

Creating Learning Opportunities for Students With Severe Disabilities in Inclusive Classrooms

June E. Downing • Joanne Eichinger

Have you ever struggled with how to provide meaningful participation for students with severe disabilities in the general education class, when a lecture is occurring or when the content is too abstract for your students? What alternative strategies would be useful in these instances?

This article discusses how professionals can recognize learning opportunities for students with severe disabilities within general education activities (see box, “What Does the Literature Say?”). We also include examples of additional learning opportunities that provide ways for students to work on their individualized objectives in various settings.

We recognize that students with severe disabilities tend to learn at a slower rate and need repeated practice opportunities to acquire and maintain skills and to generalize these skills to other settings. Thus we recommend that educators provide multiple opportunities to practice essential skills.

The Challenge of Bridging the Gap—Teacher Decision Making

Because the goal of inclusion is to promote social, academic, and nonacademic skill acquisition in the classroom, teachers must make decisions at every step of the process. Physical placement of students with moderate or severe disabilities in a general education class is a nec-

essary but not sufficient condition for successful inclusion (Schnorr, 1997). If we merely place a student in a general education class with no thought about how we will actively involve the student, we may have minimal or no expectations of the student or may influence the student’s peers to have a negative impression of the student.

The first part of the decision-making process should be to select the class (at the elementary level) or classes (at the middle or high school levels) that provide numerous opportunities for active engagement (Downing, 2002). The literature is replete with examples of instructional strategies that are conducive to meeting the needs of a diverse group of learners. Some of these strategies are cooperative learning, instruction that reflects the theory of multiple intelligences, and hands-on learning. For a complete description of these approaches and examples of their use with students with severe and multiple disabilities see Eichinger and Downing (2002).

Even when a teacher uses these instructional strategies, the teacher will also most likely use lecturing, reading, giving directions, and whole-group discussions. Fully including the student with moderate or severe disabilities becomes more difficult at these times. For the student who does not read, write, or com-



municate with a formal language, such instructional time periods can be boring and frustrating. This situation can occur at most ages, but this type of instruction is more prevalent at the secondary levels. Determining the relevance of these activities for students with moderate and severe disabilities can pose a considerable challenge to members of the education team.

Highlighting Existing Learning Opportunities

Most general education activities provide many opportunities for students with

moderate or severe disabilities to learn valuable and lifelong skills. For example, Phelps and Hanline (1999) identified the opportunity for preschoolers to acquire communication skills and learn to follow directions for cleaning up during the activity of playing with blocks. Godt, Hutinger, Robinson, and Schneider (1999) explained how the simple task of signing up for different centers or activities can encourage the development of literacy skills in young children with disabilities. Initially, the student may make a mark or find his or her color-coded name on a card or label and place it on the sign-up sheet. With continued practice and feedback, this method of signing up for an activity can lead to increasingly legible name writing and reading of others' names. For additional practice in this skill, every time a student turns in a paper or product to the teacher, the opportunity exists to work on signing one's name (by writing, printing, using a signature stamp, or affixing labels with one's name on them).

Many opportunities naturally exist to follow simple directions to line up, get out materials, get into groups, and clean up. Additional learning opportunities using these directions can occur if they are presented as a pictorial list with words or phrases and a sequence of numbers to indicate the order of steps. With this simple adaptation, the directions may be easier for the student to follow, and it provides the student with the opportunity to work on reading skills and basic math skills (e.g., number recognition and sequencing).

When the class is working on writing a story or report, the student can use pictures or items and parts of items to illustrate the work. Adding words or sentences to these illustrations allows the teacher, instructional assistant, or peer

We must plan instructional activities that promote skill acquisition and create a classroom climate that promotes a sense of belonging for all students.

What Does the Literature Say About the Inclusion of Students With Moderate and Severe Disabilities in the Classroom?

Educators and researchers have identified many benefits for students with moderate and severe disabilities as a result of inclusive opportunities (Downing, Eichinger, & Williams, 1997; Fisher & Meyer, 2002; Jorgensen, 1998; Ryndak & Alper, 2003; Williams & Downing, 1998). These benefits, however, do not simply emerge from sharing the same physical space. Teachers and other professional staff must make ongoing efforts to plan instructional activities that promote skill acquisition and to create a classroom climate that promotes a sense of belonging for all students. Research in this area of inclusion has verified the need for systematic instruction that addresses individual learning needs, as well as social interaction skills (Hunt & Goetz, 1997; Jackson, Ryndak, & Billingsley, 2000).

Many of the reported benefits of inclusive education have focused on improved social skills as a primary reason to educate students of very different abilities together (Dymond & Orelove, 2001; Freeman & Alkin, 2000). Whereas enhancing social skills is certainly one very positive benefit of inclusive educational programming, it is not the sole benefit. Students with moderate or severe disabilities of all ages can learn many meaningful academic and nonacademic skills within general education classrooms. Students can acquire the following skills:

- Communication skills (Fisher & Meyer, 2002; Hunt, Staub, Alwell, & Goetz, 1994).
- Motoric skills (Fisher & Meyer, 2002; Janzen, Wilgosh, & McDonald, 1995).
- Behavioral skills (Janzen et al., 1995).
- Social skills (Fisher, 1999).
- Academic skills (Freeman & Alkin, 2000; Logan & Malone, 1998).

Despite the potential for learning a variety of skills, when classroom activities involve content that is abstract and well beyond the ability level of students with moderate or severe disabilities, teachers may find it a challenge to find meaningful ways for participation. Coots, Bishop, and Grenot-Scheyer (1998), for example, found that elementary teachers were concerned that students with severe disabilities were unable to fully participate and were just sitting and uninvolved. This concern regarding lack of true involvement may increase as students enter middle and high school, where the focus is on obtaining a diploma and coursework focuses on content acquisition and mastery.

tutor to work on reading skills with the student. Using a match to sample strategy, students can work on developing fluency with a number of common sight words. Students can add page numbers to this story or report with number stamps, numbers on sticky labels, or tracing to develop the skills of number recognition, number sequencing, and concepts of first, second, third, and so on.

When multiple items are used in class activities, the student has an opportunity to sort and count the items. While this may not be the focus of the activity, making use of its availability can be very important for the student who may not be able to master more abstract content. For example, a student with severe disabilities in an eighth-grade biology class, works on sorting a variety of different seeds and then counting the number in each pile

while his or her classmates label the seeds according to genus. In physical education classes, teachers can promote counting as a skill during warm-up exercises, jumping rope, or tallying scores of games. Gameboards used in class to work on specific skills provide several opportunities to work on counting within a meaningful context. See Downing (2002) for examples of curricular adaptations to meet the needs of students (preschool through 12th grade) with severe disabilities in general education.

Creating Learning Opportunities

When lessons do not include sufficient learning opportunities that are meaningful for a student with severe disabilities, teachers may need to look for learning opportunities that *could* become part of

an activity. Often steps of activities that typically are done by the teacher or individual students can be performed by a student with moderate or severe disabilities. The following suggestions for creating learning opportunities are not exhaustive, but meant to serve as a catalyst for teachers to identify additional opportunities (see box, “Considerations for Creating Learning Opportunities”).

Dealing With Materials

Helping the teachers with materials like worksheets or items for science labs provides an opportunity for a student with moderate or severe disabilities to learn many skills:

- Handle items appropriately.
- Follow directions.
- Work on math skills.
- Engage in social interaction skills.

While the teacher is lecturing, giving lengthy directions, or facilitating a group discussion, the student remains actively involved and learning by handing out one form per student needed for the subject of study. This student can follow directions to get the material and then maneuver around the room handing one to each student or putting it on each student’s desk. The student can learn one-to-one correspondence, while mastering the fine motor skill of handing out one piece of paper at a time. This type of activity should be conducted on a routine basis so the other students in the class are less apt to find this distracting. Collecting homework or other materials from individual students also offers the

student with moderate or severe disabilities the opportunity to work on one-to-one correspondence, handling materials, and behaving appropriately.

The student with moderate or severe disabilities also can help the teacher gather and organize materials into separate piles for different groups to use during a lab or small-group activity. This procedure could involve

- Reading the pictorial and written directions.
- Matching items to the directions.
- Organizing.
- Counting the number of different sets of material.

If the teacher is doing a demonstration in front of the class using materials, the student with moderate or severe disabilities may be able to help with this demonstration. The student would need to follow directions from the teacher and hold items appropriately. If the model is difficult to see at a distance, this student could assist the teacher by moving around the room, showing the model to classmates. Students unable to walk could use their wheelchair or a mobile stander while doing this task.

Instructional support to teach these skills can be provided by a special educator, paraeducator, related services provider, peer tutor, or volunteer when the activity taking place holds little meaning and is too difficult to adapt.

Grouping Students

The teacher’s intended lesson may include the random grouping of students. During the lecture portion of the lesson, the student with moderate or severe disabilities can work with a paraeducator to organize students into groups for the teacher. The student can use photographs of each student with a small magnet on each and randomly organize the photos into the necessary arrangement using a magnetic board. The student can organize students by first letter of their name, or by numbers written on the back of each photo. A special die with numerals on it can be used to correspond to the numbers on each photo. The student rolls the die, reads the number, and finds the photos with the same number (matching). These photos are then placed in a small envelope with the cor-

rect number on it. Using a regular die, the student can practice counting the dots and finding the corresponding number on the back of the photo.

If numbers are too difficult, the photographs can be color-coded and a similarly color-coded die could be used to determine the groupings. In this way, the student may be working on recognizing colors and matching by color. Students with limited movement can use a switch to activate a spinner for random selection or a rotary scanner for controlled selection based on color or numbers as previously described.

Checking One’s Schedule

A personal schedule used by the student with moderate or severe disabilities provides many opportunities to teach a variety of skills (Downing & Peckham-Hardin, 2001; Massey & Wheeler, 2000). With a peer, or paraeducator, students can review their entire schedule during homeroom so they can anticipate the day’s events. Checking one’s schedule also should occur at the beginning of each class period, when a lecture is occurring. Depending on the type of schedule and the educational needs of the student, the student can be acquiring reading, writing, and math skills. Through use of the schedule, they also work on communication and self-management. As a result, checking one’s schedule should not be rushed, but should be a carefully planned minilesson.

Schedules should include a word, phrase, or sentence to represent each activity, along with a pictorial or object representation. Numbers of the activities or periods allow the learning of number identification and sequencing. If dots (visual or tactile) are used with the numbers, the student can work on counting. In addition, learning to read clock time and relate it to specific activities can be targeted if either analog or digital clock time is added to a student’s schedule.

Students can mark off activities completed, or trace over prewritten words and numbers, or use a connecting dots method to write the number of activity that is next. Using Post It labels and Velcroed words and numbers, students also can write by matching. Targeted

Considerations for Creating Learning Opportunities

- Can the student collect homework or hand out materials to classmates?
- Can the student help the teacher group students for small group activities?
- Can the student check his or her daily schedule?
- Can the student create a pictorial representation of subject matter?
- Can the student help the teacher call on different students to answer questions?
- Can the student randomly select questions for classmates to answer?

Every time a student turns in a paper, the student can work on signing one's name (by writing, printing, using a signature stamp, or affixing labels with one's name on them).

skills on schedules would depend on what a particular student was learning.

Creating Pictorial Representations

A student with moderate or severe disabilities may be able to pictorially represent the topic of study. Students can be offered several pictures, some of which are related to the topic, while others are unrelated and serve as distracters. The student can choose the color and shape of the background and then select appropriate pictures to include. The student can be asked to find a certain picture as a receptive language lesson, with pictures labeled to enhance sight word recognition.

The end result can be a collage of ideas the teacher is presenting in class. At the end of the lecture, the teacher can ask the student to show this form of representation of ideas to the entire class. This activity provides several learning opportunities:

- Make decisions.
- Learn vocabulary.
- Gain general knowledge.

This activity also would complement the student's reading a much simplified version of the information that can be accessed via audiotape or videotape with captioning.

Deciding on Questions to Ask

Asking questions of students as a way to prepare for an exam or to review subject content can occur as part of a general discussion of a topic, or it can take place more formally (and fun) as part of a team competition. In a team setting, the student with moderate or severe disabilities may assume the role of picking the questions. Questions can be numbered

so that when the student reads or identifies a specified number by pointing, that question is asked of the team. A 12th-grade student with severe physical and multiple disabilities, for example, used a touch switch to randomly select a number with an Ablenet^[TM] spinner, and number overlay during a Jeopardy-type competition during an English lesson on medieval England. This same student could activate a rotary scanner to purposely select a specified number, which targets the skills of number matching or identification (see box, "How Sergio Stays Actively Involved").

Similarly, the student can randomly select keywords of a particular content area for members of the class to define, or interpret. Words can be on different colored cards, which the student can sort (by color) and then select a particular color of card when sharing information with the class. For example, one student

in her 10th-grade Spanish class was learning to recognize pictures by selecting the correct picture related to a vocabulary word (in English and Spanish) from three options. Once she made the correct selection, her classmate had to provide the equivalent vocabulary word or phrase in Spanish.

Final Thoughts

Learning possibilities for students with severe disabilities are endless and only limited by the creativity of team members who support the student. Many of the adaptations and accommodations we suggest can be used in a variety of classes and situations, thus affording the student several opportunities to practice valued skills. Though such accommodations are specifically designed to meet students' individual learning needs, they also should benefit the entire class. The more team members engage in identify-

How Sergio Stays Actively Involved in His Biology Class

As a high school student, Sergio attends a number of classes that involve periods of lecture and note taking. Sergio enjoys being with his peers and draws others to him. He has severe spastic quadriplegia and does not use speech to communicate. He is learning to recognize his name, control his environment through switch activation, and communicate through the use of facial expressions, vocalizations, and picture use.

During his biology class when his teacher starts to lecture, Sergio is supported by a peer tutor to go over his daily schedule to determine what period has just ended and what period it currently is. He then uses an Ablenet^[TM] spinner that contains the photographs of his classmates and a switch to randomly assign students to different groups for their lab work on genetics. The peer tutor sets this up for Sergio and prompts him to activate the switch until he has written down the names of the students for groups. If the teacher is still lecturing, Sergio will work on creating a collage of pictures related to genetics. Sergio is to differentiate between two pictures at a time to determine which is the picture of a man or woman versus something completely unrelated. Pictures of people with quite different characteristics are used to represent the diversity of genetics. Sergio is learning to identify pictures when asked, and he indicates his choice by looking at one of the two pictures. He will then be offered two different places for the picture to be glued on the paper and he will again look at the location of his choice. When the collage is finished, he will show it to the teacher and the rest of his class.

Sometimes, instead of making a collage, the teacher will ask Sergio to help him call on various students to respond to questions on the topic of study. Sergio will use his Ablenet^[TM] spinner with photographs of his classmates for this purpose. Another option for Sergio to use his switch is to turn on the overhead or computer for the PowerPoint presentation used by the teacher during the lecture. Sergio seems to enjoy these different ways to be an active member of his class. When the class gets into their various groups to work on the lab assignment, Sergio uses his spinner to randomly determine who will get various features such as blue eyes, brown hair, muscular build, etc. Within this part of the activity he will be asked to identify various colors through eye gaze. Sergio receives support from his peer tutor, biology teacher, special educator, or paraeducator, depending on the day.

The goal of inclusion is to promote social, academic, and nonacademic skill acquisition in the classroom.

ing the learning opportunities for students with moderate or severe disabilities within typical classroom activities, the easier this process should become.

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Inclusive Education Resources for Students With Severe Disabilities

Print

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On the Web

- <http://inclusion.org>
This site is The Inclusion Network, a nonprofit organization in the greater Cincinnati area where viewers can obtain considerable information on ways to promote inclusive activities.
- <http://www.quasar.ualberta.ca/ddc/incl/intro.htm>
This Web site, Inclusion: School as a Caring Community, provides a handbook on inclusive education, interviews with teachers, resources, and feedback for those having specific questions about individual students.
- <http://www.kidstogether.org>
Kids Together, Inc., is a nonprofit organization designed to promote inclusive communities. Information on inclusive education is provided.
- <http://www.uni.edu/coe/inclusion/index.html>
This Web site on inclusive education is designed for general education teachers, special education teachers, parents, and school staff. It provides answers to often-asked questions and provides resources for making accommodations.
- http://www.newhorizons.org/spneeds/front_spneeds.html
This Washington-based Web site is Inclusion Learning Environments for Students With Special Needs. It provides legal information, definitions, and strategies for developing inclusive educational environments. It also disseminates information on research-based best practices on inclusion.

Videos

- Families, friends, futures.* (1995). Evanston, IL: Comforty Media Concepts. (Available from www.comforty.com).
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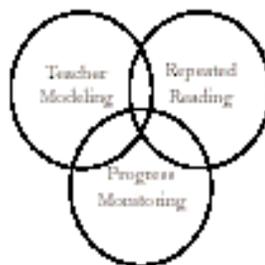
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