



16

Teaching Students with Severe or Multiple Disabilities

Ms. Gibbins teaches physical education at Mt. Morris Elementary School. She has been there for two years and this is her tenure year. She is proud of her teaching and the way she has implemented her curriculum. Thus far she has taught a student with Down syndrome, two who had mild autism, and one with a visual impairment. She feels she has been successful teaching these students with special needs, and she feels confident about getting tenure this year. In August, she receives an email indicating that she will be teaching Courtney, a first grader who has a disability consisting of severe spastic cerebral palsy and seizures. Courtney uses a wheelchair. She can push the chair herself for very short distances on flat surfaces, but in most cases the chair needs to be pushed for her. Courtney speaks very slowly and quietly, but patient listeners can understand some of what she says. She uses a DynaVox in her classroom, which is an electronic communication device. Courtney's mother writes a note to Ms. Gibbins saying that Courtney has an adapted scooter on which she can sit and push herself with some help. Her mother also mentions that Courtney loves to swim in warm water, push a ball off her lap, and hit balloons with her big sister. Ms. Gibbins is nervous about teaching Courtney, but she is determined to integrate the girl successfully into class and make this a positive learning experience for her first graders and for herself.

introduction

The above scenario is not uncommon in today's schools. Students with severe and multiple disabilities are being educated in neighborhood schools more often than in the past. In many cases these students are included with their peers in physical education, though sometimes they are in a segregated class in which they are assisted by trained peer tutors. In either case, informed and tailored approaches help us teach students with severe or multiple disabilities. In this chapter we will discuss types and causes of severe disabilities, learn about assessing students (why to assess, what to assess, forms of assessment), justify the time we take to assess, learn more about writing IEPs, and discuss what and how to teach students with severe or multiple disabilities.

Definitions

Severe disability means a severe chronic condition attributable to mental or physical impairment of a person that is likely to continue indefinitely and results in substantial functional limitation in three or more of the major life activities of self-care, receptive and expressive language, learning, mobility, self-direction, capacity for independent living, and economic self-sufficiency. Such a disability can originate at birth or be acquired.

Etiology

Severe and multiple disabilities have many causes. Exhibit 16.1 lists just a few of the conditions and disabilities that are sometimes seen in conjunction with other disabilities. Keep in mind that many children will have more than one disability, all of which may stem from a single cause. For example, a child who is born very prematurely may have cerebral palsy, a visual impairment, and an intellectual disability along with a severe seizure disorder.

Attributes and Tendencies

No matter what the etiology, individuals with severe or multiple disabilities may exhibit some or all of the attributes and tendencies in the list on the following page (Block, 1992).

EXHIBIT 16.1 *Some of the causes of severe or multiple disabilities.*

Angelman syndrome	Deafness	Shaken baby syndrome
Autism	Deafblindness	Trisomy 18
Cerebral palsy	Intellectual disability	Visual impairment
CHARGE syndrome	Prematurity	Other

- *Limited level of awareness.* An individual labeled with a severe disability may have a limited level of knowledge of what is happening in the environment and may not be able to respond effectively to prompts or instruction. This may be due to hearing, vision, processing issues, muscular limitations, or expressive issues.
- *Limited response repertoire.* An individual may have very limited ability to respond due to the issues discussed above. Even when the person does understand what you are asking or when they are reacting to the environment, he or she may not be able to express his or her needs.
- *No coherent system of communication.* The individual may not have the ability to develop a system of communication that will receive information or express feelings and needs clearly.
- *Medical complications.* The individual may have medical complications such as seizures, a shunt, a feeding tube, a tracheotomy, severe contractures, or eating and swallowing issues, just to name a few.

Assessment

Children with severe disabilities require systematic, long-term curricular, instructional, and environmental accommodations and support based on assessment data (Block, Klavina, & Flint, 2007; Kelly, Wessel, Dummer, Sampson, 2010). Due to this fact, the assessment part of this chapter will be comprehensive so that teachers, paraeducators, and peer tutors will have a starting point and be better prepared to assess and keep track of progress.

Once instructors know that they will have a student with a severe disability or multiple disabilities in their class, it is very important to assess the student's level of functioning. Without assessment the instructor will not know where to start and will not be able to document progress in the psychomotor domain (Lieberman & Houston-Wilson, 2009). Although this is true of any child, assessment for a student with a severe disability must be well planned (Kowalski, Houston-Wilson, Daggett, Speedling, & Douglas, in press). In addition, effective assessment for a child with a severe disability will take time.

Assessing students with severe or multiple disabilities enables physical educators to determine the student's current level of functioning, which provides a baseline. This baseline is needed to write the IEP, understand current functioning, and document progress.

Students with severe or multiple disabilities must have at least a 1:1 ratio of one support staff, such as a teacher, teacher's aide (paraeducator), or peer tutor, per child for instructional purposes (Lieberman, Haibach, & Schedlin, in press). Often a 2:1 ratio of two support staff per child is needed in order to assess appropriately (Dunn & Leitschuh, 2010). For example, assistance may be needed when positioning a child with a severe disability on her or his side, on a scooter, or in the pool. An accurate assessment will help determine the student's level of independence and the ratio that will be needed for physical education, whether it is 1:1, or 2:1, or perhaps more in certain units, such as aquatics. Documenting the current level of performance will also help the support staff determine the levels of assistance needed as the student attempts tasks and skills. For example, if a student can extend her arm to 30 degrees, she may need 100 percent physical assistance when dropping a bean bag in a bucket as a prerequisite to throwing. If she can extend her arm to 100 degrees, she may only need 50 percent physical assistance to help her drop a ball in a bucket and may start to learn to throw (Block, Hornbaker, & Klavina, 2006).



If a student cannot stand up on his own, the instructor can plan for the student to execute the skill while sitting in a wheelchair, lying over a bolster, or lying on his back on a wedge mat or flat mat.

Accurate assessment will also help determine what modifications are needed in the lessons. For example, if a physical educator finds that a child has a limited ability to grasp a ball, he can plan for the student to use a bean bag, a deflated ball, a ball made of rope, or start with a scarf depending upon grasping ability. If a student cannot stand up on her own, the instructor can plan for the student to execute the skill while sitting in the wheelchair, lying over a bolster, or lying on her back on a wedge mat or flat mat. Knowing which of these positions the student can start from helps determine the appropriate task modifications.

Assessment will help to determine the student's baseline function, levels of assistance needed, and modifications necessary for program development and implementation. Without assessment the program cannot be developed and implemented appropriately.

Lastly, ongoing assessment will ensure that improvements are documented. Students with severe and multiple disabilities improve at a slow rate, and ongoing assessment can reveal small improvements that can then be document-

ed on progress reports and IEPs, and shared with other team members (Block et al., 2006; Kowalski et al., in press; Lieberman & Houston-Wilson, 2009).

Guidelines for Assessment

When assessing students with severe or multiple disabilities, keep the following guidelines in mind.

Assessment should:

- *Be 1:1 and ongoing.* In order for assessment to be accurate and thorough, it must be conducted with at least one teacher or paraeducator for each student and, if possible, it must be conducted daily. This is the best way to document progress.
- *Be chronologically age appropriate.* What is assessed must be age appropriate. For example, if a student is 5 years old, it is appropriate to assess balance; if a student is 18 years old, then balance should be assessed within an age-appropriate activity such as kicking a soccer ball, a 3-step approach in bowling, or while walking around a track.
- *Be functionally appropriate.* In addition to being age appropriate, assessment must be targeted at the student's functional level. For example, if a student with severe disabilities is working on volleyball with his 14-year-old peers, the functional approach may be to put his chair right up to the net and lower the net and determine how independent he is when dropping the deflated beach ball over the net to a peer. If he can do this with 50 percent support in 3 seconds with a verbal command, then the teacher has a baseline to work from in an age-appropriate activity at the student's functional level. The word functional means that the individual can use that skill in everyday tasks (Dunn & Leitschuh, 2010; Kowalski & Lieberman, 2011). In this case, if the student can hold a ball, he may also be able to hold a bottle of milk at lunchtime or hold his gym bag on his way to the gym.
- *Utilize community-based activities.* When working on specific community-based skills, try to get the student out into the community setting, where the skills

will actually be used, in order to determine the student's level of functioning. For example, teaching racquetball in the gym with peers and familiar equipment is a good start; however, to determine the student's ability to participate in racquetball in the community, it is best to assess her at the local university, YMCA, community center, or health club to determine her true level of functioning in that sport.

- *Document levels of independence.* A true assessment also includes how much support or assistance the student needs for each skill or activity. For example, if a student floats in the shallow end of a pool with a life jacket for 30 seconds, document whether or not you supported her fully at both the shoulders and the waist, partially supported her, or supported her not at all. Improvements in independence will become more apparent when they have been documented in detail (Kowalski et al., in press).

- *Include choice-making.* Students with severe or multiple disabilities will have varying backgrounds, experiences, interests, likes, and dislikes. Offer a variety of choices with regard to textures, colors, sounds, smells, and sizes, allowing students to pick equipment based upon their personal preferences (Canales & Lytle, 2011; Dunn & Leitschuh, 2010). Offer the choices in front of a student and allow her to point to what she wants or push away what she does not. This type of communication will give you an idea about what the student prefers. It will help her perform to the best of her ability, and assessments will be the most valid and reliable as you are getting the student's preference directly from him. Preference should also be documented for others (Block, 2007).

- *Work with the multidisciplinary team.* The multidisciplinary team or IEP team consists of all personnel and family members who are involved with the student's education. These members include parents/guardians, classroom teachers, physical education teachers, psychologists, physical therapists, occupational therapists, speech therapists, neurologists, physicians, nurses, paraeducators, counselors, and any other person involved in the educational program. All members can help with programming and support in physical education as well as share in your successes and improvements with the student.

- *Allow for interaction with peers without disabilities.* While assessing students it is appropriate for them to participate in the skills, games, and activities with their peers without disabilities. This mirrors the natural environment and will yield more accurate assessment data. Make sure the students have a chance to participate in the skill a few times before you document assessment.

What Should We Assess?

Assessment for students with severe or multiple disabilities should be done using skills or abilities that are functional. In other words, assess life skills that will help them in everyday tasks such as dressing, eating, toileting, communicating, and ambulating. Exhibit 16.2 lists areas for assessing function related to skills and everyday activities.

Assessment Tools

A few assessments are available for individuals with severe disabilities. These include the Brockport Physical Fitness Test (BPFT), the aquatics skills checklist, and *Inclusive Physical Activity Assessment: From Basic to Proficient* by Kowalski et al. (in press). Some good assessment checklists are included in the article by Block et al. (2006) and the book by Dunn and Leitschuh (2010), pages 316–326.

EXHIBIT 16.2 *Examples of assessment areas that relate function to skills needed for everyday activities.*

Ambulation (walking, moving)	Motor skills (fine and gross)
Aquatics	Range of motion
Attention	Reactions
Communication	Reflexes
Fitness	Stability
Grasping and releasing	Trunk control
Head control	

Block (2007) also includes one assessment. This section on the forms of assessment for individuals with severe disabilities discusses the BPFT, the aquatics skills checklist, and the “3 P’s” approach to assessment (assessing the process, product, and parameter).

The Brockport Physical Fitness Test

The BPFT is currently the only health-related physical fitness assessment for students with severe or multiple disabilities (Winnick & Short, 1999). This is a criterion-referenced test; the criterion standards were developed via research findings, logic, expert opinion, and norm-referenced data. Information about the test is provided in Exhibit 16.3.

The assessment information derived from the BPFT can be used for referral, eligibility, and placement into adapted physical education. In addition, the information can be used for progress reports, IEPs, and transition plan reports (see Chapter 6).

Aquatics skills checklist

This aquatics skills checklist (see Exhibit 16.4) is hierarchical and based on level of independence. It was created by Cathy Houston-Wilson; more information about it can be found in Lieberman & Houston-Wilson (2009). It should be used as an evaluation of initial swimming skills as well as for documenting progress in swimming skills.

For more information on adapted aquatics see Lepore, M., Gayle, W. G., and Stevens, S. (2007), *Adapted Aquatics Programming* (2nd ed.). Champaign, IL: Human Kinetics or the aquatics chapter by Luis Columa in “Assessment for Everyone” Kowalski and Lieberman (2011).

In some cases the BPFT and/or the aquatics skills assessment may not provide enough information related to skills or specific level of function. Another way to look at performance for any student, especially those with severe disabilities, is the 3P’s approach.



The aquatics skills checklist can be used as an evaluation of initial swimming skills as well as for documenting progress on the skills.

EXHIBIT 16.3 *Information about the Brockport Physical Fitness Test's target populations and test items (Winnick & Short, 1999).*

TARGET POPULATIONS

Individuals between the ages of 10–17 years who have:

- Intellectual disabilities
- Visual impairments
- Spinal cord injuries
- Congenital anomalies and amputations
- Orthopedic impairments

TEST ITEMS

Aerobic Capacity/Functioning

- Progressive Aerobic Cardiovascular Endurance Run (PACER) (20m)—FITNESSGRAM (Cooper, 1982) & BPFT
- PACER (16m) —BPFT
- Walk Test—FITNESSGRAM
- One Mile Run/Walk—FITNESSGRAM & BPFT
- The Aerobic Movement Test—BPFT

Body Composition

- Skinfolds—FITNESSGRAM & BPFT
- Body Mass Index—FITNESSGRAM & BPFT

Flexibility

- Backsaver Sit and Reach—FITNESSGRAM & BPFT
- Trunk Lift—FITNESSGRAM & BPFT
- Shoulder Stretch—FITNESSGRAM & BPFT
- Modified Apley Test—FITNESSGRAM & BPFT
- Modified Thomas Test—FITNESSGRAM & BPFT
- Target Stretch Test—BPFT

Lower Body Strength and Endurance

- Curl-Up—FITNESSGRAM & BPFT
- Modified Curl-Up—BPFT

Upper Body Strength and Endurance

- FITNESSGRAM and BPFT
 - Push-Up
 - Modified Pull-Up
 - Pull-Up
 - Flexed Arm Hang
 - BPFT
- Bench Press
- Dumbbell Curl
- Reverse Curl
- Grip Strength
- Isometric Push-Up
- Seated Push-Up
- Extended Arm Hang
- 40 m push/walk
- Wheelchair Ramp Test

EXHIBIT 16.4 *The College at Brockport Aquatic Skills Checklist.*

Student: _____ Age: _____ Date: _____

Instructor: _____

	INDEPENDENT	NEEDS ASSISTANCE	TOTAL ASSISTANCE
POOL PREPARATION			
Proper behavior en route to the pool			
Takes clothes off			
Hangs clothes in locker			
Puts bathing suit on			
Takes shower			
Awaits directions before entering pool			
POOL ENTRY			
Sits at edge of pool, feet in water			
Puts water on body			
Lowers self into pool			
Climbs down stairs and enters pool			
ADJUSTMENT TO WATER			
Splashes water around with no fear			
Holds gutter and kicks legs			
Kicks on front while being towed			
Kicks on back while being towed			
Moves arms and legs in swimming motion while being towed			
Blows bubbles			
Treads water for 30 seconds			
Puts whole face in water for 5 seconds			
Holds breath while submerged for 10 seconds			
Bobs up and down 5 times			
Continuous rhythmic breathing while holding side of pool and turning head to side 10 times			
Continuous rhythmic breathing from prone position while kicking with kickboard for 20 feet			
FLOATING SKILLS			
Floats on front while holding kickboard with arms fully extended and face submerged			
Front float			
Back float			

EXHIBIT 16.4 *Continued.*

	INDEPENDENT	NEEDS ASSISTANCE	TOTAL ASSISTANCE
BASIC PROPULSION			
Flutter kicks with kickboard while on front for 15 feet			
Glides on front with push-off, holding kickboard with arms extended, and flutter kicks for 15 feet			
Glides on front with push-off and flutter kicks with no kickboard for 15 feet			
Glides on front with push-off and flutter kicks with face submerged and no kickboard for 15 feet			
Glides on back with push-off, holding kickboard with arms extended, and flutter kicks for 15 feet			
Glides on back with push-off and flutter kicks with no kickboard for 15 feet			
Rolls over, front to back, while gliding			
Rolls over, back to front, while gliding			
SWIMMING STROKES			
Does freestyle stroke, arms only, face out of water, for 10 strokes			
Does freestyle stroke, arms only, face submerged, for 10 strokes			
Does freestyle stroke, arms and legs, face submerged, for 10 strokes			
Does freestyle stroke, arms and legs, with rhythmic breathing, for 10 strokes			
Swims under water for 10 feet			
Does side stroke on either side for 10 feet			
Does breast stroke for 10 feet			
Does back crawl stroke, arms only, for 10 strokes			
Does back crawl stroke, arms and legs, for 10 strokes			
DIVING SKILLS			
Dives from a sitting position			
Dives from squat or crouched position			
Dives from standing with knees slightly bent			
Dives from standing with spring and arm action			
Performs standing dive from end of low board			
WATER SAFETY AND DEEP WATER SKILLS			
Bobs 15 times			
Treads water for 30 seconds			
Survival floats			
Jumps feet first into water, surfaces, and swims back to side of pool			
Begins freestyle stroke after jumping or diving into pool			
Changes directions while swimming			
Changes position while floating and swimming (rolls from front to back)			
Changes from horizontal to vertical position while treading water			
Dives off side and swims under water for 15 feet			

The 3P's approach

In addition to the above assessments for physical fitness and aquatics, physical educators will likely need to use the **3P's approach** to assessment. In other words, they will have to write a description of the student's skills and abilities related to process, product, and parameter. The following describes each of the "P's":

Process. *Process* information relates to the form or quality of a movement. Skills can be analyzed into component parts through task analysis or through the use of ready-made checklists. An example would be, "Johanna can underhand roll with a step with her opposite foot and a follow through of her right hand."

Product. The *product* of the skill relates to the quantitative value produced by the student's performance. Skills will be quantified differently depending on the desired outcome, the chronological age of the student, and the goals of the class. Product information relates to how many, how far, how fast, or how long. For example, "Johanna can throw a tennis ball underhanded a distance of 30 feet, to a 4x4 foot target, five times."

Parameter. *Parameter* refers to the conditions under which the skill was performed. Examples of parameters include (1) the type of equipment used; (2) the distance at which the skill is executed (such as how far the student is from the net or basket); (3) the environmental arrangement (indoors, outdoors, group, or 1:1 setting); and (4) the levels of assistance (independent, verbal cue, demonstration, physical assistance). Note that a student's parameter on a skill may change with developmental or motoric gains or increases in independence. This should be continually monitored, as should the process and product of the skill.

The example for this would be, "With a demonstration and physical assistance at the knees and wrist, Johanna can roll the tennis ball underhanded, stepping with the opposite foot, 4 out of 5 times." In this example the demonstration and physical assistance at the knees and wrist are the parameter.

Using the 3P's to document assessment. The 3P's system is an effective way to develop and document assessment data. It can be used to share assessment information and improvements, document present level of performance (PLP) for the IEPs, and determine placements (Lieberman & Houston-Wilson, 2009). The following is an example of a PLP statement using the 3P's approach:

Robbie can grasp a soccer ball with both hands while sitting, push and release the ball toward pins eight feet away with physical assistance at the hands, 80 percent of the time.

The PLP is the cornerstone of the IEP. (See Chapter 6 for more information on the IEP.) The accuracy and the ability to measure the PLP are very important. That is why the 3P approach is so important for students with severe disabilities.

Physical educators, adapted physical educators, and paraeducators must work hard to keep track of progress related to baseline performance levels as well as specific skills related to improvement. The following are recommendations to help with the very important process of keeping data.

Generating Reliable Assessment Data

Several recommendations can assist instructors and support personnel when recording data. First, the support person should establish rapport with the student, which

helps to generate data that is more valid and reliable (Lieberman, 2007). As mentioned previously, assessment must be done frequently and consistently, and the data generated by that assessment must be carefully documented.

To get the best results, and thus the best data, assess students in a natural setting and informally. Formal or contrived situations will not generate the best performance results. In addition, the instructor or support personnel must use very simple verbal and nonverbal cues that can be transferred to any setting (Canales & Lytle, 2011). That way the skill or activity can be replicated at home or with siblings and peers when playing.

The skills or tasks themselves should be broken down into smaller parts in order to obtain a true assessment of ability. A kick itself may not be possible at the beginning, but while seated in a chair a student can be given a verbal cue and a tap on the knee to see how far up he can bring his leg to attempt a kick. This partial knowledge about a kick can then be improved on, allowing the student to work up to a more independent and appropriate kick.

Last, it is important to monitor and document how long a student maintains new skills as well as where he or she can perform the skills. If a student learns the kick in the physical therapy room, it is important to find out if she can do it in the gym, on the playground, and perhaps at home as well.

Teaching Considerations

Why We Modify the Curriculum

Remember that students with disabilities are people first. The school PE curriculum should be similar whether it is taught in a segregated or inclusive class. Students with disabilities in a segregated setting are still part of the school community; to take away their opportunity to learn what their peers are learning is not pedagogically sound. If a ninth-grade high-school curriculum consists of eight units, then the instructor for the segregated or inclusive class should teach eight units. The students with disabilities should learn the same eight units as their peers. The standards set forth by NASPE are specific. NASPE standard 1 states that students must develop competency in a variety of physical activities. Standards 2 and 3 address a similar concept. Students with severe disabilities must also be taught a variety of units and cannot just learn one or two units in a year. These students have the right to learn the same units as their peers. It is up to the physical educator, the paraeducators, and the multidisciplinary team to make the modifications necessary to make this possible (Canales & Lytle, 2011; Stopka, Goodman, & Siders, 1997).

IDEA (2004) defines physical education as “the development of physical and motor fitness, fundamental motor skills and patterns, and skills in aquatics, dance, and individual group games and sports.” The law identifies this wide variety of activities because the goal is for all students to be self-determined, with the goal of becoming self-determined adults.

Self-determination is a goal of education in which we encourage our students to exercise the most choices and control over their lives as possible. Only when we teach students with disabilities all of the sports, skills, and activities their peers are learning will they have any chance of being self-determined. They will have the opportunity to engage in sports and activities with their peers only if they know the sport. Learning one or two units in a year does not give them the variety of choices provided to their peers and offers them little or no control of what they can do in their free time. Self-determination can happen only if instruction is differentiated for each student's unique needs (Ellis, Lieberman, & Leroux, 2009).

Positioning Students

Even with background information about assessment, physical educators often feel they don't know where to start positioning students when assessing targeted skills. Exhibit 16.5 offers guidelines for beginning educators concerning skill development. Keep in mind that these positions and skills can be done within a unit as well as on their own. For example, a student can sit in her chair and work on pushing a ball off the chair for kickball, or she can sit in her chair and use a bat affixed to her hand with Velcro to strike a ball off a tee for baseball.

EXHIBIT 16.5 *Ideas for positioning and skill development for students with severe or multiple disabilities.*

IN THEIR WHEELCHAIRS

- Student can push objects off of her lap.
- Student can reach for objects dangling from strings from the basketball hoop or from a string pulled across two volleyball standards. He can grasp items such as socks with a tennis ball inside, a tennis ball, scarves, whiffle ball, yarn ball, or Koosh ball.
- Student can bat balloons.
- Student can pull on Thera-Bands or surgical tubing (Modell & Cox, 1999).
- Student can use a racquet bandaged around one hand to bat a ball or play hockey with a hockey stick that is Velcroed or bandaged around one hand.

OVER A BOLSTER

- Lying on her front over a bolster, a student can push balls back and forth, drop scarves or bean bags into buckets, or do push ups with assistance. She can also reach up into higher buckets or baskets and drop items into higher targets.

LYING ON A WEDGE MAT OR SITTING ON A MAT WITH SUPPORT FROM BEHIND

- Lying on his front over a wedge mat or sitting on a mat with support from behind, a student can push balls back and forth, drop scarves or bean bags into buckets, or do push-ups with assistance. He can also reach up into higher buckets or baskets and drop items into higher targets.

LYING SUPINE ON A MAT

- While a student is lying on her back, she can kick a ball off of her feet. She can also pull a scarf off her face, push a ball off her chest, reach up for scarves or objects, and practice grasping and releasing into hula hoops.

LYING PRONE ON A SCOOTER OR SITTING UP WITH SUPPORT

- While lying prone on a scooter or sitting up with support, a student can hold on to a hula hoop while being pulled around. He can push himself with his feet to the extent possible; he can hold on to a rope with support and be pulled around; and he can push himself with his arms.

IN THE POOL

- While prone or supine in the pool with or without flotation devices, a student can work on kicking, paddling with her arms, and relaxation of her body. She can work on range of motion, grasping and releasing objects, and object control skills. She can also work on standing at the side of the pool while holding on to the side of the pool as independently as possible.

Within the general physical education (GPE) curriculum, individualization can include students with severe or multiple disabilities. For example, if a class is working on volleyball, the whole class can practice serving, bumping, setting, and blocking in stations. To include students with severe or multiple disabilities, lower some of the nets—or even one side of a net—to an appropriate height. Modify the balls to include beach balls (some deflated a bit), bean bags, trainer volleyballs, or balloons. The students with severe or multiple disabilities can play small-sided games with trained peer tutors and trained paraeducators. The rules can be modified to allow walking with the ball, throwing the ball over, utilizing physical assistance, and serving from a variety of places. These students can still be proud to play volleyball with some modifications. Each GPE unit can be modified in this way to include all students (Lieberman & Houston-Wilson, 2009).

For specific activities for students with severe disabilities, see the very helpful book by Davis (2012), *Physical Activities in the Wheelchair and Out*.

Types of Support Personnel

As noted earlier, students with severe and multiple disabilities learn best in a one-on-one situation. Whether they are in a segregated or inclusive class, they require additional support in order for them to receive individualized instruction, feedback, and physical assistance. For example, Maya, who has cerebral palsy, is deaf and visually impaired and uses a walker; she will benefit from having a support person to guide her in the locomotor skills unit. In addition, she should automatically have a partner when the class pairs up for various activities. These roles are discussed in more detail in Chapter 8.

Sport Opportunities

According to the Special Olympics, their Motor Activities Training Program (MATP):

is designed for persons with the most severe disabilities who do not yet possess the physical and/or behavioral skills necessary to participate in Official Special Olympics Sports. The program provides a comprehensive motor activity and recreation training curriculum for these participants that can be administered by a variety of trainers (e.g., physical educators, re-creators, and therapists). In addition, direct care workers, parents, and volunteers will find the MATP helpful in developing appropriate motor programs for individuals with severe disabilities. (Special Olympics, 2011)

chapter summary

Students with severe disabilities can learn physical skills and gain independence. Get to know your students and push them accordingly. People with severe or multiple disabilities can continue to learn and grow, often surprising themselves and those around them with the skills they are able to acquire. Be sure to continually collect data and observe improvements. In order to do this well, use a variety of assessment instruments.

Modifications to activities and physical assistance are both necessary (Canales & Lytle, 2011; Stopka, Goodman, & Siders, 1997). This chapter covers a variety of resources to help with modification and positioning for many units. It is important that the instructor utilize several techniques to facilitate the most participation. Be sure to document improvements and progress made and celebrate each accomplishment with the multidisciplinary team. Be confident in your abilities, and know that when you are teaching students with severe or multiple disabilities, you are doing the right thing.

review questions

1. What is a severe disability?
2. What are three medical complications you may see when working with a student with a severe disability? How would you navigate each one when teaching?
3. Describe five assessment guidelines to consider when working with a student with a severe disability.
4. What are the five components of the Brockport Physical Fitness Test?
5. What are two types of support personnel you would partner with when teaching students with a severe disability? How would you train each one, and what would be involved in the training?
6. What sport opportunities are available for children and youth with severe disabilities?

FURTHER READING & RESOURCES

Davis, A. (2012). *Physical activities in the wheelchair and out*. Champaign, IL: Human Kinetics.

Slagle, C., Sullivan, T., Hapshie, T. J., Brevard, V., & Brevard, D. (in press). *Build it so they can play*. Champaign, IL: Human Kinetics.

WEBSITES

Special Olympics Motor Activity Training Program, www.specialolympics.org/motor_activities_training_program.aspx This program is designed for athletes with severe or profound intellectual disability who

are unable to participate in Official Special Olympics sport competitions because of their skill and/or functional abilities.

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