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How teachers and parents can work together to teach daily living skills to children with autism.

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Many individuals with autism have deficits in their ability to function independently and need extensive instruction to master daily living skills. Further, federal law requires that schools and families work together when planning transitions. This article explains three techniques (videotaped modeling, photographic or pictorial schedules, and peer/ sibling tutoring) that can be used both at home and in school to teach functional daily living skills to students with autism. Examples of appropriate skills to teach with each technique are given.

Due to deficits in their ability to function independently, many individuals with autism, including high-functioning autism, have poor adult outcomes. They typically experience poor occupational achievement (Peraino, 1992), and the majority need long-term sheltered care (Marcus, Kunce, & Schopler, 1997). In recognition of the importance of helping children with disabilities function successfully as adults, transition education has assumed a major role in the school curriculum. Inherent in this programmatic emphasis is the idea that schools and families should work together to teach children from an early age the dally living skills they will need to be successful as adults. The purpose of this article is to describe practical methods by which schools and the parents of children with autism can work together to teach these children functional dally living skills.

Selecting Daily Living Skills for Instruction

The first step in any teaching process involves selecting the skills to be taught. When choosing daily living skills for instruction, the goal should he to increase the independence of the student (Snell & Farlow, 1993). Brown, Nietupski, and Hamre-Nietupski (1976) stated that all educational activity should be directed toward meeting the "criterion of ultimate functioning." This requires us to ask the question, Will the student be able to function as an adult if he or she does not learn the skill being taught? Other factors to be considered when selecting skills for instruction are the skills the student currently performs, the demands of the environment in which the student participates, the student's chronological age, the manner in which peers perform the task, and the typical environment in which the task will be performed (Berkell, i992; Snell & Farlow, 1993).

Keeping these factors in mind, it is clear that the objectives of daily living skills instruction for a

child with autism will change as the child's skill level changes, as the child grows older, and as the child is required to perform the skill in different settings. An elementary school student, for example, may need to learn skills such as dressing independently with clothes selected by his or her parents, recognizing coins and currency, eating in a school cafeteria, riding on a school bus, and making his or her bed. During the middle school years, it may be appropriate for the same student to learn to select clothing to wear (based on both the weather and the styles worn by other children), count money and make change, eat in restaurants, and clean his or her room. During the high school years, instruction for this student may focus on purchasing and maintaining clothing, budgeting money, preparing meals and cleaning the kitchen, using public transportation or taxis, and helping out with household maintenance.

Teaching Skills in School

Although teaching skills in the natural environment is most effective (Westling & Fox, 2000), it is not always possible. A number of other techniques have been effective in teaching functional daily living skills to children with autism. For example, videotaped modeling has been used to teach a variety of skills and is useful to teachers who do not have easy access to natural environments (Alcantara, 1994). This instructional approach simply involves videotaping another student performing the desired task so that the videotape can be shown repeatedly to the student attempting to acquire the skill. Hating, Kennedy, Adams, and Pitts-Conway (1987) used videotaped modeling to teach children with autism to make purchases and produce social responses in a school cafeteria and a convenience store. Also, videotaped modeling has been used to teach children with autism to make purchases in community grocery stores, and the skill was generalized to an untrained store (Alcantara, 1994). Among the benefits of using videotaped modeling to teach skills in a school setting are that it saves time, allows freedom from making transportation plans, and involves less risk than using extensive community-based instruction.

Another technique that has been commonly used to teach functional skills to individuals with a variety of developmental disabilities, including autism, is the use of photographic or pictorial activity schedules. In this technique, a series of pictures depict the stages of a task, to help the student perform the task independently. This technique has been successfully used to teach cooking skills (Johnson & Cuvo, 1981), clerical and laundry tasks (Wacker, Berg, Berrie, & Swatta, 1985), and computer use (Frank, Wacker, Berg, & McMahon, 1985), and has been demonstrated to improve generalization (Pierce & Schreibman, 1994).

A third instructional technique that has been successfully used in schools involves the participation of peers. Benefits of peer tutoring have been widely described for students with a variety of disabilities. In a variant of this technique, Blew, Schwartz, and Luce (1985) described using peers without disabilities as models in teaching functional community-based skills to students with autism. They demonstrated that students were able to learn to select library books, purchase items in a convenience store, and cross a street by watching the actions of peer models. Additionally, Worton, Walker, Rotholz, McGrale, and Locke (1988)

described procedures for using peers with developmental disabilities as tutors. Though their writing focused on traditional classroom instructional practices, the techniques could easily be adapted to daily living skills instruction.

Reinforcing Skills at Home

The techniques described for use in school can easily be adapted for use at home. Copies of the videotapes used at school can be used at home to reinforce learning that has taken place. Additionally, siblings or children in the neighborhood can be videotaped performing age-appropriate skills that will be useful at home. For example, an older sibling can serve as a model in a videotape demonstrating how to select clothes to wear to school. Figure 1 shows an example of a script that could be used to teach a child how to select clothing to wear to school.

FIGURE 1. Videotape script for selecting clothing.

1. A sibling is shown looking out a window and asking him- or herself, "Do I need to wear warm weather clothes or cold weather clothes today?"
2. The sibling says, "This is a warm (or cold) weather clothes day."
3. The sibling goes to his or her closet, looks at the warm (or cold) weather clothes, and asks him- or herself, "Which of these clothes haven't I worn for a few days?"
4. The sibling then asks him- or herself, "Which of these clothes are the most like the clothes my friends wear?"
5. The sibling makes an appropriate clothing selection and gets dressed.

Pictorial activity schedules could also be used to teach the child at home. For example, a series of photos could be used to teach a child to make his or her bed. For this skill, the photographs would portray the following series of activities: the child enters his or her bedroom, pulls the top sheet to the front of the bed, places the pillows at the front of the bed, pulls the bedspread to the front of the bed, and smooth the wrinkles from the bedspread. In Figure 2, a task analysis that could be photographed shows the steps of making a bed.

FIGURE 2. Task analysis for making a bed.

1. Smooth the wrinkles from the bottom sheet on the bed.
2. Pull the front of the top sheet to the front of the bed.
3. Make sure the top sheet hangs evenly on both sides of the bed.
4. Fluff the pillow(s) and place them at the front of the bed.
5. Pull the front end of the bedspread to the front of the bed.
6. Make sure the bedspread hangs evenly on both sides of the bed.
7. Smooth any wrinkles in the bedspread.

Additionally, siblings or peers in the neighborhood can serve as tutors to the child with autism at home. For example, siblings or peers can create a play store in which they can instruct the

child with autism in counting money and making change. Further, siblings or peers can promote generalization of this by monitoring the child with autism as he or she engages in transactions in stores in the community.

Conclusion

Children with autism are likely to have better adult outcomes if they are able to master a variety of functional daily living skills. However, if these skills are to be maintained and generalized they need to be taught repeatedly by different individuals and in different settings. This article described three easy-to-use techniques that have been proven effective in teaching students with autism and that can be employed both at school and in the home. Use of these techniques will help fulfill the Individuals with Disabilities Education Act requirement that schools and parents work together to address the child's needs in the area of daily living skills. Most important, use of these techniques will enable children with autism to live more independently and successfully as adults.

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