



AUTISM SPECTRUM DISORDER SERIES

Curriculum Accommodations for Students with Autism Spectrum Disorders

Introduction

No single instructional method for teaching students with autism is successful for all students in all areas of curriculum. Also, students needs change over time, making it necessary for teachers to try other types of accommodation approaches. This issue of the **Autism Spectrum Disorder Series** contains information about important areas of instruction and curriculum approaches that have proved successful for teachers working with students with autism.

Visual Approaches

The most strongly recommended approach for teaching students with autism is to use visual aids. Students often demonstrate relative strengths in concrete thinking, rote memory, and understanding of visual-spatial relationships, and difficulties in abstract thinking, social cognition, communication, and attention.

Pictographic and written cues can often help the student to learn, communicate, and develop self-control. One of the advantages of using visual aids is that students can use them for as long as they need to process the information. In contrast, oral information is transient: once said, the message is no longer available. Oral information may pose problems for students who have difficulty processing language, and who require extra time. In addition, it may be difficult for the student with autism to attend to relevant information and to block out background stimulation. Using visual supports enables the individual to focus on the message.

Visual aids and symbols range in complexity from simple and concrete to abstract. The continuum moves from real object or situation, to facsimile, color photograph, color picture, black and white picture, line drawing, and finally to graphic symbol and written language. Objects are the most simple, concrete form of aid. Graphic symbols, although far along the continuum in terms of complexity and abstraction, have been widely successful with students with autism. Software packages that provide quick access to graphic symbols and the ability to create customized symbols are available.

Visual supports can be used in a variety of ways in the classroom. However, to be successful, they must fit the student s level of comprehension by being at the appropriate point on the

continuum of complexity. Using a line drawing to support learning when the student needs color photographs in order to comprehend will only frustrate everyone.

Taking this caution into account, visual supports are very useful and can be employed to: organize the student's activity daily schedules, mini-schedules, activity checklists, calendars, choice boards provide directions or instructions for the student visual display of classroom assignments, file cards with directions for specific tasks and activities, pictographs and written instructions for learning new information assist the student in understanding the organization of the environment labeling of objects, containers, signs, lists, charts, and messages support appropriate behavior posted rules and representations to signal steps of routines teach social skills pictorial representations of social stories depicting a social situation with the social cues and appropriate responses, developed for a specific situation for the individual student (for further information on social stories, see the section in this chapter on strategies for teaching social skills) teach self-control pictographs, which provide a cue for behavior expectations.

The key question to ask when planning an activity or giving an instruction is: how can this information be presented in a simple visual format? Choose visual aids on the basis of an understanding of the student and her or his abilities and responses.

Other Approaches

Provide precise, positive praise while the student is learning

Give students precise information about what they do right or well; for example, great coloring, or good finishing of that math problem. Generalized praise may result in unintended learning that is hard to reverse. Students with autism may learn on one trial, so directing the praise to the very specific behavior is important: Sal, you are doing very well at multiplying these numbers. Superstitious learning can occur if students mistakenly connect something they are doing with the praise. Saying Sal, you are doing very well when Sal is also swinging his feet while he does the math assignment might connect the feet swinging with the general praise.

Use meaningful reinforcements

Reinforcers can be anything from praise to tangible objects that increase the behavior the student is to learn. Students with autism may not be motivated by common reinforcers that work with other students. They might prefer some time spent alone, time to talk to a preferred staff member, a trip to the cafeteria, an exercise routine (such as going for a walk), time to play with a desired object, music, playing in water, getting to perform a favorite routine, items that provide specific sensory stimulation, or sitting at the window. It is important to know what works as reinforcement for each child. A preference profile that identifies the activities or other reinforcers that are preferred by the student can be helpful. This likes and dislikes list can be developed with the help of the family and shared with all service providers.

Plan tasks at an appropriate level of difficulty

Students with autism may be particularly vulnerable to anxiety and intolerant of feelings of frustration if they cannot perform the tasks assigned. Increasing the level of difficulty gradually and scaffolding or supporting learning (particularly with visual information rather than solely oral explanations) will assist in minimizing the student's frustration.

Use age-appropriate materials

It is important to honor the dignity of students with autism through the choice of instructional

materials. Even if the instruction must be modified significantly, the learning materials should be appropriate to the age of the student.

Provide opportunities for choice

Because students with autism may be frequently frustrated by their inability to make themselves understood, they need instruction and practice in making good choices for themselves. Many parts of their lives may necessarily be highly structured and controlled by adults.

Sometimes students continue to choose one activity or object because they do not know how to choose another. Acceptable methods of providing choice for students who have limited ability to communicate need to be developed on an individual basis. Direct teaching of making choices may be helpful. Choice should be limited to one or two preferred activities until the student grasps the concept of choice. Open-ended choices will not enhance the student's skill at making choices, and may only frustrate him or her.

Break down oral instructions into small steps

When providing instruction for students with autism, teachers should avoid long strings of verbal information. As discussed above, supporting oral instruction with visual cues and representations will help students to understand.

Pay attention to processing and pacing issues

Students with autism may need longer to respond than other students. This may be linked to cognitive and/or motor difficulties. Students with autism may need to process each discrete piece of the message or request, and therefore need extra time to respond. Providing extra time generally, and allowing for ample time between giving instructions and student responses are both important tactics for supporting students with autism.

Use concrete examples and hand-on activities

Teach abstract ideas and conceptual thinking using specific examples, and vary the examples so that the concept is not accidentally learned as applying in only one way.

Use task analysis

Teachers and parents may need to break complex tasks down into subtasks and reinforce in small, teachable steps. For each step of a complex task, the student needs to have the requisite skills. These sub-skills may need to be taught and reinforced in sequence. For example, when teaching a self-help skill such as brushing teeth, the task may need to be broken down into sub-skills: getting the toothbrush and toothpaste, turning on the water, wetting the toothbrush, unscrewing the lid of the toothpaste, putting the toothpaste on the toothbrush, etc. Life skills, social skills, and academic skills can all be analyzed and approached as tasks and sub-tasks, with each step taught and then linked to the next in a chain sub-tasks.

Use discrete trial methods

Using prompts to help students learn is an important element of instruction for some students with autism. Prompts may be physical, gestural, or verbal. They should only be used as long as they are needed, as students can become dependent on prompts. When using the discrete trial strategy, the instructor presents the stimulus for the desired behavior (gives the directions or instructions), and prompts the student; the student responds, and then the instructor provides consequences based on behavioral principles. The prompt is often designed to model the desired behavior or assist the student in performing it.

Introduce unfamiliar tasks in a familiar environment when possible

When it is not possible to introduce unfamiliar tasks in a familiar environment, prepare the individual for the new task and environment using aids such as pictures, videotapes, and/or social stories.

Organize teaching materials and situation to highlight what is important

Use organization aids and visual supports to:

- help the student attend to pertinent information, and teach new tasks

For example, remove extraneous materials from the desk or table before attempting to teach a skill. Or present only the text you want read rather than the whole book. Highlight the key words, such as character names in the text, so they are noticed.

Encourage independent effort and incorporate proactive measures to reduce the likelihood of becoming dependent on prompts

When students with autism are constantly supported, they may never develop the capacity to act independently. Since independence is a desired goal for all students, instruction should include strategies to decrease the need for adult prompting.

Strategies include:

- using visual aids to decrease reliance on physical and verbal prompts from the parent, teacher, or teacher assistant
- planning ways to fade prompts
- ensure that the adult is not always positioned close to the student and that the same adults are not always present; positioning the adult away from the student and changing teacher assistants may help to avoid dependency
- providing visual organizational aids, such as schedules, task outlines, check lists, and charts, and involving the student in developing and using them, if feasible
- providing instruction to increase the student's awareness of environmental cues
- teaching in the environments containing the cues and reinforcement that prompt and maintain the behavior

Direct and broaden fixations into useful activities

If the student is fixated on an object or a topic, such as a color or shape, use it to teach a concept. A whole week's learning activities in writing and math can be centered on one topic; this is creative theme-based learning activities taken to the extreme.

Know the individual, and maintain a list of strengths and interests

Family members can provide valuable information for teachers about what students know and do at home or in the community. These interests and skills can be built upon both for instruction and for reinforcing successful learning and behavior.

Develop talent and interest areas

If the student demonstrates a particular interest and strength in a specific area (e.g., music, drama, art, graphics, computer), provide opportunities to develop further expertise in that area. This may not only provide enjoyment and success, but may also lead to the development of skills for future employment.