Promoting Emergent Literacy in Young Children with ASD

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This article follows the information presented in “The ABC’s of emergent literacy in young children with ASD” (September 2013 WigWag), based on a study by Lanter, Watson, Erickson & Freeman (2012). For a brief summary of this article, see the box below, or you can watch our Research in a Hurry about the article.

Here is a brief summary of the article The ABC’s of emergent literacy in young children with ASD:

- The authors studied the emergent literacy skills of 41 young children with autism spectrum disorder (ASD), and found that they demonstrated an uneven profile of skills, generally characterized by a strength in form (also referred to as inside-out/outside-in skills, Whitehurst & Lonigan, 1998) and weakness in meaning.

Some specific findings included:

- correlations between the children’s language and literacy abilities
- strengths in letter name identification, environmental print, letter-name knowledge, mechanical aspects of print functions, and for some children, emergent writing
- weaknesses in letter-sound correspondence, understanding the function of print (why people read and write), and pretend reading
Speech language pathologists have an important role to play in the area of emergent literacy with children with ASD, especially given the established links between language and literacy (Lanter & Watson, 2008). But this is still a new area of research, so we may feel poorly equipped to intervene in this area with young children with ASD. Furthermore, there are some current practices which may or may not benefit this population of children, which we may not know about.

Lanter et al (2012) provide some suggestions for assessment and intervention in this area for speech language pathologists and educators based on their findings. These suggestions, along with recommendations provided in Lanter & Watson (2008), and suggestions made during Lanter’s April 2013 workshop in York Region, Ontario are summarized below.

Facilitating emergent literacy skills in children with ASD

Lanter and her colleague’s recommendations can be summarized by the following six principles:

1. Start early!
2. Assess across a variety of domains
3. Teach decoding strategies and conceptual skills
4. Use naturally-occurring routines and activities to teach literacy
5. Promote shared reading
6. Help parents promote emergent literacy skills at home

1. Start early!

Probably the most important suggestion highlighted by Lanter & Watson (2008) is:

“just as there is no set time to begin to teach play, cognitive, social, or language skills, there is no set time to begin to teach reading” (p. 35)

Spoken language abilities shouldn’t be regarded as a prerequisite for acquiring literacy skills. We should avoid “reading readiness” models which suggest that a child must first master certain
skills such as oral language, letter identification, and shape, number and colour recognition before beginning more formal reading instruction. Lanter & Watson (2008) explain that in some cases, targeting literacy skills promotes the oral language skills of children with ASD.

2. Assess across a variety of domains

Another important recommendation, highlighted in Lanter et al, 2012, is that the literacy skills of children with ASD need to be assessed across a variety of domains. Children with ASD demonstrate uneven profiles of emergent literacy skills, with relative strengths in code-based skills (or “inside-out skills”) but difficulties with meaning-based skills (or “outside-in skills”). Lanter et al (2012) point out that sometimes emergent literacy skills are measured using a single indicator of proficiency (e.g. letter name knowledge, which is a code-based skill), and that this can result in an overestimation of a child’s skills. Furthermore, “oral language” is often assessed and collapsed into one composite score, which might fail to highlight a child’s strengths and weaknesses. Therefore, emergent literacy skills should be assessed and considered separately, and include: expressive and receptive language, vocabulary, story comprehension, story retelling, print concepts, phonological awareness, and letter name and letter-sound knowledge.

3. Teach decoding strategies and conceptual skills

While there are many emergent literacy skills that require intervention in young children with ASD, there are two areas that are sometimes neglected in this population: decoding skills and conceptual knowledge. Therefore, we need to ensure that we:

- **teach children to crack the code** – in her workshop, Lanter (2013) explained that best practice for children with ASD is to learn to “crack the code”. Previously, educators taught children with ASD to memorize words in chunks (drawing on their gestalt learning style), believing that the children would learn the code by memorizing words. However, Lanter (2013) stated that there is no research to support this practice, and we need to teach decoding strategies.

- **target conceptual skills and procedural skills** – the conceptual/procedural framework of emergent literacy comes from Senechal, LeFevre, Smith-Chant, & Colton (2001). Lanter (2013) explained that often we disregard conceptual skills (understanding why we read and write) when children enter kindergarten because typically-developing children begin school with this knowledge already. Examples of these conceptual skills include pretend reading, pretending to write and telling an adult what it “says”, pretending to write while playing waiter at a restaurant, running a finger from left to right along the text, asking what written words say, etc. (Lanter, 2013).

Because typically-developing children begin school with this conceptual knowledge, procedural skills become the focus in kindergarten (such as letter names, letter-sound knowledge, writing...
letters, writing the child’s name, and reading words). However, children with ASD demonstrate a different profile. Often, they have more procedural knowledge than conceptual knowledge. Lanter, Freeman & Dove (2012) studied 32 children with ASD and 32 language-matched children who were developing typically, and determined that the children with ASD had a relative strength in procedural print-related skills versus conceptual print-related skills (which was the opposite of the typically-developing children). Without the conceptual knowledge, children’s reading skills can’t progress (Lanter, 2013). Therefore, it is important to target conceptual knowledge and help children with ASD understand the purposes of reading and writing.

4. Use naturally-occurring routines and activities to teach literacy

- **teach literacy in natural contexts to build understanding of the function of literacy** – instead of working on emergent literacy during isolated skill practice (e.g. sitting down and writing alphabet letters), try to incorporate literacy goals into natural, purposeful activities and routines. Lanter et al (2012) provide an example of “signing in” to class each day on arrival, or using flip charts with lyrics to songs when singing. Case studies have revealed that preschoolers with autism improved a variety of emergent literacy skills when functional literacy tasks were built around routine events in the curriculum (Lanter & Watson, 2008).

- **incorporate literacy into language activities** – emergent literacy goals can be incorporated into many of the language activities that speech language pathologists use during therapy. Lanter & Watson (2008) give the example of a grocery store activity, during which the SLP might use a story to prepare the children for the activity (describing what happens at the store, what they will do there, etc). During the activity, literacy activities can be incorporated like writing a shopping list, finding the store on map or in a phone book, looking at food labels, etc. This type of activity can help build children’s functional understanding of the purpose of literacy.

5. Promote shared reading

Lanter & Watson (2008) explain that qualitative data has shown that frequent and repeated shared reading intervention with children with ASD has led to improved oral language and attention, and decreased echolalia and stereotypic behaviour. Furthermore, repeated shared book readings help children recognize familiar schemas, which underlie their text comprehension. To encourage children’s understanding of these schemas, SLPs can choose stories that have:

- simple pictures
- a predictable story line with logical sequence of events
- clear cause-and-effect relationships
- goal-directed behaviour by the main characters
• events that can related to the child’s everyday experiences
• story elements that can be explained/highlighted via props (like puppets or figurines)

(Lanter & Watson, 2008)

Other strategies which promote the quality of shared reading include:

• use a variety of texts – children with ASD sometimes enjoy nontraditional reading material, and this is sometimes based on their special interests. Expository texts (books which provide facts, ideas, and explanations) may appeal to some children with ASD. Lanter et al (2012) found that many parents reported that their child preferred expository texts about dinosaurs, planets, or trains. Other children enjoyed other nontraditional reading material, such as field guides or car magazines. Therefore, SLPs should expose children with ASD to a range of genres based on their interests. use adapted books – Lanter (2013) suggested having a lending library of adapted books for use during therapy and for parents to borrow. These books have removable pictures or words on Velcro, meant to keep the child engaged during shared reading, and also for fill-in-the-blank responses (the child can hand the adult the removable picture/word or point to it). These books can also include predetermined questions with picture answers, as well as strategies or scripts for scaffolding children’s response (Lanter et al, 2012).
• encourage story retelling – story retelling promotes children’s recognition of story schemas, which increases their story comprehension as well as their ability to organize their oral narratives (Lanter & Watson, 2008). SLPs can help children retell stories by using visual aids (like pictures, felt pieces, puppets, etc) to help break down the story structure and make it more explicit. Children should be encouraged to retell a story with a clear beginning, middle, and end.
• create dialogue around books – Lanter & Watson (2008) suggest using questions before, during, and after stories, based on the child’s language abilities. Augmentative means of responding can be provided to nonverbal children if necessary. As much as possible, we should aim to ask higher level language processing questions, which encourage inference and interpretation. Factual questions, for which answers can be drawn directly from the text, are the least difficult for children with ASD. However, Lanter & Watson (2008) explain that children with ASD find the following types of questions more challenging, and we should aim to incorporate these types of questions (geared to the child’s language level) as much as possible during shared readings. The questions are listed according to increasing difficulty for children with ASD:
  o interpretive questions – for which answers require an inference based on the text, a prediction, or a synthesis of ideas (e.g. asking the child what might happen next in the story)
  o applicative questions – for which answers involve relating the text with the child’s personal beliefs (e.g. asking the child how he would react if he was in the same situation as the character)
6. Help parents promote emergent literacy skills at home

When Lanter et al (2012) interviewed parents about their children’s home literacy environment, they learned that:

- parents were more likely to teach their child to read than to write, and they infrequently pointed out the function of reading and writing to their child.
- only 29% of the parents felt somewhat secure in their ability to promote their child’s literacy skills, and 9% felt minimally secure.
- parents asked mostly identification questions during shared readings (questions for which responses are based on information directly out of the text). Few parents asked questions about predictions, feelings, or inferences. Lanter et al (2012) explain that the parents may have tried to gear their questions to their child’s language level, or that they lacked knowledge about questions that promote higher level language processing.

These findings confirm that parents are interested in promoting their child’s literacy skills, but may lack the knowledge and confidence to do so.

In her workshop, Lanter (2013) explained that it’s not enough to send parents home with a book and tell them to go home and read it with their child. Parents need to learn how to promote their child’s engagement during shared reading, how to adapt books in order to promote comprehension, and how to promote their child’s literacy skills during everyday life. This can be done by:

- increasing parents’ awareness of the different components of literacy – we can raise parents’ awareness that learning to read and write is more than just learning the ABC’s, and that there are many component skills (including conceptual skills) necessary for emergent literacy development. Furthermore, some children with ASD learn to read words beyond what is expected based on their comprehension or decoding abilities.
hyperlexia”). This can be highlighted for parents, as well as the importance of continuing work on language (story comprehension, vocabulary, etc) and decoding abilities if a child demonstrates this early reading ability.

- **encouraging parents to choose the right book** – Lanter el al (2012) found that many of the children preferred nontraditional reading material, such as nonfiction material about their special interests. Parents should be encouraged to follow their child’s lead, because choosing motivating reading material for their child will provide a good context for shared reading and conversation.

- **helping parents learn to ask good questions and have conversations about books** - in both the More Than Words® Program and the TalkAbility™ Program, we talk about how to ask questions while looking at books that encourage higher level language processing (for children who are ready for this). We encourage parents to promote their child’s thinking by “asking questions and making comments about things that are not told in the story” (Sussman, 2012, p. 354), such as drawing connections between the book and the child’s life, or asking about character’s feelings. In the TalkAbility program (Sussman, 2006) we also help parents use books to help their child “tune in” to others, by taking the perspective of the characters in the book. Parents can have conversations with their child about how the characters might think and feel, as well as about different points of view or problems that need to be solved during the story.

- **encouraging parents to act out stories with their child** – using props or puppets. This helps with story comprehension and allows the child to take on the perspective of a character.

- **encouraging emergent literacy through everyday activities and routines at home** – Lanter & Watson (2008) emphasize teaching literacy within natural contexts, which fits very well with our work with families in our Hanen parent programs. Parents can draw their child’s attention to print within their natural environment, such as in the TV guide, menus, signs, toy boxes, package labels, birthday cards, To Do lists, billboards, or at the grocery store. There are several ideas for making print “talking” at home in the More Than Words® and TalkAbility™ programs (Sussman, 2012; Sussman, 2006), such as:
  - labeling key items in the child’s everyday environment (e.g. a “coat” label next to his coat hook
  - making placemats with family members’ names on them
  - having the child write his name on his artwork
  - writing cards for special occasions (birthday cards, etc)
  - regularly referring to a calendar of daily events
  - having paper, pencils, and crayons available for the child to scribble or write
  - emphasizing that each alphabet letter has a sound, not just a name. For example, the parent can sound out the letters in the child’s name as they slowly move their finger under each letter.

**Conclusion**

Working with young children with ASD can sometimes feel like a delicate juggling act, balancing communication, interaction, play, peer and other goals simultaneously. It’s no wonder
that literacy ends up at the bottom of the “goal pile”, waiting to be addressed once social communication goals are tackled. But after reading the work of Elizabeth Lanter, it’s apparent that we really need to embed emergent literacy goals early on in our work with young children with ASD. Just as in typical development, the development of language and literacy go hand in hand in children with ASD, and working on one area may positively influence the other.

The statements in the “ASD & Emergent Literacy Quiz” at the beginning of the article are all false. These statements represent common misconceptions about targeting emergent literacy skills in young children with ASD. Some of these practices are still prevalent, even though they are not based on evidence.

References


