



Episodic Memory, Experience-Sharing, and Children with ASD

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Memory is important for everyone in terms of learning, growing, and managing more complex social and emotional situations in life. We use our memories to build and strengthen relationships; to reflect on what we've done in order to make plans for the future; and to problem-solve based on past experiences. If we didn't have memories to draw on, we would hardly move forward in life. Hence, developing meaningful memories is a critical skill for all people, including children with autism.

The Critical Role of Episodic Memory

Imagine this: You spend the day in Boston with a friend. You take the T there; walk around Faneuil Hall; do a little shopping on Newbury Street; have lunch in the North End; and visit the Swan Boats in the Public Garden. In that one day, the memories you formed, and those you used, span a variety of topics. You probably remember the things that you talked about with your friend, or the laughter that you shared, more than you remember any particular item that you looked at while shopping. You probably also remember how good your meal tasted, but maybe not the other items that were listed on the menu. If there was a line when you got to the Swan Boats, you probably used your memories of waiting in other lines to appraise how long you might need to wait in this one. Each of these memories is an example of episodic memory.

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Episodic memory refers to one's autobiographical memory. As we move and do things throughout our lives, we are creating a story about ourselves. We use this self-narrative to share our experiences with others and to negotiate new situations in the future. Without memories to pull from, the world would be a scary place and any new situation would leave us feeling lost. With episodic memory, we can enter a new situation and figure out what to do because we remember a similar situation from our past.

Now imagine that you took that same trip to Boston with a child who has ASD. His memories may instead be the names of the T stops you rode past; how loud the restaurant was; and the anxiety he felt waiting in line to go on the Swan boats because he didn't know how long he was going to have to wait. What is meaningful moment-by-moment to a child with ASD may be different from what is meaningful to another person. Instead of forming memories that will later help with problem solving and future planning a child with ASD may be forming memories that lead to fear of the unknown. Developing episodic memory is difficult for people with autism, partly because they have difficulty sorting relevant from irrelevant information, making appropriate connections, and seeing things holistically. Hence, they lack important information to inform future planning. Clearly, the development of episodic memory is a critical skill needed for living an independent, happy, and stress-free life.

Episodic Memory and Experience-Sharing

One of the most important things that social partners can do to support the development of, and access to episodic memories in children with ASD is to modify the way in which they communicate with these children. Typically, when adults try to help children access memories they ask a lot of questions (Who did you play with at school today? What did you have for snack?). Or, they use too many imperative statements (Tell Daddy what movie we saw. Tell Mommy what you did at the playground.). The problem with questions and imperative statements is that they don't enable the child to generate the information that adults really want. To be specific, don't we really want to know how the child felt throughout the day? What made the child smile or laugh? About connections the child made with his or her classmates? The other problem with questions and imperative statements is that they typically generate one-word or very brief answers. Perhaps the biggest problem with these language forms is that they do not get to the heart of what we all use memories for: *to share who we are!*

Because we don't always know what a child with ASD is remembering about an event (Is it the ceiling fan that he watched, or the numbers he noticed on the outside of a house?), we have to be especially mindful to build in socially meaningful memories that

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highlight relevant information that the child can access later. We can do this by stating out loud what we know, notice, remember, or think in the form of comments. This is known as *declarative language*,* and when we use this form of language input alongside a child, we help that child to learn how to observe, reflect, and share a subjective appraisal. By being generous with information (instead of questions) we help children to build socially meaningful memories. This means we should generously share information without expecting anything in return. It is by our moving from *getting* information to *giving* information that the child can truly learn to give back. We should make a habit of interacting in this manner with children with ASD, since it also helps them to gain knowledge about the world.

Once we have spent enough time giving important and relevant information, we can then engage the child in specific activities that support him or her in sharing what is remembered. Here is one such activity:

Sharing memories in partnership with the child. This means, that you become collaborators in the task of weaving a story. It is important to do this within an interactional context so that you can scaffold the child's skill development. To illustrate how this is done, consider again the trip to Boston. Only this time, offer information along the way that not only recaps what you are doing, but communicates a subjective appraisal—for example, you can say, "Wow! I can tell you really liked riding on the T. I think Park Street is your favorite stop." At another point in time add, "Oh look! There's a line for the Swan Boats, but it isn't that long. Let's wait, because I think people in the line will move quickly so that we won't have to wait that long." And later still, "You really like pizza! We should go to the North End because that's where the best pizza in Boston is."

While on this trip you should try to take snapshots with your cell phone or other camera. That way, you can take pictures of the child in action, thereby capturing moments that are socially meaningful to him or her. Once your trip is complete, look at the pictures together, helping the child to remember aspects of the trip and recapping the day as a team. Whether you do this while riding home on the T, or as a bedtime activity, your role is to build in memories of the event by sharing what *YOU* remember. Be sure to use components that make storytelling more interesting and fun for everyone such as, animated facial expressions, rich intonation, gestures, and dramatic pauses. Here and there pause so that your child has the opportunity to chime in, or even just to communicate that he or she remembers too.

To help generalize experience-sharing, you could, as a team, later tell a family member or friend about your day. For example, you would share some of your memories and pause to see if the child wants to add his or her own related memories. The idea here is to have your memories trigger those of the child. This can help him or her to add a thought here and there. You can make the task even easier by scaffolding an idea or two. For example, "We went on the T and stopped at your faaaaavorite stop." If more support is needed, try using a cloze procedure: "We decided to eat in the North End because...." This type of scaffold can enable the child to "fill in the blank" with, "Good pizza" or "I love pizza!"

By engaging in this type of experience-sharing with a child with ASD, you help him or her to build in *meaningful* memories of the relevant sights, sounds, tastes, and people that were a part of the event. In addition, you help to bring cohesion to an activity that, without your help, the child may perceive as an unrelated series of separate activities. Finally, when you consider the importance of drawing on past experiences for future planning and problem solving, and the critical role that meaning plays in remembering things, helping the child to build in and share his or her memories is a task well-worth pursuing. 🍕

***Editor's Note:** Linda's informative article on the importance of using declarative language with children with ASD will appear in the winter issue of ASQ, due out in November.

BIO

Linda Murphy, M.S., CCC-SLP has been a speech language pathologist for over ten years, and a Relationship Development Intervention® (RDI®) Consultant since 2007. She obtained her Bachelor's Degree in Mathematics from Boston College but after working for two years with adults with ASD in supported work and residential settings, she found her true passion and pursued a Master's Degree in Speech Language Pathology from Emerson College. She added RDI® to her practice in order to serve families of individuals with ASD in more effective and meaningful ways. Linda has a private practice in Beverly, Massachusetts that offers services including speech language therapy, communication assessments, school consultations, professional trainings, social pragmatics groups, and RDI.® Her website is www.peer-projects.com and she can be reached at linda_murphy@peer-projects.com.

