Joyce Downing and Theresa Earles Vollrath, Associate Editors

Intervention in School and Clinic

Volume 44 Number 1 September 2008 58-61 © 2008 Hammill Institute on Disabilities 10.1177/1053451208318876 http://isc.sagepub.com hosted at http://online.sagepub.com

Using Social Stories to Increase Positive Behaviors for Children With Autism Spectrum Disorders



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Keywords: elementary age; interventions; behavior; practices; inclusion

 $E_{(ASD)}^{\text{ducating students with autism spectrum disorders}}$ over the past decade (Agosta, Graetz, Mastropieri, & Scruggs, 2004; Norris & Dattilo, 1999), which has posed some challenging behavioral issues for many classroom teachers. As such, they are required to provide a range of behavioral supports within the inclusive classroom setting (Sansosti & Powell-Smith, 2006). One support that has shown some promise for teaching appropriate classroom behaviors to students with ASD is the use of social stories (Barry & Burlew, 2004; Crozier & Tincani, 2005; Gray & Garand, 1993; Kuoch & Mirenda, 2003; Scattone, Wilczynski, Edwards, & Rabian, 2002). A social story is a short, simple story written from the child's perspective. It describes a social situation, and through text and visual supports, it provides instruction on positive and appropriate social behaviors (Gray & Garand, 1993). Smith (2001) provides a number of reasons that social stories are effective for children with ASD: Such stories are visual, which is a preferred

modality for children with ASD; they are permanent, thereby allowing the child to access the story repeatedly; they are written on the basis of the child's assessed needs; they focus on what people are thinking and doing; social interference is removed to maximize learning; and they are written in a predictable format using a specific formula. This article can assist teachers in using social stories to encourage positive behavior and thus increase learning for children with ASD in the inclusive classroom.

As part of the class, children are expected to participate in numerous social activities, such as greeting friends, following group instruction, playing during centers, cleaning up, and taking turns. Teachers can write generic social stories that incorporate some of these social behaviors, but children with ASD may need additional instruction on using appropriate classroom behavior. In this case, the teacher uses a social story diagnostically, to teach an alternative prosocial behavior that the child can learn as an alternative to the problem

behavior. The teacher first defines the target problem behavior and then writes a social story to teach the child an alternative positive behavior. Defining the target problem behavior can be done informally, through observation of the student, or the teacher may choose to conduct a functional behavioral assessment if more information is needed regarding the function of the behavior. In that case, the teacher would collect data on the frequency and duration of the problem behavior and then use this information to assist in choosing the appropriate replacement behavior to teach the child via the social story. O'Neill et al. (1997) described a comprehensive process of conducting a functional behavioral assessment using direct and indirect methods, as well as environmental manipulations, when needed.

Social stories follow an explicit format of approximately 5 to 10 sentences describing the social skill, the appropriate behavior, and others' viewpoints of the actions. Gray (2000) originally developed the framework used in writing and implementing social stories. As mentioned, social stories follow a predictable sequence involving specific types of sentences: two to five sentences describing each appropriate behavior in a social situation (descriptive sentences); one sentence describing positive, observable appropriate responses (directive sentence); one sentence describing the viewpoint of others as they react to the situation (perspective sentence); one optional sentence describing a commonly shared value or opinion; and one sentence that reminds the child of the appropriate behavior in the social situation (control sentence). Gray recommended this format for several reasons:

- The social story should be presented in a predictable format.
- It should be more than a list of tasks.
- The emphasis should be on describing rather than directing.
- The focus of the social story should be on describing the appropriate behaviors, with sufficient social and environmental cues.

However, a number of researchers have found social stories to be effective without conforming to the format and ratio of directive sentences to other types of sentences (Hagiwara & Myles, 1999: Kuttler, Myles, & Carlson, 1998; Lorimer, Simpson, Myles, & Ganz, 2002; Norris & Dattilo, 1999; Rogers & Myles, 2001; Swaggart et al., 1995; Theimann & Goldstein, 2001).

The stories need to be written within the comprehension level of the child who will be using them. The needs of the child should determine the number of sentences on each page. Gray and Gerand (1993) suggested that a social story can be presented on a single page for students with mild disabilities and Asperger syndrome,

whereas Swaggart et al. (1995) recommended using a booklet with one sentence per page for students with moderate to severe autism. Crozier and Sileo (2005) recommended that text be kept to a minimum, with no more than one directive sentence per page and one to three descriptive or perspective sentences per page. Limiting the amount of text per page helps to minimize the amount of information received at one time (Hagiwara & Smith, 1999).

The social story should also be written in a way that ensures accuracy of interpretation. Pictures representing the concept can be added for children who have difficulty reading text without cues. Pictures can be simple line drawings, clip art, books, or actual photographs. The type of picture used depends on the child's ability to discriminate between the different types of pictures (e.g., line drawings versus actual photographs) and the representational level of the child (Mirenda & Locke, 1989). The social story can be handwritten or typed, with the illustrations added. After the story has been written and illustrated, the booklet can be bound and laminated, if desired. Gray (2000) recommended that the child be included in writing and illustrating the story, if possible. Finally, social stories can be developed using the computer, with PowerPoint (or similar software) and clip art or photographs. When an electronic story is written, it is easy to insert digital photographs of the children performing the expected behavior. Table 1 lists the steps to develop and implement a social story intervention.

When the social story is first used with the child, the teacher needs to make sure that the child understands the story and the social skill being taught. The child can then read the story independently, read it aloud to an adult, or listen as the adult reads the story. There are no rules on how long a social story can be used (Gray & Gerand, 1993). Some children may initially need to have it read a couple of times a day, but once the child begins to master the new behavior, his or her need for the social story will decrease. Fading the social story is a natural process as the child learns the appropriate behavior or skill. Three examples follow that have been used with children with ASD in inclusive classrooms.

Sean, a second grader with ASD, has a difficult time waiting for his opportunity to talk with the teacher, and he often interrupts others. His teacher developed a social story called "Waiting for My Turn to Talk":

Waiting for My Turn to Talk

At school we like to talk to our teacher. (descriptive sentence) Many times other children want to talk to her too. (descriptive sentence)

Table 1 Steps in Developing a Social Story for Problem Behaviors

Define the inappropriate behavior.

Define an alternative positive behavior.

Write the story using the social story format.

Locate pictures to illustrate the social story.

Read the social story to the child.

Practice the social skill used in the social story.

Remind the child of the situation where the social skill should be used.

Prompt the child to use the social skill at appropriate times throughout the day.

Affirm the child when they use the appropriate social behavior.

Everyone cannot always talk to her at the same time. (descriptive sentence)

Sometimes we have to wait our turn. (descriptive sentence)

When it is not my turn, I need to listen to what others are saying. (*directive sentence*)

My teacher likes it when we are good listeners and wait for our turn to talk. (*perspective sentence*)

I will try to remember to be a good listener and wait for my turn to talk. (control sentence)

Another example can be seen with Jack, who is a first-grade student with ASD. When it is time to clean up after center time, he frequently has a tantrum. His teacher wrote a social story to teach Jack how to follow instructions to put away toys when it is time to clean up centers:

Center Time

We like to play with toys during center time. (*descriptive* sentence)

When it is time to clean up centers, my teacher sings the clean-up song. (descriptive sentence)

Sometimes we are having fun playing and do not want to clean up. (descriptive sentence)

After we clean up our toys we can go outside to play. (descriptive sentence)

Even when we want to keep playing, we pick up our toys. (*directive sentence*)

My teacher is very happy when we clean up our toys. (*perspective sentence*)

It is very important to keep our toys neat and to pick up. (perspective sentence)

I will try to remember to pick up my toys when I hear the clean-up song. (control sentence)

The following generic social story is written for an inclusive second-grade classroom, and it describes the appropriate behavior for the library. Because many first graders are using the library for the first time, it is important to explicitly teach them the expected behaviors rather than wait for problem behaviors to occur.

Library Day

On Mondays our class goes to the library. (descriptive sentence) We line up and sit in the story circle in the library. (descriptive sentence)

Ms. Cain, the librarian, reads us a story. (*descriptive sentence*) Then we look at books and find one that we want to borrow. (*descriptive sentence*)

We check out our book from Ms. Cain at the desk. (descriptive sentence)

When we go to the library, we must be very quiet so that people can read. (*directive sentence*)

My teacher and Ms. Cain like it when we are quiet in the library. (*perspective sentence*)

I will try to remember to be very quiet when I go to the library. (*directive sentence*)

Implementing Social Stories Into the Daily Schedule

Using social stories allows the child with ASD to have direct instruction in learning the appropriate social behaviors that are needed for success in the inclusive classroom setting. Much of the existing research on social stories combines this method with other interventions, such as verbal prompting (Crozier & Tincani, 2005), visual schedules, prompting, token economies (Kuttler, Myles, & Carlson, 1998), videotaped clips (Hagiwara & Myles, 1999), brainstorming appropriate behavior (Norris & Dattilo, 1999), social skills training (Swaggart et al., 1995), and videotaped feedback to teach social skills (Theimann & Goldstein, 2001). Social stories are not used in isolation, and they are not designed to address all the behavioral needs of the child with ASD, but they can be implemented as part of the child's educational plan.

In using social stories as part of the child's daily intervention, it is necessary to first consider the desired outcome of the social story and then analyze the parts of the daily routine in which the desired outcome would manifest itself. For example, if a social story is designed to assist a child in how to appropriately greet an adult, optimal time for this behavior would include a number of school scenarios, such as walking in the halls, going to recess, getting on and off the school bus, and arriving at and departing from school; the story can even involve a future vocational scenario, whereupon the child reaches the age of part-time employment and must therefore interact with various adults (e.g., supervisors, customers). It is essential to find times directly before or during these events to review (not introduce) the social story. Reviewing a social story is clearly not appropriate while walking in the hall; however, using a visual cue to

remind the child of his or her expected actions is appropriate. Pointing toward your eyes can remind a student that when he or she greets an adult, he or she should begin by looking at the adult, as mentioned in the control statement of the social story.

With the growing emphasis on inclusion, children with autism need to learn social behaviors through interventions that can be assimilated into the typical classroom setting. Because general education classrooms involve reading and literacy activities, social stories are easily integrated into the general education classroom routine. Social stories can be developed for individual children and groups and then implemented within the existing social milieu of the classroom. It appears that social stories can effectively encourage positive behaviors and thus increase learning for many children.

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