specific Strategies	Examples	Parent Goals	Sample Schedule
Play and engage	Choose interesting and engaging toys Join the child by actively playing with toys he chooses Teach target level play actions and sequences	Choosing blocks for a child at the premanipulative level Modeling stacking the blocks, placing blocks in dump truck Handing blocks to the child to sustain play Modeling a routine of “put blocks in truck, dump blocks”	80% of the time the parent is playing at the child’s level with toys that are of interest to the child	Sessions 1-4
Notice and respond	Sit face to face with the child Follow the child’s lead Respond to all child communication	Adult follows the child when the child moves from blocks to cars Child vocalizes while playing with the baby, and adult says “baby” Child points to a toy on the shelf, and adult responds by labeling the toy “ truck”	80% of child communication are followed by a related, contingent response	Sessions 5-6
Balance turn-taking	Balance turns by responding to each child utterance with only one comment	Child babbles and points; adult responds with word, sign and points to object, then waits for child to take another turn Child signs, “More blocks”; adult responds with, “You need more blocks,” gives blocks, then waits for child to take another turn	75% of parent turns are in response to child communication or action	Sessions 7-8
Mirroring and mapping	Imitate the child’s nonverbal actions (mirror) and model (map) language to these actions	Child makes a snowman with Play-Doh, adult makes a snowman with Play-Doh and models “Make a snowman”	75% of parent turns are in response to child communication or action	Sessions 9-10

Modeling and expanding communication	Model point, show, and give gestures Model target signs or words Expand child communication by adding words and or symbols	Pointing to the apple and saying “apple” Showing a dog as adult takes it from a box and labeling it “dog” Modeling the word/sign “baby” while playing with the baby Child signs or says “baby” and the adult signs or says, “Feed the baby”	50% of the parent’s utterances are at the child’s target level 40% of child utterances are expanded by the parent	Sessions 11-14
Environmental arrangement strategies	Assistance Choices Waiting with routine Waiting with cue Inadequate portions	Adult gives the child a juice box and waits for the child to ask for help, then models the phrase “open juice” while opening the box Adult holds up two choices and waits for the child to make a choice, then labels the choice as she gives it to the child	80% of environmental arrangement strategies are correctly executed	Sessions 15-18
EMT prompting strategies	Open questions, choice questions, “Say” prompt Episodes begin with requests and end with expansions	Child requests the ball and the adult says “say ‘ball,’” Adult holds up “juice” and “milk” and says “juice or milk?”	80% of EMT strategies are correctly executed	Sessions 19-24

Teaching Parents EMT Using the Teach-Model-Coach-Review Approach

The effects of EMT have been examined in more than 30 studies, including 10 in which parents were taught to implement the strategies with their children. EMT has been shown to produce increases in communication skills for young children with significant communication impairment, including children with language delays (Hancock & Kaiser, 1996; Roberts & Kaiser, 2012), children with intellectual disabilities (Kaiser & Roberts, 2013), children with autism (Hancock & Kaiser, 2002), and children who are nonverbal (Kaiser, Ostrosky, & Alpert, 1993). Children receiving EMT from therapists and/or a parent have demonstrated increases in frequency of communication (Kaiser, 1993; Wright, Kaiser, Reikowsky, & Roberts, 2012), vocabulary (Kaiser, 1993; Scherer & Kaiser, 2010), and complex syntax (Kaiser & Hester, 1994; Warren & Kaiser, 1986). Children taught using EMT strategies maintained newly learned targets (Warren & Kaiser, 1986) and generalized across settings and people (Goldstein & Moussetis, 1989; Kaiser & Roberts, 2013; Warren & Bambara, 1989).

Across studies, we have developed a systematic approach to parent training: Teach-Model-Coach-Review. This approach is based on strategies that have been effective in teaching adult learners, principles of family-centered intervention, and specific empirical evidence indicating the model is effective. In this approach, EMT skills are taught in a sequential order to build a foundation for positive interactions and a specific skill set for teaching language and communication. The approach is sufficiently flexible such that training can be adapted to fit (a) the parents' skills, (b) their desired role in their child's language intervention, and (c) the child's needs for specific support to learn and use language in everyday interaction. We conduct training in a clinic playroom setting and at home to ensure that the parents have concentrated practice (clinic) and that they can apply EMT in their interactions at home.

Effective Methods for Teaching Adult Learners

The foundation of the Teach-Model-Coach-Review model is based on the six adult learning methods summarized by Trivette, Dunst, Hamby, and O'Herin (2009) in a meta-analysis. *Introduction* involves previewing the material that is the focus of the teaching. *Illustration* includes a demonstration of the use or application of the knowledge or skill. *Practice* involves the adult learner using the new knowledge or skill. *Evaluate* includes the adult learner assessing the outcome of using the new knowledge. *Reflection* is engaging the adult learner in a self-assessment regarding his or her knowledge. *Mastery* extends reflection by engaging the adult learner in a self-assessment that is linked to a set of external standards. Trivette et al. (2009) found that each of these adult learning strategies had positive effects on adult knowledge, skills, attitudes, and self-efficacy. For example, traditional workshop lectures (introduction) had an effect size of $d = 0.68$, whereas role-playing (illustration) had an effect of $d = 0.87$. Real-life application of knowledge (practice) had an effect of $d = 0.58$, and evaluation of strengths and weaknesses had an effect of $d = 0.96$. Reflection in the form of discussing a plan for performance improvement had an effect of $d = 1.07$, and mastery of the knowledge when compared to a standards-based assessment had an effect of $d = 0.76$. Although individual adult learning strategies have positive effects on adult learning outcomes, the largest effects on adult learning occur when multiple strategies were used concurrently. Trivette et al. (2009) found that incorporating more adult learning methods is strongly associated with larger effects. For example, the effect size for five adult learning methods was $d = 1.25$, whereas the effect for between two and four strategies was $d = 0.75$. On the basis of the finding that multiple strategies were more effective, we incorporated all six of the adult learning methods found to be effective by Trivette et al. (2009) into this model of parent training.

Building Relationships With Parents

In addition to using effective strategies for teaching adult learners, building positive relationships with parents during parent training is critical to the success of parent training.

Relationships between therapists and parents are built by applying a core set of family-centered practices during every interaction with the family. Epley, Summers, and Turnbull (2010) summarized these core practices, and we adapted them to fit the content of the EMT intervention. First, we focus on the needs of the entire family, not just the child's communication skills. We begin the intervention by asking families about their child, their routines and interactions at home, and their pressing needs for support for themselves and their child. We focus on attending to family concerns about daily interactions because we have found that parents are more likely to use specific language support strategies when these strategies meet their specific needs. We give families choices throughout the parent training process. For example, parents choose the routines in which they would like to practice the language support strategies. Parents choose which specific words they would like to target with their child. Parents also have choices within the parent training process for the method (how much modeling, role-playing, how much written material, the use of video) and place of instruction (clinic or home, within the routine or before the practice session begins). We highlight family strengths by showing videos of existing positive interactions between parents and children and by pointing out how the interaction strategies that parents already use have contributed positively to their child's development. Showing parents that we recognize their existing language support strategies often increases their confidence in their interactions with their child and makes them more open to fine-tuning these strategies. We create a collaborative partnership with parents by seeking input from the family during every part of the process. We view parents as the expert on their child's communicative needs. We set the expectations that both parents and therapists bring specific expertise, that children benefit from having the parent-therapist team supporting their communication development, and that we will work in partnership to make decisions throughout the training process. Finally, we emphasize the effects of parents' use of language support strategies on their child's communication rather than simply focusing on changing parents' behaviors. In sum, we present parent training as a process that serves families everyday needs for improved communication in their daily routines by recognizing parents' existing skills and partnering with experienced therapist to increase parents' expertise in supporting their child's language development.

Evidence Supporting the Teach-Model-Coach-Review Approach

Components of this approach to parent training have been included in many of our parent-implemented intervention studies and may be found in other parent training studies as well. We specifically evaluated this systematic approach in two experimental studies. The Teach-Model-Coach-Review parent training model was developed in the single-subject design study (Roberts et al., 2013; described above) and subsequently was applied in a small randomized study (Roberts & Kaiser, 2012). In this study, parents of toddlers with receptive and expressive language delays ($N = 35$) were randomly assigned to a business as usual control or parent plus therapist-implemented EMT. Parents in the EMT group received 28 individual parent training sessions at home and in the clinic using the Teach-Model-Coach-Review protocol. The parent training model was implemented with high levels of fidelity across therapists. Parents learned all EMT strategies with effect sizes (comparing trained and untrained parents) ranging from $d = 1.81$ to $d = 3.19$ across language support strategies. Changes in parent strategy use had a subsequent effect on child language outcomes, with effect sizes ranging from $d = 0.29$ for parent report of expressive vocabulary to $d = 0.67$ for total language standard scores on the Preschool Language Scale—4th Edition. This study confirmed the effectiveness of the cascading model of intervention and provided further evidence supporting the use of the Teach-Model-Coach-Review method.

Implementing Teach-Model-Coach-Review to Teach EMT

The Teach-Model-Coach-Review system of parent training involves four components that cumulatively include each of the critical adult learning strategies summarized by Trivette et al. (2009). These components occur within a 60-min session at home or in the clinic across 24–36 individual sessions.

Parent training begins with the *teach* component, which involves two parts. First, the parent attends a 60-min workshop without their child to focus on learning specific EMT strategies (the sequence of teaching the strategies is discussed in the next section). During this workshop, the parent learns about the target strategy by listening to an overview of the strategy. This includes a description of the strategy with examples, specific steps to implement the strategy, and a rationale for using the strategy. Next, the parent watches a video in which they are using the target strategy to some degree and their child has a positive response to their use of the target strategy, and another video in which they fail to use the strategy and the child does not respond as positively. This contrast demonstrates to the parent the impact that their behavior has on their child's communication. The therapist summarizes the key steps in the strategy with additional simple examples. Next, the parent role-plays with the therapist to practice the target strategy. The parent is given goals for their use of each target strategy that include when to use the strategy and how often or how accurately the strategy is to be used. Examples of parent goals are provided in Table 1. A critical aspect of the training process is ensuring that the parent meets criterion levels of performance on one strategy before learning and attempting to implement the next strategy. Criterion levels are based on implementation associated with positive child progress across EMT research studies. The parent is shown graphs illustrating their initial levels of the target behavior. As training continues, they are shown graphs illustrating their levels of previously learned skills before and after training. Last, the parent and the therapist discuss how the target strategy may be implemented across the day at home in familiar routines.

The second part of the teach component occurs during the first 10–15 min of the next EMT therapy session following the workshop. Both the parent and the child are present. During this first part of the practice session, the therapist asks the parent about their understanding and comfort with the specific EMT strategy taught in the workshop and how they think their child will or is responding to the strategy. Then, the therapist reviews the key elements of the target strategy and briefly practices with the parent by role-playing. Before beginning practice with the child, therapists ask the parent if they have questions and answers any questions the parent poses.

After the brief review of the target strategy, the therapist models the target strategy with the child. During this 15- to 20-min segment, the therapist models with the child during a routine or activity of the parent's choice. The therapist verbally highlights the strategy while interacting with the child. For example, if the target strategy is expansions, the therapist might say, "He said 'ball' and then I said 'roll the ball,' which is an expansion." During this segment, it is critical that the therapist maintains her engagement with the child. Thus, the therapist may briefly describe their actions without looking at the parent, so that the therapist's focus of attention remains with the child.

After watching the therapist use the strategy with the child, the parent then practices for 15–20 min. During this practice session, the therapist provides coaching in the form of praise and constructive feedback. Examples of coaching for each EMT language support strategy are provided in Table 2. The rate of coaching depends on the needs of individual parents. When a strategy is first introduced, parents often require a higher level of constructive feedback than is needed later in training. Whereas the amount of constructive feedback generally decreases over time for each strategy, the amount of praise remains relatively constant. Furthermore, the therapist makes an effort to balance praise and constructive feedback when the parent first learns a strategy to build confidence with the strategy.

Table 2. Examples of Praise and Constructive Feedback for Core EMT Strategies

	Praise	Constructive Feedback
Play and engage	“Great! You followed his lead and joined him to build a tower.”	[Child is stacking blocks and parent is making the animal eat the block.] “Let’s try stacking the blocks with him.”
Notice and respond	“Great noticing that he pointed.”	[Child says “ball” and parent doesn’t respond.] “Respond to him. He said ‘ball’.”
Matched turns	“Great! You responded to his word with just one turn.”	[Parent takes multiple turns in a row.] “Wait for him to communicate before taking a turn.”
Mirroring and mapping	“Nice job imitating what he is doing and giving him the word-‘drive’.”	[Child is driving the car and not communicating; parent is watching.] “Let’s try driving the car with him and then saying ‘drive’.”
Expansions	“Perfect expansion—he said ‘dog’ and you said ‘the dog eats’.”	[Child says “car” and parent doesn’t respond.] “Expand, say ‘drive the car’.”
Environmental arrangement	“Nice! You waited for him to ask you before helping him open his snack.”	[Child is playing with water and not talking.] “Try filling the cup up with water and pouring a little into the tub and then wait to see what he will do.”
Milieu Teaching	“Wow! You prompted when he was requesting but not using a target word—perfect!”	[Child gives a jar to the parent.] “Here is a great time to prompt since he is asking for your help. Say ‘tell me what you want’.”

Following this practice session, the parent and therapist review the session. The therapist begins by asking the parent about their perceptions of the session. The parent and therapist discuss the session. The therapist summarizes their impressions of the session by describing the parent’s use of the strategy in relation to the child’s communicative behavior. For example, the therapist might say “You did a really nice job adding words to what Sally said to you. I noticed that she imitated these longer sentences at least three times!”

Sequencing Strategies Taught to Parents

EMT strategies are taught sequentially using the Teach-Model-Coach-Review approach. First, parents are taught strategies for playing and engaging with their child across naturally occurring routines and activities. Parents learn to choose toys and activities that are interesting and motivating for their child. Parents learn specific strategies for playing with toys and structuring daily activities that are appropriate for their child’s developmental level.

Second, parents are taught to notice and respond to their child’s communicative attempts. Parents are encouraged to sit face to face with their child while the therapist supports the parent to notice and respond to the unique ways their child communicates. Third, parents learn to balance communicative turns, first by waiting for their child to communicate, and second by responding to communication with only one verbal turn. By limiting the parent’s responses to a single turn, the therapist provides the child with more opportunities to initiate. Fourth, parents learn to “mirror” (i.e., imitate their child’s actions) and “map” (i.e., provide a specific target word for these actions). This strategy ensures that parents’ language corresponds to their child’s focus of interest. For example, if the child is stacking the blocks to make a tower, the parent joins the child in stacking, by imitating her action (putting a block on the tower) and saying, “We are stacking blocks.”

Fifth, once parents have mastered general responding to their child’s communication, they are taught to respond using specific language models. Language models are (a) at the

child's specific target level, (b) forms the child is ready to learn, and (c) appropriate for the child's specific focus of interest and actions. For example, when mirroring the child's actions and mapping those actions with words, parents are taught to use language that is at their child's target level by matching both the length of his utterance and the semantic complexity of his vocabulary. Ideal target-level language is slightly more complex and slightly more diverse than the child's current language but is within the range of skills that can easily be learned through modeling and imitation. When children communicate, parents are taught to expand their child's communication by adding a semantically meaningful word. Gestures are expanded with words; single words are expanded into early two-word utterances mapping semantic relations. When children have utterances of two or more words, expansions contain key words for building phrases and sentences. For example, if the child points to the block, the parent is taught to point to the block and say "block." If the child says "block" the parent is taught to imitate the word and add a word (e.g., "stack the block").

Sixth, parents are taught several environmental arrangement strategies that involve structuring activities in ways that increases the likelihood that children will initiate communication without verbal prompting. For example, the adult may provide the child with an object that requires assistance (e.g., an unopened juice box, an unopened jar of Play-Doh) and then wait for the child to initiate a request for help. The adult may provide the child with a limited quantity of the desired material (e.g., only a single toy car) and wait for the child to request more cars. Finally, parents learn to use specific milieu teaching prompting strategies. These prompting strategies include using open-ended questions, choice questions, and direct prompts ("say" prompts) to elicit child target language. Prompting uses a least-to-most support sequence to ensure that children are successful in responding to the prompt. Each prompting episode ends positively with access to preferred materials or assistance as requested by the child and an expansion of the child's response. Using these specific prompting procedures, parents prompt their child to use language targets during highly motivating and reinforcing opportunities. Table 1 summarizes the sequence used to teach EMT.

Becoming an Effective Parent Trainer

In this final section, we discuss some additional principles that guide SLPs in teaching parents to use EMT following the Teach-Model-Coach-Review model and the skills that are needed to effectively implement this model. This summary of principles and skills is the result of training more than 300 professionals to implement EMT and more than 30 masters-level clinicians to train parents to use EMT.

The foundation of effective parent training lies in therapists' knowledge of language development, their understanding and ability to address the unique characteristics of specific child populations, and their fluency in the intervention they are teaching parents to implement. Simply put, therapists cannot teach what they do not know. Although professional training (course work, clinical training, internships) provide opportunities to learn about language development and the communication needs of children with language impairment, the ability to apply this knowledge and to speak fluently to parents about development and their child's needs and strengths requires specific practice in working with parents. Fluency in applying EMT is developed only through practicing the strategies with a range of children until high levels of fidelity are achieved.

A system for supporting the application of the Teach-Model-Coach-Review approach to teaching EMT requires tools for video-recording and data collection. It is essential to evaluate parent use of the EMT strategies and child communication in order to link parent training to child progress. Video recording is helpful for collecting positive examples of parent behavior and its impact on child behavior. Counting and summarizing data in a simple graphic format allows therapists to provide performance-based feedback and to assess parent performance in relation to established criteria for effective implementation (see Roberts & Kaiser, 2012, for

these criteria for each EMT strategy). It is not essential to videotape or collect data in every session. However, it is essential to review parent and child performance before introducing a new skill.

To become proficient as EMT parent trainers, therapists should consider monitoring their own fidelity in implementing the Teach-Model-Coach-Review approach. In research studies, we video- or audio-record the training sessions—including workshops and individual practice sessions—and complete a fidelity checklist to assess therapist use of the teaching strategies associated with our model. An example of a fidelity checklist is in Table 3. A fidelity checklist could be completed without the video- or audio-recording; however, occasional video recordings of therapist training are useful for self-evaluation of manner and content of training.

Table 3. Example Fidelity Checklist for Implementing Parent Training

Initial Caregiver Training Session	
Therapist reviews four strategies: 1. Notice and respond 2. Take turns 3. Play and engage 4. Mirror and map (when the child is not communicating)	4
Therapist and caregiver model/role-play mirroring and mapping with the selected toys.	1
Therapist and caregiver discuss at least three novel ways to play with the selected toys.	3
Therapist checks for understanding and invites caregiver questions before the session.	1
Therapist practice session	
Therapist highlights mirroring and mapping at least three times.	3
Therapist highlights responding, taking turns, and following the child's lead at least three times.	3
Caregiver practice session	
Therapist gives caregiver positive or training feedback at least once per minute.	15
Ending caregiver training session	
At the end of the session, the therapist asks the caregiver how she felt the session went.	1
Therapist summarizes how the caregiver responded, took turns, played, and/or mirrored and mapped.	1
Therapist relates the caregiver's performance and child's behavior during the practice session at least once.	1
Total	33

The items listed in the therapist treatment fidelity checklist are indicative of the skills needed by therapists to be effective parent trainers: skills for forming relationships and

partnerships with families, skills for implementing EMT effectively with target children, skills for presenting information, modeling for parents, coaching parents, and reviewing parent progress. Parent trainers must be able to troubleshoot problems in parent implementation of EMT, prescribe adjustments during practice sessions, and link parent performance of the EMT strategies to the child's progress. This set of skills requires practice and commitment to becoming an effective parent trainer. The benefits of the time and effort required to become an effective parent trainer are considerable, as indicated by evidence that parent training in EMT has a consistent positive effect on the language outcomes for young children.

Conclusion

In this article, we have summarized the principles for teaching parents to be effective implementers of EMT, an evidence-based language intervention. The principles and procedures outlined here are derived from research on parent training, adult learning, and the use of performance-based feedback. By summarizing both the methods of parent training and naturalistic teaching procedures, we hope to have provided guidance for clinicians committed to developing their skills in translating research into effective clinical practice.

Comments/questions about this article? Visit our [ASHA Community](#) and join the discussion!

References

- Dawson, G., Rogers, S., Munson, J., Smith, M., Winter, J., Greenson, J., ... Varley, J. (2010). Randomized, controlled trial of an intervention for toddlers with autism: The Early Start Denver Model. *Pediatrics*, 125(1), e17–e23. doi:10.1542/peds.2009-0958
- Epley, P., Summers, J. A., & Turnbull, A. (2010). Characteristics and trends in family-centered conceptualizations. *Journal of Family Social Work*, 13(3), 269–285. doi:10.1080/10522150903514017
- Gillett, J. N., & LeBlanc, L. A. (2007). Parent-implemented natural language paradigm to increase language and play in children with autism. *Research in Autism Spectrum Disorders*, 1(3), 247–255. doi:10.1016/j.rasd.2006.09.003
- Girolametto, L., Weitzman, E., Wiigs, M., & Pearce, P. S. (1999). The relationship between maternal language measures and language development in toddlers with expressive vocabulary delays. *American Journal of Speech-Language Pathology*, 8, 364–374.
- Goldstein, H., & Mousetis, L. (1989). Generalized language learning by children with severe mental retardation: Effects of peers' expressive modeling. *Journal of Applied Behavior Analysis*, 22(3), 245–259. doi:10.1901/jaba.1989.22-245
- Hancock, T. B., & Kaiser, A. P. (1996). Siblings' use of milieu teaching at home. *Topics in Early Childhood Special Education*, 16(2), 168–190. doi:http://dx.doi.org.proxy.library.vanderbilt.edu/10.1177/027112149601600204
- Hancock, T. B., & Kaiser, A. P. (2002). The effects of trainer-implemented Enhanced Milieu Teaching on the social communication of children with autism. *Topics in Early Childhood Special Education*, 22(1), 39–54.
- Hancock, T. B., & Kaiser, A. P. (2006). Enhanced milieu teaching. In R. McCauley & M. Fey (Eds.), *Treatment of language disorders in children* (pp. 203–236). Baltimore, MD: Paul H. Brookes.
- Kaiser, A. P. (1993). Parent-implemented language intervention: An environmental system perspective. *Enhancing Children's Communication: Research Foundations for Intervention*, 2, 63–84.
- Kaiser, A. P., & Hester, P. P. (1994). Generalized effects of Enhanced Milieu Teaching. *Journal of Speech and Hearing Research*, 37, 1320–1340.
- Kaiser, A. P., Ostrosky, M. M., & Alpert, C. L. (1993). Training teachers to use environmental arrangement and milieu teaching with nonvocal preschool children. *Journal of the Association for Persons With Severe Handicaps*, 18(3), 188–199.
- Kaiser, A. P., & Roberts, M. Y. (2013). Parent-implemented enhanced milieu teaching with preschool children who have intellectual disabilities. *Journal of Speech, Language, and Hearing Research*, 56, 295–309. doi:10.1044/1092-4388(2012/11-0231)

- Kashinath, S., Woods, J., & Goldstein, H. (2006). Enhancing generalized teaching strategy use in daily routines by parents of children with autism. *Journal of Speech, Language, and Hearing Research*, 49, 466–485. doi:10.1044/1092-4388(2006/036)
- Roberts, M., & Kaiser, A. (2011). The effectiveness of parent-implemented language interventions: A meta-analysis. *American Journal of Speech-Language Pathology*, 20(3), 180–199. doi:10.1044/1058-0360(2011/10-0055)
- Roberts, M., & Kaiser, A. (2012). Assessing the effects of a parent-implemented language intervention for children with language impairments using empirical benchmarks: A pilot study. *Journal of Speech, Language, and Hearing Research*, 55, 1655. doi:10.1044/1092-4388(2012/11-0236)
- Roberts, M., Kaiser, A., Wolfe, C., Bryant, J., & Spidalieri, A. (2013). *The effects of the teach-model-coach-review intervention on caregiver use of language support strategies and children's expressive language skills*. Manuscript submitted for publication.
- Scherer, N., & Kaiser, A. (2010). Enhanced Milieu Teaching/phonological emphasis: Application for children with cleft lip and palate. In L. Williams, R. McCauley, & S. McLeod (Eds.), *Speech sound disorders in children* (pp. 427–452). Baltimore, MD: Paul H. Brookes.
- Schreibman, L., & Koegel, R. L. (2005). Training for parents of children with autism: Pivotal responses, generalization, and individualization of interventions. In E. D. Hibbs & P. S. Jensen (Eds.), *Psychosocial treatments for child and adolescent disorders: Empirically based strategies for clinical practice* (pp. 605–631). Washington, DC: American Psychological Association.
- Tamis-LeMonda, C. S., Bornstein, M. H., & Baumwell, L. (2001). Maternal responsiveness and children's achievement of language milestones. *Child Development*, 72, 748–767. doi:10.1111/1467-8624.00313
- Tomasello, M., & Todd, J. (1983). Joint attention and lexical acquisition style. *First Language*, 4(12), 197–211. doi:10.1177/014272378300401202
- Trivette, C. M., Dunst, C. J., Hamby, D. W., & O'Herin, C. E. (2009). Characteristics and consequences of adult learning methods and strategies. *Practical Evaluation Reports*, 2(1), 1–32.
- Vigil, D. C., Hodges, J., & Klee, T. (2005). Quantity and quality of parental language input to late-talking toddlers during play. *Child Language Teaching and Therapy*, 21(2), 107–122. doi:10.1191/0265659005ct284oa
- Warren, S. F., & Bambara, L. M. (1989). An experimental analysis of milieu language intervention: Teaching the action-object form. *Journal of Speech and Hearing Disorders*, 54, 448–461.
- Warren, S. F., & Kaiser, A. P. (1986). Incidental language teaching: A critical review. *Journal of Speech & Hearing Disorders*, 51, 291–299.
- Wright, C. A., Kaiser, A. P., Reikowsky, D. I., & Roberts, M. Y. (2012). Effects of a Naturalistic sign intervention on expressive language of toddlers with Down syndrome. *Journal of Speech, Language, and Hearing Research*, 56, 994–1008. doi:10.1044/1092-4388(2012/12-0060)

A Model for Coaching Parents to Implement Teaching Strategies With Their Young Children With Language Delay or Developmental Disabilities

Julia Stoner

Hedda Meadan

Maureen Angell

Disclosure: Julia Stoner, Hedda Meadan, and Maureen Angell have no financial or nonfinancial relationships related to the content of this article.

Abstract

This article focuses on the coaching model used in the Parent-Implemented Communication Strategies (PiCS) Project. The PiCS model was used to train and coach parents to deliver naturalistic and visual teaching strategies in their homes with their young children with developmental disabilities. The foundational concepts and rationale for training and coaching parents to implement intervention are discussed. The PiCS coaching model was developed using best practices of early intervention and includes five steps that prepare parents to implement intervention with high quality.

Many young children who have been identified with a developmental disability (DD), including an intellectual disability, Down syndrome, and autism spectrum disorder (ASD), exhibit speech-language deficits and delays along with atypical characteristics of social-communication behavior which were identified as “core features” of ASD (Centers for Disease Control and Prevention, 2013; Kohler, Anthony, Steighner, & Hoyson, 2001; McConnell, 2002). Given that there are about one million infants and children under the age of 5 receiving early intervention (EI) and early childhood special education services, there is clearly a need to provide effective, evidence-based EI services (McConnell, 2002).

Language deficits, especially those that affect social-pragmatic communication skills, can have significant detrimental effects on children and families. The development of appropriate sociorelational skills plays a key role in the development of communicative competence (Light, Binger, Agate, & Ramsay, 1999). Training in social-pragmatic communication skills must begin as early as possible to decrease the likelihood that school-age children with DD will face sociorelational skill deficits that may negatively affect not only their ability to learn within sociorelational environments, but also their ability to make friends with peers who will support their efforts toward personal and educational goals. Making friends is a natural result of human interaction that involves many complex verbal and nonverbal transactions. As young children progress through increasingly complex levels of socioemotional development (Greenspan & Wieder, 1998), they need the support of family and friends in their natural environments to encourage their intellectual and emotional growth.

This article includes a model for supporting parents to implement evidence-based practices when facilitating their children’s social-pragmatic communication. Specifically, we discuss the foundational concepts of EI and indicate how these foundational concepts are in

concert with coaching parents to implement language intervention. We follow this discussion with an overview of coaching practices for parents. Finally, we provide a step-by-step description of the Parent-Implemented Communication Strategies (PiCS) project coaching model that was developed and effectively implemented to teach parents naturalistic teaching strategies that facilitated their children's social-pragmatic communication.

Foundational Concepts of EI

EI is vital for children with disabilities, and benefits extend beyond children with disabilities, positively affecting the children, their families, and their schools. Bruder (2010) has identified three primary beneficiaries of EI. First, the child benefits; research (e.g., Martin, 2010; Nores & Barrett, 2010) has consistently supported the benefit of EI that is given at a time in the child's life when the child can benefit the most. Second, EI is typically provided in the context of the family, reaping benefits for all involved (Stoner et al., 2005; Turnbull, Turnbull, Erwin, Soodak, & Shogren, 2011). Finally, schools benefit because EI focuses on facilitating school-readiness skills and may save schools the time and resources to develop skills that have been enhanced through EI (Bruder, 2010). For example, school-readiness skills include social-pragmatic communication skills (e.g., listening; answering questions; requesting items; and, in essence, responding appropriately to either an adult or peer) and influence subsequent academic achievement (Kong & Carta, 2013). Coaching parents to use evidence-based naturalistic teaching strategies can further facilitate the development of social-pragmatic communication skills.

In addition, the benefits of EI are enhanced when evidence-based practices are used. Bruder (2010) outlined three major concepts that provide a foundation for early intervention: (a) family-centered orientation, (b) natural and inclusive learning environments, and (c) collaborative team processes. In the Individuals With Disabilities Education Improvement Act (2004), both Part B (services for eligible children ages 3–21) and Part C (services for eligible children ages birth to 3 and their families), focus, support, and require the use of these foundations in which parents are to be integrally involved.

Why Coach Parents to Implement Language Intervention?

Application of the first EI foundation, a family-centered focus, in which the family is the unit for intervention, requires parent involvement. Early interventionists acknowledge the importance of establishing and addressing clear, observable, measurable, and achievable communication goals for children with DD through Individual Family Service Plans which address family and child needs. Individual Family Service Plans, which incorporate family as well as child goals, are developed for children 0–3 years, whereas Individualized Education Plans are developed for children older than 3 years who receive services in the schools and focus exclusively on the child's needs. Parents are children's first language teachers and have consistent opportunities to facilitate language development. Parents are involved in multiple social interactions with their children and can positively affect their children's independence, relationships, participation in the community, and personal well-being, even—and perhaps especially—when children are very young (e.g., Geenen, Powers Vasquez, & Bersani, 2003; Smith, Polloway, Patton, & Dowdy, 1998; Steere & Cavaulo, 2002).

Warren and colleagues (2006) emphasized that caregivers' support of children's growth in emotional, social, and communication skills "can have a multiplier effect in which a small dose of EI may lead to long-term effects" (p. 51). Hancock and Kaiser (2006) argued that parents can be ideal language teachers who are likely to respond to their children's communicative attempts, are able to more closely monitor their children's communicative attempts because of their proximity to their children, and are able to model language that elaborates or expands on those attempts. Parents have the opportunity to facilitate language

growth consistently but may lack training in evidence-based practices that can most effectively increase their children's language skills.

Furthermore, research has supported the notion that parents can be effective interventionists and can be coached to provide interventions within their home environments, routines, and activities (e.g., Mobayed, Collins, Strangis, Schuster, & Hemmeter, 2000; Woods, Kashinath, & Goldstein, 2004). Effective parent-implemented interventions for young children with disabilities have been reported in the professional literature (e.g., Kaiser, Hancock, & Nietfeld, 2000; Mobayed, Collins, Strangis, Schuster, & Hemmeter, 2000; Smith, Buch, & Gamby, 2000). Because parents have been shown to positively influence their children's communication (Kaiser et al., 2000; Roberts & Kaiser, 2011), it follows that teaching parents language interventions to support their young children's communication development can be effective and can positively affect their children's language growth (Kaiser & Hancock, 2003; Kashinath, Woods, & Goldstein, 2006; Meadan, Angell, Stoner, & Daczewitz, 2012; Meadan, Ostorsky, Zaghlawan, & Yu, 2009; Roberts & Kaiser, 2011; Stoner, Meadan, Angell, & Daczewitz, 2012).

The second foundation of EI, learning in natural and inclusive environments, is also applicable to coaching parents, especially when that coaching occurs in their homes, the most natural environment for all young children. Practically speaking, teaming with parents to provide early communication intervention and complement EI services makes good sense. Warren et al. (2006) pointed out the logistical impediments to efficient intervention, explaining that typical EI services may represent only 1–2 hr per week of a young child's potential learning time (Bailey, Aytch, Odom, Symons, & Wolery, 1999), and that even more time-intensive interaction doesn't occur within the majority of children's waking hours. Thus, parents have the opportunity to encourage the transactional effects of early communication intervention.

When parents are coached to provide language interventions in the home, and learn to do so effectively, they have the opportunity and, hopefully, will continue to provide these language interventions across inclusive environments (i.e., playground, grocery store, doctor's office, etc.). Parents can be taught to effectively use inclusive environments, giving their children opportunities and reasons to initiate communication and participate meaningfully in social interactions (Roberts & Kaiser, 2011).

Finally, the third foundation of EI, a collaborative team process, should be inherent in the coaching model. Within the framework of the Individuals with Disabilities Education Improvement Act (2004), parents are considered valued members of multidisciplinary teams (Ruddy & Sapienza, 2004; Turnbull et al., 2011) who have a voice in all decisions regarding their children. This requires that we, as practitioners, must listen to, acknowledge, respect, and respond to parents' voices (Parette, Brotherson, & Huer, 2000). Acknowledging and addressing parents' or guardians' goals for their children have also long been identified as important factors in successful teaming (Meadan, Shelden, Appel, & DeGrazia, 2010; Meadan, Stoner, & Angell, 2012; Parette et al., 2000). Within the coaching model, sharing a vision for the child, identifying language goals and learning strategies, and deciding on when to use interventions cannot be done effectively without collaboration with parents.

The Coaching Process

In the past, the concept of coaching was mostly used in athletics; however, recently it has been used in many different fields, including education, counseling, and business. Coaching has been used in EI and early childhood education by occupational therapists, physical therapists, and speech-language pathologists to support families of children with disabilities and facilitate interventions in early childhood programs (Rush & Shelden, 2005).

Coaching can be used to enhance existing practices, develop new skills, and promote self-reflection and learning. Although there are several different definitions of coaching, we used Rush and Shelden's (2011) definition as our framework for coaching parents of young

children with DD to facilitate evidence-based practices of EI. Rush and Shelden defined coaching as “an adult learning strategy in which the coach promotes the learner’s ability to reflect on his or her actions as a means to determine the effectiveness of an action or practice and develop a plan for refinement and use of the action in immediate and future situations” (p. 8). In addition, Rush and Shelden described five key characteristics of coaching: (a) joint planning: agreement on the actions or opportunities to practice between coaching sessions; (b) observation: evaluation of actions or practices to be used to develop new strategies; (c) action: spontaneous or planned events in the natural environment that will allow the coachee to practice; (d) reflection: analysis of existing strategies to decide about needed changes; and (e) feedback: information provided by the coach to expand the coachee’s current level of understanding and practice.

We incorporated Rush and Shelden’s (2011) key characteristics in our coaching model and added the coaching strategies described by Friedman, Woods, and Salisbury (2012): (a) foster conversation and information sharing, (b) observe, (c) demonstrate the intervention, (d) teach the parents directly (e) give feedback after the parent practices, (f) develop joint interaction, (g) provide guided practice with feedback, (h) use problem solving, and (i) be child focused. Consequently, our model is based on evidence-based practices of coaching but is refined to apply to coaching parents of young children with disabilities to facilitate their children’s communication skills.

A Model for Coaching Parents: PiCS Project

We developed our model for coaching parents for use within our PiCS Project funded by the U.S. Department of Education Institute of Education Sciences. We focused on coaching parents to implement evidence-based naturalistic and visual teaching strategies. The purpose of this article is to describe the PiCS coaching model that can easily be adapted to coach parents to implement a wide variety of communication interventions. The outcomes of the PiCS project (Meadan, Angell, et al., 2012 ; Stoner et al., 2012) were positive for both parents and children and were recognized as socially valid by parents of children with disabilities, parents of children without disabilities, special education teachers, and speech-language pathologists (Meadan, Stoner, & Angell 2012). The PiCS coaching model, which is based on best practices described in the literature (Friedman et al., 2012; Rush & Shelden, 2011), is composed of a series of steps (see Figure 1): (a) share a vision and establish long-term and short-term goals; (b) teach parents the intervention strategies; (c) set session goals and implement the intervention strategy; (d) observe parent, give feedback, and evaluate progress; and (e) monitor progress and set new objectives.

Share a Vision and Set Long-Term and Short-Term Goals

The first and second steps of our coaching model are completed with the parent at the first meeting. We must emphasize that parents are the focus of this session and, as such, our primary objective is to actively listen. Actively listening indicates that we are engaging in a process that begins with collaboration; we must respect and acknowledge parents’ opinions and desires. We strive to understand parents’ visions for their children, and we have found them to be forthright and realistic. We start the process by asking parents to tell us about their hopes and dreams for their children (in 2–3 years) and identify their long-term and short-term goals regarding their children’s communication. Often, these are broad and nonspecific goals, such as, “I just want her to be able to express herself,” or, “I want her to be able to tell me what she wants.” By listening to parents, asking clarifying questions, and paraphrasing parents’ responses, we communicate to parents that we are listening to and respecting their visions for their children. As we meet with individual parents, we write their visions for their children on a form, which further tells parents that we value their input and will use it in designing interventions. Once we have finished the first meeting, we understand the parental vision and broad-range goals.

Teach Parent the Intervention Strategies

At the second meeting, we come prepared to teach the intervention to the parent. This intervention may be a naturalistic teaching strategy, such as modeling or time delay, or a visual teaching strategy, such as task analysis or rule reminder cards, or whatever intervention will facilitate the communication of the child. We begin the teaching session by explaining the strategy, why we chose it, why we believe it will positively affect the child's communication, and why we believe the parent should implement it. This step is important because we want the parent to understand the research base and evidence behind the intervention. We take the time to ask for parent concerns and answer questions, once again using collaboration with the parent to modify or clarify the intervention.

Next, we teach the parent how to implement the strategy by modeling it with the child or showing a video that gives the parent a visual representation of the strategy used by other parents. We take the time to answer parents' questions, address their concerns, and modify the intervention to better meet the needs of both the child and the family. We discuss with parents how they could use the strategy with their children within their normal routines in their natural environments. Once again, we are affirming, through our actions, that we value and, perhaps most important, incorporate parental input into the intervention goals.

We have also found that providing parents with written information, such as a flow chart of the intervention strategy, is beneficial. Parents have repeatedly told us that having a flow chart helps them remember the steps of the intervention. The flow chart can easily be made using the shapes in Microsoft Word or another software program such as Inspiration. We always laminate the flow chart of the intervention for durability and, in essence, provide a durable visual cue.

Set the Session's Goals and Implement the Strategy

We begin the third meeting by discussing the session format and asking the parent what short-term objective she would like to achieve in this session. We focus on the parent and not the child at this point. Specifically, we want the parent to establish a small objective that is achievable by the child, one that can be reached through the parent's implementation of the intervention. We write the objective in behavioral terms, without the criteria usually associated with objectives. For example, assuming our intervention is modeling and the child is nonspeaking but vocalizes, an achievable, meaningful objective may be to vocalize when given a model. The flow chart we developed incorporates all aspects of modeling: arrange the environment, establish joint attention, verbalize the target word, wait 3 s if there is no response from the child, verbalize again, wait 3 s, and if there is still no child response, give the child the object with a verbal model. If the child responds correctly, we reinforce the vocalization with the object and verbal praise. We encourage the parent to provide many opportunities for the child to practice the target behavior/skill within the natural environment. We use an action plan to help the parent think about all the steps that need to be done to use the intervention in the family's everyday routines.

Observe the Parent, Give Feedback, and Evaluate Progress

We ask the parent to implement the intervention while we observe. After the observation, we ask the parent to provide us with a self-reflection statement of what she did correctly or incorrectly, and we provide corrective feedback as needed. This process appears to reinforce the parent's actions and allows us the opportunity to correct errors. Once again, we are trying to use a collaborative model, not an expert-driven model. We record the parent's accurate implementation of the intervention and any errors made. We ask the parent to use the intervention strategy within natural home routines. To keep from overwhelming parents, we usually suggest one or two familiar routines to concentrate on when initially implementing the intervention strategy. For example, snack time, bath time, and/or bed time are times of the day when routines have typically been established and are ideal times to facilitate communication.

We also video recorded parents' implementation of the naturalistic and visual teaching strategies. During the PiCS project, we used these video-recordings for data collection and to provide parents with instructive feedback. All parents in the PiCS project identified the use of the video feedback as positive. We purposely show parents video footage of them accurately implementing the intervention to reinforce their skills. We then show them times when the intervention was not implemented as planned, when steps were ignored, or when the parent failed to establish joint attention with the child. The use of video-recording is powerful, and parents enjoy seeing their implementation and their children's responses.

Between sessions, it is helpful to ask parents to identify (a) times when they used the intervention strategy and (b) their children's outcomes. In essence, we are teaching parents to collect data, which can be very reinforcing. We provide a form for parents to complete while we are not there, and this not only allows us to document child and parent progress, but also facilitates discussion and problem solving during the next session. For example, if we had asked the parent to use a visual teaching strategy during the bedtime routine, and the parent recorded sporadic use of the strategy at that time, that might lead to a discussion about problem whether the intervention was easy to incorporate into the bedtime routine or whether there were other distractors occurring at bedtime. We are flexible with parents and consistently collaborate with them to solve any issues or problems that arise.

This observation, feedback, and progress evaluation phase of the coaching model is usually the longest one. The goal is to guide the parent to implement the intervention strategy with high fidelity (i.e., implementing all steps of the intervention strategies correctly). If the parent implements the intervention with fidelity, we can move to the next step, in which we focus on changing the intervention on the basis of the child behavior. In our experience, coaching parents has produced strong outcomes for both parents and children, in terms of parents learning effective, evidence-based teaching strategies and their children achieving positive outcomes and measured gains in communication skills. Typically, when intervention programs are evaluated, we are focused on the outcomes and desire to have evidence that our interventions work. While this is, indeed, important, we must also be concerned with the social validity of the goals and acceptability of the intervention procedures (Gresham & Lopez, 1996; Turan & Meadan, 2011). If parents don't feel the intervention is effective, or if they feel it is not feasible for them to implement, they may not continue to use the intervention in the long run.

To gain family perspectives about an intervention, which includes the social validity of the goals of the intervention, the acceptability of the procedures used, and the outcomes of the intervention, we recommend asking parents for their opinions. Was it useful to develop a vision? Can they implement the strategy within their busy, everyday lives? What would they change about the coaching process? By assessing the validity of the coaching model, we can begin to strengthen it and increase our skill in implementing it.

Monitor Progress and Set New Objectives

In the last phase of the coaching process, we observe children's progress toward the identified goals and might also ask parents to record their children's behavior or communication after they implement the teaching strategies. Because our goal is to continuously increase children's communication, we may encourage parents to change their initial objectives. For example, if a child was initially producing only the vowel in a consonant-vowel-consonant word, we may now ask the parent to stress and focus on production of the first consonant. Constantly seeking to raise objectives as the child makes progress is reinforcing to all. When both parent and child reach their goals, the coach can begin the coaching process again by instructing new teaching strategies.

In our experience, the PiCS coaching model produced changes in parent and child interactions. As one parent stated, "I thought PiCS was about changing my child, but it was about changing me and how I interact with her." We also found that by using the PiCS coaching model, coaches changed and refined how they interacted with parents. The PiCS project coaches reported being more responsive to parent needs, more receptive to parent

concerns, and more open to parent suggestions as their collaboration progressed. The benefit of collaboration was evident for parents and for coaches and, most important, for the children's outcomes.

Comments/questions about this article? Visit our [ASHA Community](#) and join the discussion!

References

- Bailey, D. B., Aytch, L. S., Odom, S. L., Symons, F., & Wolery, M. (1999). Early intervention as we know it. *Mental Retardation and Developmental Disabilities Research Reviews*, 5, 11–20.
- Bruder, M. B. (2010). Early childhood intervention: A promise to children and families for their future. *Exceptional Children*, 76, 339–355.
- Centers for Disease Control and Prevention. (2013). New data on autism spectrum disorders. Retrieved from <http://www.cdc.gov/Features/CountingAutism/>
- Friedman, M., Woods, J., & Salisbury, C. (2012). Caregiver coaching strategies for early intervention providers. *Infants and Young Children*, 25(1), 62–82.
- Geenen, S., Powers, L., Vasquez, A. L., & Bersani, H. (2003). Understanding and promoting the transition of minority adolescents. *Career Development for Exceptional Individuals*, 26(1), 27–46.
- Greenspan, S. I., & Wieder, S. (1998). *The child with special needs: Encouraging intellectual and emotional growth*. Cambridge, MA: Perseus.
- Gresham, F. M., & Lopez, M. F. (1996). Social validation: Unifying concept for school-based consultation research and practice. *School Psychology Quarterly*, 11, 204–227.
- Hancock, T. B., & Kaiser, A. P. (2006). Enhanced milieu teaching. In R. McCauley & M. Fey (Eds.), *Treatment of language disorders in children* (pp. 203–236). Baltimore, MD: Paul H. Brookes.
- Individuals with Disabilities Education Improvement Act, 20 U.S.C. §§ 1400 et seq. (2004).
- Kaiser, A. P., & Hancock, T. B. (2003). Teaching parents new skills to support their young children's development. *Infants and Young Children*, 16(1), 9–21.
- Kaiser, A. P., Hancock, T. B., & Nietfeld, J. P. (2000). The effects of parent-implemented enhanced milieu teaching on the social communication of children who have autism. *Journal of Early Education and Development [Special Issue]*, 4, 423–446.
- Kashinath, S., Woods, J., & Goldstein, H. (2006). Enhancing generalized teaching strategy use in daily routines by parents of children with autism. *Journal of Speech, Language, and Hearing Research*, 49, 466–485.
- Kohler, F. W., Anthony, L. J., Steighner, S. A., & Hoyson, M. (2001). Teaching social interaction skills in the integrated preschool: An examination of naturalistic tactics. *Topics in Early Childhood Special Education*, 21(1), 93–103.
- Kong, N. Y., & Carta, J. J. (2013). Responsive interaction interventions for children with or at risk for developmental delays: A research synthesis. *Topics in Early Childhood Special Education*, 33(1), 4–17.
- Light, J., Binger, C., Agate, T., & Ramsay, K. (1999). Teaching partner-focused questions to enhance the communicative competence of individuals who use AAC. *Journal of Speech, Language, and Hearing Research*, 42, 241–255.
- Martin, S. (2010). An early childhood prevention programme and the long-term outcomes for students. *Childcare in Practice*, 16(3), 257–274. doi: 10.1080/13575271003756256
- McConnell, S. R. (2002). Interventions to facilitate social interaction for young children with autism: Review of available research and recommendations for educational intervention and future research. *Journal of Autism and Developmental Disorders*, 32(5), 351–372.
- Meadan, H., Angell, M. E., Stoner, J. B., & Daczewitz, M. (2012). *Promoting young children's social-pragmatic communication: Parent-implemented intervention*. Manuscript submitted for publication.
- Meadan, H., Ostrosky, M. M., Zaghlawan, H., & Yu, S. (2009). Promoting the social and communicative behavior of young children with autism spectrum disorders: A review of parent-implemented interventions studies. *Topics in Early Childhood Special Education*, 29(2), 90–104. doi: 10.1177/0271121409337950.

- Meadan, H., Shelden, D., Appel, K., & DeGrazia, R. (2010). Developing a long-term vision: A road map for students' futures. *TEACHING Exceptional Children*, 43(2), 8–14.
- Meadan, H., Stoner, J. B., & Angell, M. E. (2012). *A social validity study: Parent perspectives on the Parent-Implemented Communication Strategies (PiCS) project*. Manuscript submitted for publication.
- Mobayed, K., Collins, B., Strangis, D., Schuster, J., & Hemmeter, M. (2000). Teaching parents to employ mand-model procedures to teach their children requesting. *Journal of Early Intervention*, 23, 165–179.
- Nores, M., & Barrett, W. S. (2010). Benefits of early childhood interventions across the world: (Under) investing in the very young. *Economic of Education Review*, 29(2), 271–282. doi: 10.1016/j.econedurev.2009.09.001
- Parette, H. P., Brotherson, M. J., & Huer, M. B. (2000). Giving families a voice in augmentative and alternative communication decision making. *Education and Training in Mental Retardation and Developmental Disabilities*, 35(2), 177–190.
- Roberts, M. Y., & Kaiser, A. P. (2011). The effectiveness of parent-implemented language interventions: A meta-analysis. *American Journal of Speech-Language Pathology*, 20, 180–199.
- Ruddy, B. H., & Sapienza, C. M. (2004). Treating voice disorders in the school-based setting: Working within the framework of IDEA. *Language, Speech, and Hearing Services in Schools*, 35, 327–332.
- Rush, D. D., & Shelden, M. L. (2005). Evidence-based definition of coaching practices. *CASEinPoint*, 1(6), 1–6.
- Rush, D. D., & Shelden, M. L. (2011). *The early childhood coaching handbook*. Baltimore, MD: Paul H. Brookes.
- Smith, T., Buch, G., & Gamby, T. (2000). Parent-directed, intensive early intervention for children with pervasive development disorder. *Research in Development Disabilities*, 21, 297–309.
- Smith, T. C., Pollway, E. A., Patton, J. R., & Dowdy, C. A. (1998). *Teaching students with special needs in inclusive settings*. Needham Heights, MA: Allyn & Bacon.
- Steere, D. E., & Cavaiuolo, D. (2002). Connecting outcomes, goals, and objectives in transition planning. *Teaching Exceptional Children*, 34(6), 54–60.
- Stoner, J. B., Bock, S. J., Thompson, J. R., Angell, M. E., Heyl, B., & Crowley, E. P. (2005). Welcome to our world: Parent perceptions of the interactions between parents of young children with autism spectrum disorder (ASD) and education professionals. *Focus on Autism and Other Developmental Disabilities*, 20, 39–51.
- Stoner, J. B., Meadan, H., Angell, M. E., & Daczewitz, M. (2012). Evaluation of the Parent-Implemented Communication Strategies (PiCS) Project using the Multiattribute Utility (MAU) approach. *Educational Assessment, Evaluation, and Accountability*, 24, 57–73. doi: 10.1007/s11092-011-9136-0.
- Turan, Y., & Meadan, H. (2011). Social validity assessments: Understanding the social importance of goals, procedures, and outcomes in early childhood special education. *Young Exceptional Children*, 14(3), 13–28.
- Turnbull, A., Turnbull, R., Erwin, E., Soodak, L., & Shogren, K. (2011). *Families, professionals, and exceptionality: Positive outcomes through partnerships and trust* (6th ed.). Upper Saddle River, NJ: Pearson/Merrill/Prentice Hall.
- Warren, S. F., Bredin-Oja, S. L., Fairchild, M., Finestack, L. H., Fey, M. E., & Brady, N. C. (2006). Responsivity education/prelinguistic milieu teaching. In R. J. McCauley & M. Fey (Eds.), *Treatment of language disorders in children* (pp. 47–75). Baltimore, MD: Paul H. Brookes.
- Woods, J., Kashinath, S., & Goldstein, H. (2004). Effects of embedding caregiver implemented teaching strategies in daily routines on children's communication outcomes. *Journal of Early Intervention*, 26, 175–193.