

Course: Education of Mentally Retarded Children-II

SEMESTER: AUTUMN, 2018

(3606)

ASSIGNMENT# 2



Q. 1 How psychotherapy approaches are helpful for rehabilitating children with intellectual disability?

ANS: Various therapeutic services can improve a person's adaptive behavioral skills. These therapies are helpful for many people with intellectual disabilities (ID, formerly mental retardation).

Occupational therapy

- Meaningful and purposeful activities;
- Self-care (e.g., grooming, dressing, feeding, bathing);
- Employment activities and skills;
- Leisure activities (e.g., knitting, playing games);
- Domestic activities (e.g., cooking, cleaning, laundry).

Speech therapy

- Improves communication skills;
- Improves receptive and expressive languages skills;
- Improves speech articulation;
- Improves vocabulary.

Physical therapy

- Enhances quality of life by maximizing mobility and self-locomotion;
- Provides adaptive solutions to mobility problems;
- Increases sensory integration

Outdated, Unproven 'Treatments' for Intellectual Disabilities

Effective skills training and educational approaches for people with intellectual disabilities (ID, formerly mental retardation) have already been discussed. These approaches are concrete, systematic, and straightforward. These evidence-based practices are supported by a large body scientific research. In this section, we review several so-called 'treatments.' As we have emphasized, there is no 'treatment' for a disability. At best, some medical treatments are effective at reducing the symptoms of the conditions causing the disability. Nonetheless, unsubstantiated claims are made about alternative treatments. There are no reliable research studies to support claims of effectiveness.

Orthomolecular therapy: We all know diet and nutrition are important for good health. Just like many other folks, some people with IDs don't eat a healthy diet. In these cases, nutritional supplements may be beneficial. However, diet and nutritional supplements have not been proven to enhance cognitive functioning, performance, or learning in individuals with IDs. Orthomolecular therapy claims vitamins and minerals can treat (reverse) a number of different conditions including IDs. Proponents of orthomolecular therapy contend that cognitive disorders can be improved by 'molecular balance' via nutritional supplements. These claims have not been substantiated using accepted scientific methods.

Medications: Medications are legitimately prescribed when neurocognitive disorders are the root cause of the disability. Currently, no medication can treat the entire spectrum of disorders that cause IDs. Nonetheless, the use of "nootropic" medicines (i.e., 'smart drugs') to improve people's learning abilities is a growing area of interest. At this time, there is insufficient evidence to suggest that nootropic drugs facilitate learning in persons with IDs.

Talk therapy: Talk therapy refers to psychotherapy. Psychotherapy is useful for many psychiatric disorders. However, psychotherapy cannot treat, arrest, or cure disabilities. Some types of psychotherapy may be a helpful adjunct for some people with mild ID, and who have psychiatric disorder such as depression. Nonetheless, psychotherapies have not proven effective for people with ID. Such therapies rely on a person's cognitive, emotional, and verbal abilities in order to promote change. Therefore, people with ID are not good candidates for such therapies.

Genetic manipulations: Someday it may be possible to use genetic manipulations. This area of research attempts to correct the genetic causes of some IDs. However, this promising area of research is still in its infancy

Q. 2 Propose a month long plan to develop gross and fine motor skills in moderately retarded children during physical education or play time in school.

ANS: Movement is an essential component of a healthy, happy life. Whether you enjoy a casual walk with friends or a competitive game of soccer, all of us can identify the existence of movement in our lives and can attest to the benefits of physical activity. For some of us, movement means time for ourselves—a chance to regroup or unwind from a hectic day. For others, movement is a competitive outlet or a personal challenge—the opportunity to reach a personal best or to win.

For many individuals with visual impairments, including persons with deafblindness, opportunities to move for pleasure or for sport are severely limited. A misperception may exist that individuals with disabilities are somehow exempt from the need to move. This could not be further from the truth. Movement is a sensory experience. We gain information about our world and about our own bodies by moving. We learn to move by watching others; therefore, access to this visual information is restricted for persons with visual impairments. How do you know what running looks like if you have never seen it? How do you kick a ball if you have never watched a game of soccer? It is common for children with visual impairments to arrive at school significantly behind their peers with sight in gross motor development. Without the knowledge on how to perform the most basic motor skills—hop, jump, run, skip, kick, throw—students with visual impairments are less likely to participate in sports that require performance of these basic skills.

To combat this problem, Lauren Lieberman and Pamela Haibach have created *Gross Motor Development Curriculum for Children With Visual Impairments*. Based on decades of research, this curriculum outlines teaching approaches that are unique to children with visual impairments and that are applicable to the instruction of specific motor skills. There is a misperception that children with visual impairments cannot move like their peers with sight. In reality, their aptitude to move is the same as any child, but sometimes they are unable to access the instruction provided in general physical education classes. When we teach children with visual impairments using methods that are accessible and meaningful to them, we give them the opportunity to reach their potential. For example, the child who is blind cannot simply "watch and do" like her peers with sight. Movement skills must be taught using hands-on, tactile teaching methods. Lieberman and Haibach effectively outline teaching strategies that bring movement instruction within arm's reach of children with visual impairments. Whether you are a physical education teacher, a teacher of students with visual impairments, an orientation and mobility instructor, or a parent, this curriculum can help you teach a child with vision impairment how to perform basic movement skills. The techniques described may or may not be familiar to you, but their application within the domain of physical education is novel. This curriculum paves the way for increased opportunity for and participation by children with visual impairments in sports and physical activities in educational and community settings.

As a curriculum consultant, I applaud the work of Lieberman and Haibach. *Gross Motor Development Curriculum for Children With Visual Impairments* is thoughtfully written and easy to implement with students. This curriculum applies evidence-based practice to the domain of physical education for students with visual impairments and will be a valued instructional tool for educators in the field of vision impairment and physical education. Children with visual impairments, blindness, or deafblindness require additional support to acquire gross motor skills including modified equipment and specifically trained vision teachers, physical education

teachers, and paraeducators. Because of the unique nature of visual impairment, these children need increased time to learn gross motor skills in comparison to their sighted peers. Unfortunately, many of these children are not given the added support and instruction that they need, which often results in gross motor skills that are significantly behind their sighted peers. This gap in motor skill proficiency often increases throughout childhood as many of these children's skill level remains the same.

This curriculum addresses the specific needs of children with visual impairments based upon research findings on fundamental motor skills. The curriculum is divided into two parts: Teachers, parents, paraeducators, and specialists will find this curriculum helpful and easy to use when they provide instruction in motor development for children who are visually impaired, blind, or deafblind. The instructional strategies work well with many physical fitness or motor development assessments that are available to teachers.

In this curriculum, we use the term *visual impairment* to mean low vision, visually impaired, or blind. In most cases, the teaching techniques discussed are also conducive to teaching children who are deafblind. When additional techniques are needed for children who are deafblind, the techniques are shared.

1 month lessonplan is written below for the development of motor skills during play time.

Motor Skill Identifier helps locate specific skills within a particular assessment.

Skill	Assessments*				
	APEAS II	BPFT	BOT™-2	DEVPRO	FITNESSGRAM®
Balance	APEAS II		BOT™-2	DEVPRO	
Run	APEAS II	BPFT	BOT™-2	DEVPRO	
Gallop	APEAS II			DEVPRO	
Hop	APEAS II		BOT™-2	DEVPRO	
Leap					
Skip	APEAS II			DEVPRO	
Hor. Jump	APEAS II		BOT™-2	DEVPRO	
Slide				DEVPRO	
2-Hand Str.				DEVPRO	
1-Hand Str.					
Dribble			BOT™-2	DEVPRO	
Catch	APEAS II		BOT™-2	DEVPRO	
Kick	APEAS II			DEVPRO	
Overhand Throw	APEAS II		BOT™-2	DEVPRO	
Underhand Roll					
Curl-ups/Sit-ups	APEAS II	BPFT	BOT™-2		FITNESSGRAM®

Push-ups	APEAS II	BPFT	BOT™-2		FITNESSGRAM®
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Instructional Strategies

Before you instruct children who have visual impairments, keep in mind the following teaching tips:

- Check with parents and physicians to ensure the children do not have any contraindications (shunts, glaucoma, detached retina, etc.)
- Find out what previous experiences they have so that you start at the appropriate level.
- Make sure the children have sneakers that are for activity so they feel good about their movements and enjoy the activities. Fashion sneakers are not appropriate or safe.

Whenever possible

- A 2:1 instructor ratio is preferred to a 1:1.
- Use a mirror for the child to see his movements.
- Use sound and song to motivate movement.
- Include a description of body parts until the child knows every part of the body by name (knees, shoulder, elbow, ankle, foot, etc.) so he understands cues related to body parts.

The instruction of complex movement skills such as jumping, catching, or running for children with visual impairments may at first seem difficult to the average parent or teacher. Thus, instructors with no knowledge of instructional modifications are likely to attempt verbal descriptions only; they may have difficulty determining where to begin physical assistance.

Children with significant visual impairments learn by description, observation, and prior experience just as other children do. Therefore, the modifications presented here pertain to how to work around the instructional barriers using *whole-part-whole instruction, verbal instruction, task analysis, modeling, and demonstration.*

Pre-teaching

Because teaching motor development skills to a child with visual impairment takes longer than teaching a child with sight, many motor development skills should be taught as a pre-teaching experience; or in other words, the skill should be introduced to the child a week or two before it is taught in the physical education class. It will benefit the child, his classmates, and teacher if the child knows the skill before the teacher introduces or incorporates it into a unit. Pre-teaching helps a child participate in class with more confidence, knowledge, and understanding to be a successful mover.

Whole-part-whole instruction

The organization of knowledge should be an essential concern of the teacher so that the direction from simple to complex is not from arbitrary meaningless parts to meaningful wholes, but instead from simplified understandable wholes to more complex understood wholes (Knowles, 1988). According to Park, Wilde, and Shea (2004), when one only teaches the whole skill, the child does not retain the parts of the skills and the process is very slow. According to Nettlebeck and Kirby (1976), teaching the parts of a skill is superior to the whole and requires less training time for people who are able-bodied. Kurtz and Lee (2003) found the opposite to be true in that teaching the whole to learn perceptual information provides a rich basis for perceptual information. Swanson and Law (1993) support whole-part-whole learning and believe that there is a natural rhythm to this approach to learning. "It is not only the mastery of each individual part of instruction that is important, but the relationship between those 'parts' through the 'second whole' that provides the child with the complete understanding of the content. Within the whole method, it is possible to practice the whole skill, yet maintain focus on a specific part that needs improvement. After the child successfully achieves the performance criteria for the individual parts or components within the whole, the instructor links these parts together. This approach provides both the advantage of part practice and the advantage of whole practice (Magill, 2011). Feedback about performance is one of the most powerful variables that affect the learning of motor skills (Magill, 1993). It is not only the mastery of each individual part of instruction that is important, but the relationship between these parts and the whole movement method that provides the child with the complete understanding of the content. The whole-part-whole is an effort to acknowledge and utilize theory and best practices to design sound learning programs (Swanson & Law, 1993). As noted in the introduction, proven scientific studies support the whole-part-whole as the most effective method pedagogy to deliver motor skills to

the child or player. Teach the whole through the teaching techniques of verbal instruction and task analysis coupled with tactile teaching. Tactile teaching includes *tactile modeling*, *coactive movement*, and *physical guidance*. According to O'Connell (2000), each technique is equally effective in the skill acquisition for children with visual impairment or blindness.

Verbal instruction

The key to using verbal instruction effectively is the use of *precise language* and *common analogies*. If the skill is more complicated or the child has little previous experience, the skill may need to be broken down into smaller pieces in a process known as *task analysis*. It is important to use specific teaching vocabulary when working with children who are visually impaired. There is no place for the general slang words commonly used in our everyday language, such as "that," "heads up," and "over there." Precise and clear language is critical when you describe movements in this curriculum because of their complexity (Lieberman, Ponchillia, & Ponchillia, 2013). Children who have severe visual impairments are dependent upon instructors to use the same terminology consistently in order to assimilate definitions of physical movements.

Consistency in word usage is important for effective instructional communication. The use of several different terms for the same behavior could confuse the child. For example, one can call an *overhand throw* a *baseball throw*; the term *jump* can mean many behaviors, such as from one foot to the other foot, from one foot to two feet, from two feet to two feet, or from one foot to the same foot. The term to use is that which is most correct—specifically the one used in textbooks or most commonly in the vocabulary of physical educators. In this case, *overhand throw* is a more commonly accepted term than *baseball throw*. In order to become meaningful to children with extremely limited vision, use these terms consistently to avoid confusion (Lieberman et al., 2013). Shortening the verbal instructions to verbal cues will help guide the child as well as keep his movements consistent and on task. Verbal cues must be precise, clear, and free of additional words. For example, if you want a child to bring both arms back for the standing long jump, you would say, "Swing arms down and back with hands behind buttocks and arms straight," so the child knows you mean down and back as opposed to over the head and back. If a child is deafblind, the use of sign or tactile explanation prior to using touch cues is appropriate.

Task analysis

Verbal language is not sufficient to teach children with no previous experience or with limited basic skills about complex physical movements, such as hopping, skipping, or throwing. *Task analysis* (also known as *activity analysis*) is the breakdown of all the steps necessary to perform a given task. (Lieberman & Houston-Wilson, 2009). Task analysis is a powerful tool of instruction for those with visual impairments who need to learn basic physical skills. The use of task analysis allows a child to learn and master skills through a series of smaller steps until the entire skill is learned. Teaching the underhand roll may be a matter of using the appropriate cues: step (opposite foot), arm back, step, step (opposite foot), bend knees, roll, and follow through. It is important to use these verbal cues coupled with the teaching techniques of tactile modeling and physical guidance. See Appendix A for cues for each gross motor skill in this curriculum.

Tactile teaching

In most cases with children who have low levels of vision, it is best to use verbal instruction accompanied with tactile teaching. Verbal instruction alone may take a long time and leave the instructor and child frustrated. It is also not as likely to produce the correct form of the skill (O'Connell, Lieberman, & Petersen, 2006). The methods discussed here are *tactile modeling*, *coactive movement*, and *physical guidance*. Use these three instructional techniques to teach children with visual impairments who may not be able to see a demonstration. Use these techniques to make the demonstration of complex physical skills accessible to children who are visually impaired.

Tactile modeling

In this context, tactile modeling means an adapted demonstration—in other words, an exhibition of a motor skill presented tactilely (the child feels the instructor or a peer executing the movement) to make it accessible to children with visual impairments. Tactile modeling can be a demonstration presented to children who are blind through a tactile demonstration (child feels instructor or a peer) that also increases the visibility of an activity for those who have low vision (O'Connell et al., 2006). Tactile modeling is a common tool used to teach the

component parts in the task analysis and is effective for activities such as yoga, shot put, goalball offense and defense, swimming, and many others. During tactile modeling, the child touches or observes a model (teacher, aide, or peer) who demonstrates a skill. In many instances, a child will comprehend a skill much better when feeling the instructor perform the movements. This works best when the child is smaller than the instructor, paraeducator, or peer. In coactive movement, position the child so that his moving body part touches the instructor's same moving body part. This is similar to tactile modeling, although the entire body part moves as opposed to parts of the body and the child goes through the motion at the same time as the instructor. See examples in Table 3: Examples of Coactive Movement.

The disparity of size between an adult's arms and legs to that of a small child may make peer tactile teaching a good option for some children.

Table 3
Examples of Coactive Movement

Skill	Position	
Slide	<ol style="list-style-type: none"> 1. The child and instructor stand on carpet squares facing each other; the tips of their shoes touch each other's; they hold hands while the instructor slides feet. 2. The child and instructor hold hands while both slide their feet on the floor. 3. The child executes the slide independently. 	"S
Push-up	<ol style="list-style-type: none"> 1. The child lies on the instructor's back with his arms on the instructor's arms.* 2. The child feels the elbows bend and straighten and feels their bodies move up and down. 	"U
Weight shift for throwing or batting	<ol style="list-style-type: none"> 1. The child stands behind the instructor or peer and puts his hands on the instructor's hips.* 2. Instructor moves forward and back. 	"S for

An entire class can participate in coactive movement by performing activities in pairs. This allows the child with visual impairment to participate without "feeling different" or doing something different from his classmates. For example, students can dance the "Cupid Shuffle" shoulder to shoulder.

Physical guidance.

By contrast, physical guidance involves manipulation of the child; the instructor, aide, or peer actively touches and moves the child in some way. Physical guidance is an important component of the instructor's lesson; there are some physical activities for which physical guidance is the ideal teaching technique and is useful for improving performance (Tsutsui, & Imanaka, 2003). Please remember to couple physical guidance with a verbal explanation (or signs for children who have a dual sensory impairment). When using physical guidance, it is imperative to discuss its use with the child before doing so. People with blindness are often sensitive to being touched or to being urged along by an arm or elbow. Indeed, one of the first principles to guiding a person who is blind is to never push or grab that person. This sensitivity to being pushed is not unique to people with visual impairments, but is broadly human in nature and probably stems from a need for the locus of control to remain within each of us (Lieberman et al., 2013). This is noteworthy in a discussion of instructional modification in physical education because many individuals with a visual impairment react to physical manipulation with a degree of emotion that can become a barrier to learning. Thus, physical guidance can be appropriate and effective, but the child must understand that he can ask the instructor to use tactile modeling if preferred. When teaching physical skills to individuals who have no significant intellectual or cognitive difficulties, the general rule is to consider tactile modeling first, and then move to physical guidance if that is a preferred method for the child. The child should have the choice, but the instructor can also assess what method is easiest and most appropriate for a particular skill or activity.

Teaching children who have deafblindness

The methods to surmount communication barriers between teacher and child as well as the instructional methods described thus far in this chapter also apply to children who have both a visual impairment and hearing loss. However, children who are deafblind face the additional difficulty of the loss of verbal communication from instructor to child. Therefore, teachers of children with dual sensory impairments must be aware of alternative communication methods and systems that their children might use. Hearing losses can range widely from mild hearing loss to deafness. Likewise, there are various combinations of vision and hearing among people who are deafblind. However, while some people who are deafblind are able to use augmented verbal communications, the instructional modifications described here are aimed primarily at those whose hearing losses are severe enough to require manual communication systems. Some children who are deafblind are able to respond verbally to instructors (that is, with expressive language), so the barriers to communication may relate only to information from the instructor to the child. In that event, the child can explain what he already knows about the activity, but may need the aid of an interpreter/intervener to receive explanations (that is, to overcome a barrier to receptive language). Teach children in the method from which they learn the best (Best, Lieberman, & Arndt, 2002; Liberman et al., 2013). Before starting to work with a child who is deafblind, it is important to discover the child's preferred method(s) of communication. The physical education teacher can consult with other members of the child's educational team, such as his teacher of children with visual impairment, a sign language interpreter, or an intervener.

Teaching Gross Motor Skills

Refinement

The *Gross Motor Development Curriculum for Children With Visual Impairments* helps you teach lead-in activities, perceptual motor skills, locomotor skills, object control skills, and physical fitness skills to students who have visual impairment or blindness. Teach each skill using the whole-part-whole approach. Once you determine which skills a student needs to refine, discuss the whole-part-whole approach for each skill with the student. If a specific teaching technique is needed for parts of the following skills, it is described under each specific skill.

Whole-Part-Whole

Generally, the teacher should begin to teach the whole skill by demonstrating the skill in the child's field of vision while explaining the motions verbally. A child who uses a monocular can watch a coach or peer run from a distance to learn the synchronization of the arms and legs and to see the fluid, rhythmic motion of the movement.

Another option is to have a young peer demonstrate the skill while the teacher describes the movement. For example, if the skill is a jump, the peer performs the movement while the teacher says, "Bend knees, arms back, swing arms to front, jump forward, and land on both feet."

Whole-Part-Whole

Once the child understands the general skill, break the skill down into its component parts. Teach each part with either physical guidance (move the child through the motions), and/or tactile modeling (the child feels the teacher/peer doing the motions). Use clear verbal instructions and cues.

Determine to use tactile modeling or physical guidance by the type of skill, the child's level of experience, size of the instructor or peer, and comfort level of the child (Cieslak, Lieberman, Haibach, & Houston-Wilson, 2015). For example, if the teacher is much larger than the child and a peer is not available, use physical guidance. If a child has performed the skill before and just needs a prompt to execute the skill, minor physical guidance, such as a touch of the knee for a jump, is appropriate.

Whole-Part-Whole

Once the child has practiced the whole skill and subsequently refined the skill by executing each part, then the child can put the parts together to perform the whole skill. It might help to accompany each step with a cue. For example: The child observes a peer strike a ball and hears the words, "Feet parallel, grip, arm back, bend knees, shift weight to back leg, step forward and swing, follow through." Another example: The child observes a peer catch a ball and hears the words, "Hands out, palms up, catch, grip." The child then practices the task-analyzed

skill and each part with physical guidance and tactile modeling until she performs each part. Then the child puts the whole skill together along with cues. If the child needs further refinement, then she can break down the skill and practice the parts that need improvement before performing the skill in its entirety. There is no specific time for each part of the process. It is important to keep in mind that **children with visual impairments can perform motor skills as well as their peers with sight—they just need to be given the opportunity and time.**

Teaching Perceptual Motor Skills

Perceptual motor development engages children in movement activities that integrate perception and movement; it uses movement activities to enhance academic and cognitive skills. Usually the development of perceptual motor skills evolves in children between 2½ to 6 years old. As stated in the introduction, children with visual impairment develop motor skills more slowly than peers with sight. Balance is a perceptual motor skill that is vital for successful performance in all motor skills. Short-term dynamic balance interventions have been found to improve balance significantly in children with visual impairments (Jazi, Purrajabi, Movahedi, & Jalali, 2012), which can have positive effects upon the acquisition of fundamental and sport-specific motor skills as well as reduce the individual's risk for falling. For this reason, the authors chose to present balance prior to teaching locomotor and object control skills, and physical fitness skills.

To teach and practice balance, and to record progress for a possible Individualized Education Program (IEP) goal, use the practice grid in Appendix C. For an actual assessment, use the scoring record provided with your chosen assessment tool.

Skill: Balance

Description: Child stands—with eyes closed—on one foot and then the other foot.

Materials: Clear space and stopwatch

Directions: When child performs barefoot, wipe the floor area with a disinfectant before each child begins; wearing tennis shoes is acceptable. Practice using a watch with a second hand or a stopwatch when the chosen assessment tool requires timing. Determine the child's preferred foot. Stand close to the child for support in case he starts to fall. Tell the child to close his eyes (if there is usable vision), to lift his nonpreferred foot about 6 inches from the ground, and to hold the position for as long as possible. Stop timing if the raised foot begins to lower or touches the ground, and if the child begins to sway or opens his eyes. Repeat with the preferred foot.

Task Analysis/Practice:

1. Stands with feet together and parallel.
2. Closes eyes.
3. Lifts arms out to sides at shoulder height. Optional: Lightly hold the child's hand until balance is steady or let child lightly touch wall. Eventually eliminate support.
4. Lifts one foot off the floor about 6 inches, knee bent at a 45-degree angle.
5. Holds position for as long as possible.

Teaching Modifications and Adaptations:

- Use a low balance beam with foam pads on both sides.
- Use a tactile model/figure to demonstrate different balance positions.

Teaching Locomotor Skills

Locomotor skills are motor skills in which the feet move the body from one place to another. Most children with sight learn to walk at approximately age 1, and to run, hop, and jump at age 2. They begin to master galloping, skipping, sliding, and leaping at about age 3. All children, regardless of sight, need some instruction to learn these skills. Ample opportunities to practice these skills are vital for children who have a visual impairment. The locomotor skills (minus walking) presented on the following pages are roughly in order of how children learn them. To teach and practice a locomotor skill, and to record progress for a possible Individualized Education Program (IEP) goal, use the Practice Record in Appendix C. For actual assessments, use the scoring record provided with your chosen assessment tool.

Skill: Run

Description: Child runs as fast as possible from one cone to the other (toward the beeping sound).

Materials:

- 60 feet of clear space
- Portable sound source (e.g., APH Portable Sound Source, beep baseball, radio, MP3 player, clapper, etc.)
- Two cones
- Optional: Sighted guide
- Optional: 65-foot guidewire, two game standards, 12-inch loop rope, carabiner

Directions: Position two cones 50 feet apart and make sure there is at least 8 to 10 feet of clear space beyond the second cone for a safe stopping distance. Place the portable sound source at the far cone. Provide a "set, go" start. Repeat and practice as needed. If using a guidewire, tie the guidewire to two multipurpose game standards. Place a knot at 50 feet so the carabiner catches on it and the runner still has 5 feet of guidewire to stop before hitting a standard.

Task Analysis/Practice:

1. Keeps elbows bent.
2. Moves arms back and forth from shoulders—without crossing midline—in opposition to legs
3. Nonsupport leg bent approximately 90 degrees and support foot lands directly underneath the body with knee slightly bent.
 - Both feet are off the ground for a short period of time.
 - Foot hits the ground lightly—landing between heel and midfoot—then quickly rolls forward (i.e., not flat footed).
4. Thinks tall and keeps head straight and level.

Teaching Modifications and Adaptations:

Arm swing: The teacher stands behind the child with two hockey sticks or broom sticks in each hand. Move the sticks back and forth in a swinging motion while standing. When the child understands this movement, then walk while swinging the arms. Once this is correct, run while swinging the sticks and therefore the arms.

Treadmill: Running on a treadmill gives the instructor an opportunity to give physical guidance during the run to correct any biomechanical errors. Treadmill running may also provide the student an opportunity to observe running form—tactually feel arm position and swinging motion, knee lift, and so forth. Treadmills offer an opportunity for the child to hear the rhythm of running. For more independent operation, place tactile markers on the treadmill controls. It is good practice to reduce the treadmill speed as needed and to provide task analysis before showing form on the treadmill.

Skill: Hop

Description: Child hops on one foot consecutive times and then hops on other foot.

Materials: Clear space

Directions: Determine the child's preferred foot. Tell her to hop on the preferred foot and then 3 times on the other foot. Repeat and practice as needed.

Task Analysis/Practice

Optional: Lightly hold the child's hand until balance is steady. Eventually eliminate this step.

1. Bends nonsupport leg and lets it swing forward and backward to produce force.
2. Foot of nonsupport leg remains behind body and swings backward.
3. Flexes arms and swings them for balance and to produce force.
4. Jumps up and lands on same foot consecutive times as required by assessment tool.
5. Thinks tall and keeps head level.

Cue: Say, "Bend knee, lift foot behind body, bend arms, hop."

Teaching Modifications and Adaptations: Use a mini trampoline and transfer skill to floor. Always surround trampolines with floor mats.

Skill: Horizontal jump

Description: Child jumps forward.

Materials:

- 10 feet of clear space
- Florescent tape

Task Analysis/Practice:

1. Bends knees and hips; extends arms behind the body. Swings arms forward forcefully and upward to full extension above the head.
2. Jumps forward with both feet and lands on both feet simultaneously; bends knees to absorb the force of the landing.
3. Thrusts arms downward during landing.

Teaching Modifications and Adaptations:

- Use a mini trampoline and transfer skill to floor.
- In a pool, use an aqua aerobic step or a submersible step stool and begin small jumps to the pool floor. Transfer skill to pool deck.

Cue: Say, "Bend knees, arms back, jump forward, thrust arms to front, land on two feet, and bring arms down."

Skill: Skip

Description: Child skips from one cone to the other (toward the beeping sound).

Materials:

- 25 feet of clear space
- Portable sound source (e.g., APH Portable Sound Source, beep baseball, radio, MP3 player, etc.)
- Two cones
- Optional: Sighted guide
- Optional: 35-foot guidewire, two game standards, 12-inch loop rope, carabiner

Directions: Position two cones 25 feet apart and make sure there is at least 10 feet of clear space beyond the second cone for a safe stopping distance. Place the portable sound source at the far cone. Provide a "set, go" start. Repeat and practice as needed. If using a guidewire, place a knot at 25 feet so the carabiner catches on it and the runner still has 10 feet of guidewire to stop.

Task Analysis/Practice:

1. Bends arms and lifts to waist level.
2. Steps forward with the lead foot. With lead foot in the air, hops on opposite foot; continues this pattern changing lead foot each time.
3. Brief period where both feet are off the ground between each cycle.
4. Maintains a rhythmic pattern for a determined number of consecutive skips.

Teaching Modifications and Adaptations:

- Have the student listen to the rhythm of the skip to understand the step sequence.
- Sighted guide provides "physical rhythm" or cadence through coactive movement.

Cue: Say, "Step forward-hop, step forward-hop."

Skill: Gallop

Description: Child gallops from one cone to the other (toward the beeping sound).

Materials:

- 25 feet of clear space
- Portable sound source (e.g., APH Portable Sound Source, beep baseball, radio, MP3 player, clapper, etc.)
- Two cones
- Optional: Sighted guide
- Optional: 30-foot guidewire, two game standards, 12-inch loop rope, carabiner

Directions: Position two cones 25 feet apart and make sure there is at least 10 feet of clear space beyond the second cone for a safe stopping distance. Place the portable sound source at the far cone. Provide a "set, go" start. Repeat and practice as needed. If using a guidewire, place a knot at 25 feet so the carabiner catches on it and the runner still has 10 feet of guidewire to stop.

Task Analysis/Practice:

1. Bends arms and lifts to waist level.
2. Steps forward with the lead foot; steps the trailing foot forward adjacent to or behind the lead foot. The lead foot always remains in front, and the back foot comes up to meet but never passes the front foot.
3. Brief period where both feet are off the ground.

4. Maintains a rhythmic pattern for a determined number of consecutive gallops.

Teaching Modifications and Adaptations:

- Have the student listen to the rhythm of the gallop to understand the step sequence.
- Sighted guide provides "physical rhythm" or cadence.

Cue: Say, "Step right foot forward-step left foot together, right foot forward-left together, right forward-together, forward-together."

Skill: Slide

Description: Child slides from one cone to the other, and back again for more practice.

Materials:

- 25 feet of clear space
- Two cones
- Florescent tape

Directions: Position the cones 25 feet apart along the tapeline. The child starts at one cone and slides along the line to the other cone.

Task Analysis/Practice:

1. Stands on the tapeline so shoulders are aligned with the line.
2. Steps sideways with lead foot and then slides the trailing foot to meet the lead foot—instep to instep.
3. Practices continuous step-slide cycles to the right.
4. Practices continuous step-slide cycles to the left.

Teaching Modifications and Adaptations:

- For initial whole-part-whole, have the child remove shoes to feel tactile line (if needed).
- Stand on carpet squares and slide with the child.
- Let the child slide along a wall.
- Slide between two foam rectangular prisms.
- Have the child use a guidewire.

Cue: Say, "Stand sideways, step, together, step, together."

Skill: Leap

Description: Child leaps over a small beanbag.

Materials:

- 20 feet of clear space
- Brightly colored beanbag
- Florescent tape

Directions: Attach a piece of tape to the floor. Place a beanbag 10 feet from and parallel to the tape. The child stands on the tape and runs to the beanbag and leaps over it. If child has little or no usable sight, tap a cane on the floor next to the beanbag as a directional cue. Just before the child arrives at the beanbag, quickly remove the cane and shout, "Leap!"

Task Analysis/Practice:

1. Starts with a large step and progresses to pushing off the back foot while landing on the opposite foot.
2. Advances to take off on one foot and land on the opposite foot.
3. Make sure both feet are off the ground for a short period.
4. Reaches forward with the arm opposite the lead foot.

Teaching Modifications and Adaptations: To teach a child to lift the toes up high and forward, roll up a towel or yoga mat and place it on the floor. Demonstrate how to drag and lift a foot up and over the roll, dragging the toes over the roll. Provide verbal guidance and have the child practice the action.

Cue: Tap cane to start and say, "Leap!"

Teaching Object Control Skills

Object control skills are motor skills that involve an object. Outside of the gym, object control skills are sometimes referred to as manipulative skills. For small muscles, the object might be a pencil, button, or jewelry. For large muscles, the object might be equipment such as bats, balls, racquets, golf clubs, or hockey sticks.

When one teaches these skills, it is important to remember that a child's goal is not complete accuracy (e.g., throwing a ball at a target). Children need to learn and begin to master the action. For a child with a visual impairment, it can be helpful to use sound adapted equipment and tactile teaching as described earlier.

To teach and practice a locomotor skill, and to record progress for a possible Individualized Education Program (IEP) goal, use the Practice Record in Appendix C. For actual assessments, use the scoring record provided with your chosen assessment tool.

Skill: Two-hand strike/bat

Description: Child hits a ball (on a batting tee). If the child has enough vision to see the ball, teach and practice the skill using a traditional ball and bat or a plastic ball and bat as recommended by your chosen assessment tool. For a child with low vision, use a bright color ball or paint the ball if needed. For children with no usable vision, use a continuous, sound emitting ball with an aluminum bat.

Materials:

- Clear space (outdoors or gym)
- Sound emitting t-ball, baseball, or softball
- Aluminum bat
- T-stand
- Optional: Commercially available balls and bats (See Description.)

Directions: Adjust the batting tee so the top is level with the child's waist. Place the sound emitting ball on the batting tee. Tell the child to swing at the sound and hit the ball hard.

Task Analysis/Practice:

1. Turns body sideways with nondominant shoulder facing the direction the child is batting; child should hear the ball predominately in ear above nondominant shoulder.
2. Positions feet parallel and slightly more than shoulder width apart, with weight evenly distributed on both feet.
3. Grips bat with dominant hand above nondominant hand.
4. Brings bat up to dominant shoulder and holds even with or slightly above the shoulder.
5. Slightly bends knees with elbows down.
6. Shifts weight onto back leg.
7. Steps forward as arms swing.
8. Sequential rotation of hips and shoulders.
9. Hits ball.
10. Follows through across body.

Teaching Modifications and Adaptations:

Begin by attaching a balloon to the edge of a table and have the child sweep the edge of his palm along the table to hit the balloon. Then add a small ball to hit across the table into the balloon. Next, hit the ball with a plastic or wooden bowling pin. Remove the balloon when the child is comfortable hitting just the ball. Leave the table and transfer skill to a batting tee with a bat.

Skill: One-hand forehand strike

Description: Child strikes a self-bounced ball with a paddle (Ulrich, 2014). If the child has enough vision to see the ball, teach and practice the skill using a traditional tennis ball and plastic paddle as recommended by your chosen assessment tool. For a child with low vision, use a bright color ball. For children with no usable vision, use a sound emitting ball.

Materials:

- Clear space with a wall
- Auditory ball (e.g., APH 30-Love tennis ball)
- Plastic paddle
- Optional: Commercially available balls and paddles (See Description.)

Directions: Provide a quiet space so child can hear auditory ball. Tell the child to hold the ball in nondominant hand and paddle in dominant hand. Stand with back to wall and clasp so child orients nondominant shoulder to wall. Tell the child to drop the ball to the floor with enough force that it comes waist high on the off bounce. Tell the child to swing at the sound and hit the ball toward the wall.

Task Analysis/Practice:

1. Turns body sideways with nondominant shoulder facing the wall.
2. Positions feet parallel and slightly more than shoulder width apart, with weight evenly distributed on both feet.
3. Grips paddle with dominant hand.
4. Slightly bends knees.
5. Holds ball up high and drops ball to floor.
6. Shifts weight onto back leg.
7. Steps forward as arm swings.
8. Sequential rotation of hips and shoulders.
9. Hits ball on the off bounce at waist height.
10. Follows through across the body.

Teaching Modifications and Adaptations:

Begin by attaching a balloon to the edge of a table and have the child sweep the edge of his palm along the table to hit the balloon. Then add a small ball to hit across the table into the balloon. Next, hit the ball with a plastic paddle. Remove the balloon when the child is comfortable hitting just the ball. Leave the table and transfer skill to floor with a self-bounced ball. If needed, practice using a batting tee with a two-hand strike and then a one-hand strike.

Skill: Stationary dribble

Description: Child dribbles a ball with one hand without moving his feet. A child with low vision may perform better with a bright color ball. A child with no usable vision may learn more quickly with a continuous sound emitting ball. Basketball players with mature dribbling skills run and dribble without watching the ball because the tactile sense takes over for visual reference.

Materials:

- Intermediate/Women's basketball or sound emitting ball that bounces (approximately 28.5 inches)
- Hard, flat surface

Task Analysis/Practice:

1. Bounces the ball on ground and contacts the ball with hand at belt level.
2. Pushes the ball with fingertips/finger pads (does not slap or strike with the palm).
3. Ball contacts floor in front of or to the outside of foot on the preferred side.
4. Controls the ball for consecutive bounces—as determined by assessment tool—without moving the feet to retrieve it.

Teaching Modifications and Adaptations:

- Teach a child to tap his finger pads on a desktop or table. Transfer the tapping skill to a balloon ball on a string. Then introduce a small exercise ball. Transfer dribbling skill to an intermediate sized basketball.
- Use music or clapping to practice and maintain timing.

Skill: Catch

Description: Child catches a ball. Factors that affect how well a child catches a ball are size, color, velocity, trajectory angle, viewing time, and instruction. If a child has no usable vision, let him see the ball so the size is understood before instruction begins. Try to maintain the same velocity and trajectory angle with each practice throw. A verbal prompt may be needed at "catch" time. If needed, use a sound adapted ball. Place two lines of tape on the floor 15 feet apart. The catcher (child) stands on one line, and the peer or instructor who tosses the ball stands on the other. The peer or instructor throws the ball underhand with a slight arc at the child's chest. Tell the child to catch with both hands. Only count those tosses that are between the child's shoulder and belt. Repeat practice catches as needed.

Materials:

- Ball (approximately 4 inches) (sound adapted)
- 15 feet of clear space
- Florescent tape

Task Analysis/Practice:

1. Positions hands in front of the body with elbows flexed.

2. Places hands face up.
3. Extends arms while reaching for the ball as it arrives.
4. Adjusts arms and hands to ball flight characteristics; body position may need to adjust to ball as well.
5. Hands face each other; catches ball with the hands only.

Teaching Modifications and Adaptations:

- Teach skills using a bigger ball and on a table and then transfer them to an open area.
- Teach skills with a beanbag and then transfer to a ball.

Cue: Say "1, 2, 3" as the ball is thrown and "Catch!" as the ball arrives at child.

Cue: Say, "Hands in front, elbows flexed, palms up, catch, and grip."

Skill: Kick

Description: Child kicks a ball. If the child has some usable vision, use a bright color ball that contrasts with the floor color. If the child has no vision, use a sound emitting ball. Tape two lines on the floor: one 20 feet from the wall and one 30 feet from the wall. Place a ball on top of a beanbag on the line nearer the wall. Instruct the child to stand on the other line. It is important that a child with no usable vision is positioned/oriented so that he is directly behind the ball. Tell the child to run to the ball and kick it as hard as he can.

Materials:

- Minimum 30 feet clear space with a wall
- Ball (bright color or sound adapted)
- Beanbag
- Florescent tape

Task Analysis/Practice:

1. Approaches the ball rapidly and continuously.
2. Demonstrates an elongated stride or leap just prior to ball contact.
3. Positions the nonkicking foot even with or slightly behind the ball.
4. Kicks the ball with the instep of preferred foot (on instep or toe).

Teaching Modifications and Adaptations:

- Use a continuous sound emitting ball.
- Rest the ball on plastic ring or bean bag.
- Tap the floor just behind the ball with the child's cane and move the cane just prior to the child kicking the ball.
- Position a portable sound source at the wall for a target.

Cue: Touch the knee.

Cue: Stand at the wall and say, "Kick the ball toward my voice."

Skill: Overhand throw

Description: Child throws a ball overhand toward a wall. Attach a line of tape to the floor 20 feet from the wall. Instruct the child to stand behind the line. Place a sound source at the wall. Tell the child to throw the ball hard at the wall.

Materials:

- Minimum 20 feet clear space with a wall
- APH tennis or Wiffle® ball with jingle bells
- Sound source (e.g., APH Portable Sound Source, APH Sound Ball, MP3 player, etc.)
- Florescent tape
- Optional: Colorful streamer attached to ball

Task Analysis/Practice:

1. Initiates windup with downward and backward movement of hand and arm. Rotates body sideways until nondominant side of body faces the direction he is throwing.
2. Shifts weight onto back leg.
3. Steps forward (transfers weight) as he throws.
4. Follows through beyond ball release diagonally across the body toward the nondominant side.

Teaching Modifications and Adaptations:

- Use a streamer to help teach the child to follow through with his arm crossing midline.

- Tape a cup to the wall and place ball on cup rim. Create a tactile arc on the wall with tape. The child grasps the ball and traces the tactile arc with the ball.

Cue: Touch the shoulder.

Cue: Stand at the wall and say, "Throw the ball toward my voice (or sound source)."

Skill: Underhand roll/throw

Description: Child underhand throws a ball toward a wall. Attach a line of tape to the floor 15 feet from a wall. Instruct the child to stand behind the line. One person stands beside the wall and taps a stick on the wall.

Instruct the child to throw the ball underhand and hit the wall.

Materials:

- Minimum 15 feet clear space and a wall
- APH tennis ball or Wiffle® ball with jingle bells
- A stick or cane
- Extra person
- Florescent tape

Task Analysis/Practice:

1. Orients body so that chest is facing the wall.
2. Swings the preferred hand down and back, extending the arm behind the trunk; keeps chest parallel to wall.
3. Steps forward with foot opposite the preferred hand toward the wall.
4. Tosses ball forward hitting the wall.
5. Swinging arm follows through after release of the ball at chest level or above.

Teaching Modifications and Adaptations:

- Use a small pliable cone to assist with lunge.
- Use a mat for a directional aid.
- String a cord between two cones or standards, depending on child's height, for a "release the ball" or "toss forward" cue.

Cue: Touch forearm.

Cue: Say, "Bend knees."

Cue: Say, "Opposite foot from hand."

Note: The underhand roll skill is vital to be an accomplished goalball player.

Teaching Physical Fitness Skills

The ability to carry out daily tasks with vigor and alertness, without undue fatigue, and with ample energy to enjoy leisure-time pursuits and respond to emergencies. Physical fitness includes a number of components consisting of cardiorespiratory endurance (aerobic power), skeletal muscle endurance, skeletal muscle strength, skeletal muscle power, flexibility, balance, speed of movement, reaction time, and body composition. (para. 18) Assessments of physical fitness provide an effective way to evaluate overall physical condition and potential risk for negative health outcomes. Physical fitness is also influenced by factors that are out of a person's control (e.g., genetics). Not everyone can be an elite athlete, but most people can achieve healthy levels of fitness by performing recommended amounts of physical activity.

To teach and practice a physical fitness skill, and to record progress for a possible Individualized Education Program (IEP) goal, use the Practice Record in Appendix C. For actual assessments, use the scoring record provided with your chosen assessment tool.

Skill: Curl-ups

Description: Child performs curl-ups on a mat. Child lies supine on a mat with her knees bent (approximately 140 degrees), legs slightly apart, and feet flat on the mat; hands rest lightly on thighs. If peer partners are monitoring each other, place a piece of paper under the child's head to validate that the head touches the mat each time; paper will bend. A child who is blind can place her fingers on the mat so the partner's head touches the tip of the middle finger upon touching the mat. Child slowly raises torso off the mat and slides her palms up the thighs to the knees. Child slowly lowers torso back to mat. Movement should be slow and gauged. The child does as many as possible with no more than 3 seconds in between. Some assessment protocols use a measuring strip, and the hands slide along the floor. Follow the instructions of your chosen assessment tool.

Materials:

- Exercise mat
- Optional: Piece of paper
- Optional: Prerecorded cadence

Task Analysis/Practice:

1. Lies on back with knees bent; palms rest on thighs or palms flat on floor.
2. Curls shoulders up off floor; uses abdominal muscles.
3. Slides hands up to touch knees or slides palms along floor toward heels.
4. Slowly lowers torso to mat.
5. Feet remain on floor at all times.

Teaching Modifications and Adaptations:

- Use a foam wedge to provide an incline until the child builds enough strength to perform the skill in a lying position.
- Use miniature toy cars under palms to make sliding the palms forward easier and fun.

Cue: Call a cadence or use a prerecorded cadence.

Cue: Touch knee or shoulder to cadence (for students with deafblindness).

Skill: Push-ups

Description: Child performs 90-degree push-ups at a rhythmic pace. The recommended cadence is 20 push-ups per minute (one 90-degree push-up every 3 seconds), but follow the protocol of your chosen assessment tool. The child completes as many 90-degree push-ups as possible. Practice (before test time) will help the student gain greater skill in knowing what 90 degrees feels like.

Materials:

- Optional: Exercise mat
- Optional: Prerecorded cadence

Task Analysis/Practice:

1. Lies prone on the exercise mat or floor.
2. Places palms on mat under or slightly wider than the shoulders with fingers stretched out.
3. Holds legs straight and slightly apart with toes tucked under.
4. Pushes up off the floor with the arms until arms are straight.
5. Body remains straight with no arch in back or rise in buttocks.
6. Lowers the body using the arms until the elbows bend at a 90-degree angle and the upper arms are parallel to the floor.

Teaching Modifications and Adaptations:

- A square of cardboard that has a 90-degree angle may assist students who are blind to judge 90 degrees.
- The knees may remain bent for a modified push-up if necessary.
- This skill may be done standing up against a wall (child's feet placed 1-2 feet from the wall) as a lead-in activity. Hold an object on the wall as a cue to stop so the child's head does not hit the wall.
- Use a small therapy ball to lessen the push distance until the child gains enough strength to complete the full movement.

The use of this gross motor development curriculum can bring the children with whom you work one step closer to reaching their goals.

The time, energy, and effort that you put into teaching this curriculum are well worth the potential outcomes.

Thank you for taking the time to change the lives of the next generation of individuals with visual impairments, blindness, and deafblindness.

Locomotor skills

Run*

Equipment/Space Adaptations: APH Portable Sound Source and APH Sound Ball (placed 50 feet apart), two cones

Cues: Run back and forth between the two sound sources

Gallop*

Equipment/Space Adaptations: APH Portable Sound Source and APH Sound Ball (placed 25 feet apart), two cones

Cues: Say, "Step forward, feet together, step forward."

Hop

Equipment/Space Adaptations: None

Cues: Possible touch cue

Leap

Equipment/Space Adaptations: Beanbag, fluorescent or bright tape (around beanbag), rolled up yoga mat

Cues: Jump forward with one foot over the beanbag or drag toe over rolled up yoga mat and extend leg forward

Horizontal jump

Equipment/Space Adaptations: Tape and cord, or two bright jump ropes on grass

Cues: Say, "Jump as far as you can with two feet."

Skip*

Equipment/Space Adaptations: APH Portable Sound Source and APH Sound Ball (placed 25 feet apart), two cones

Cues: Say, "Step forward-hop, step forward-hop."

Slide*

Equipment/Space Adaptations: Two cones, carpet squares

Cues: Say, "Step side, together, step side, together."

* Use guidewire when needed.

Perceptual motor skill

Balance

Equipment/Space Adaptations: Wall or hand for light touch support if needed

Cues: Knee tap

Physical fitness skills

Curl-ups

Equipment/Space Adaptations: Mat or wedge mat, prerecorded cadence

Cues: Cadence, shoulder or knee tap

Push-ups

Equipment/Space Adaptations: Mat, small therapy ball, prerecorded cadence

Cues: Cadence, shoulder tap

Lead-up Activities

Skill focus: Jump

Activity setup: Spread hoops around the gym about 6 inches apart.

Cues: Say, "Jump into each hoop with two feet."

Skill focus: Weight shift

Activity setup: The child stands behind instructor (or a peer) with her hands on instructor's hips. Instructor steps forward and back.

Cues: Say, "Move forward, back, move forward, back."

Skill focus: Underhand roll

Activity setup: Give the child a hoop and tell him to roll it across the floor.

Cues: Say, "Step (with opposite foot) and roll!"

Skill focus: Slide

Activity setup: On a low balance beam, have child stand sideways. The child holds the instructor's, paraeducator's, or peer's hands and steps sideways to end of beam. Repeat in the other direction.

Cues: Say, "Step sideways-slide together, step-slide together."

Skill focus: Ready position (knees bent, hands on knees)

Activity setup: Teach the ready position. Explain that this position is used for most sports such as beep baseball, goalball, basketball, and it is the first movement in a slide, run, gallop, and so forth. Turn on music,

and say, "Ready." The kids get in ready position, then walk or run around to the music until the word "ready" is heard again to get into ready position. Children can be callers.

Cues: Say, "Ready, bend knees, hands on knees."

Skill focus: Follow through for the throw

Activity setup: Give the child a streamer with bells on the ends. Tell the child to use her dominant hand and to reach high in the air, out, and forward.

Cues: Say, "Step (with opposite foot) and throw!"

Skill focus: Gallop with stick horse or swimming noodle

Activity setup: Child uses a stick horse as a vehicle to facilitate the motion of galloping. The stick can be between the legs, or in front of the child.

Cues: Say, "Step forward, slide back foot to heel, (same foot) step forward, slide foot to heel, repeat."

Skill focus: Hip rotation and crossing midline (and weight transfer if possible)

Activity setup: Give the child a hula-hoop and have her roll it across the floor to the side as hard as she can.

Cues: Say, "Step and roll the hoop."

Practice Record

Name: P.L. Rodgers

Skill: Run

Subtest: Perceptual Motor

Locomotor

Object Control

Physical Fit

Accomplished (✓-check mark) Needs practice (✗-cross mark)

Task Analysis	Tri
Moves arms back and forth from shoulders—without crossing midline—in opposition to legs	
Keeps elbows bent.	
Both feet are off the ground for a short period of time.	
Foot hits the ground lightly—landing heel and midfoot—then quickly rolls forward (i.e., not flat footed).	
Support foot lands directly underneath the body with knee slightly bent.	
Nonsupport leg bent approximately 90 degrees.	
Keeps the head straight; does not tilt the chin forward.	

Practice Record

Name: Date:

Skill: Balance Subtest: Perceptual Motor ✓ Accomplished (check mark) ✗ Needs practice (x-mark)

Task Analysis	Trial 1	Trial 2
Feet together and parallel.		
Eyes closed.		
One foot off the floor 6 inches.		

Knee bent at 45-degree angle.		
Holds position.		

Name: Date:

Skill: Run **Subtest:** Locomotor ✓ Accomplished (check mark) ✗ Needs practice (x-mark)

Task Analysis	Tri
Keeps elbows bent.	
Moves arms back and forth from shoulders—without crossing midline—in opposition to legs.	
Both feet are off the ground for a short period.	
Foot hits the ground lightly—landing between heel and midfoot—then quickly rolls forward (i.e., not flatfooted).	
Nonsupport leg bent approximately 90 degrees.	
Support foot lands directly under the body with knees slightly bent.	
Keeps the head straight; does not tilt the chin forward.	

Name: Date:

Skill: Horizontal Jump **Subtest:** Locomotor ✓ Accomplished (check mark) ✗ Needs practice (x-mark)

Task Analysis	Tri
Bends knees and hips; extends arms behind the body.	
Swings arms forward forcefully and upward to full extension above the head.	
Jumps forward with both feet and lands on both feet simultaneously; bends knees to absorb the force of the landing.	
Thrust arms downward during landing.	

Name: Date:

Skill: Hop **Subtest:** Locomotor ✓ Accomplished (check mark) ✗ Needs practice (x-mark)

Task Analysis	Trial 1
Bends nonsupport leg and lets it swing forward and backward to produce force.	
Foot of nonsupport leg remains behind body and swings backward.	
Flexes arms and swings them for balance and to produce force.	
Jumps up and lands on same foot consecutive times as required by assessment tool.	
Thinks tall and keeps head level.	

Name: Date:

Skill: Skip **Subtest:** Locomotor ✓ Accomplished (check mark) ✗ Needs practice (x-mark)

Task Analysis	Trial 1
Bends arms and lifts to waist level.	
Steps forward with the lead foot. With lead foot in the air, hops on opposite foot.	
Continues pattern changing lead foot each time.	
Brief period where both feet are off the ground between each cycle.	
Maintains a rhythmic pattern for a determined number of consecutive steps.	

Name: Date:

Skill: Curl-ups **Subtest:** Physical Fitness ✓ Accomplished (check mark) ✗ Needs practice (x-mark)

Task Analysis	Trial 1
Lies on back with knees bent; palms rest on thighs or palms flat on floor.	
Curls shoulders up off the floor; uses abdominal muscles.	
Slides hands up to touch knees, or slides palms along floor toward heels.	
Slowly lowers torso to mat.	
Feet remain on floor at all times.	

Name: Date:

Skill: Gallop **Subtest:** Locomotor ✓ Accomplished (check mark) ✗ Needs practice (x-mark)

Task Analysis	Trial 1
Bends arms and lifts to waist level.	
Steps forward with the lead foot; steps the trailing foot forward adjacent to or behind the lead foot.	
The lead foot always remains in front, and the back foot comes up to meet but never passes the front foot.	
Brief period where both feet are off the ground.	
Maintains a rhythmic pattern for a determined number of consecutive gallops.	

Name: Date:

Skill: Slide **Subtest:** Locomotor ✓ Accomplished (check mark) ✗ Needs practice (x-mark)

Task Analysis	Trial 1
Stands on the tapeline so shoulders are aligned with the line.	
Steps sideways with lead foot and then slides the trailing foot to meet the lead foot—instep to instep.	
Practices continuous step-slide cycles to the right.	

Practices continuous step-slide cycles to the left.	
Maintains a rhythmic pattern for a determined number of consecutive steps.	

Name: Date:**Skill:** Leap **Subtest:** Locomotor ✓ Accomplished (check mark) ✗ Needs practice (x-mark)

Task Analysis	Trial
Starts with large step and progresses to pushing off the back foot while landing on the opposite foot.	
Advances to take off on one foot and land on the opposite foot.	
Both feet are off the ground for a short period.	
Reaches forward with the arm opposite the lead foot.	

Name: Date:**Skill:** Kick **Subtest:** Object Control ✓ Accomplished (check mark) ✗ Needs practice (x-mark)

Task Analysis	Trial 1	Trial 2
Approaches the ball rapidly and continuously.		
Demonstrates an elongated stride or leap just prior to ball contact.		
Positions the nonkicking foot even with or slightly behind the ball.		
Kicks the ball with the instep of preferred foot (on instep or toe).		

Name: Date:**Skill:** Overhand Throw **Subtest:** Object Control ✓ Accomplished (check mark) ✗ Needs practice (x-mark)

Task Analysis	Tr
Initiates windup with downward and backward movement of the hand and arm. Rotates body sideways until nondominant side of body faces the direction he is throwing.	
Shifts weight onto back leg.	
Steps forward (transfers weight) as he throws.	
Follows through beyond ball release diagonally across the body toward the nondominant side.	

Name: Date:**Skill:** Push-ups **Subtest:** Physical Fitness ✓ Accomplished (check mark) ✗ Needs practice (x-mark)

Task Analysis	Tr
Lies prone on the exercise mat or floor.	
Places palms on mat under or slightly wider than the shoulders with fingers stretched out.	
Holds leg straight and slightly apart with toes tucked under.	

Pushes up off the floor with the arms until arms are straight.	
Body remains straight with no arch in back or rise in buttocks.	
Lowers the body using the arms until the elbows bend at a 90-degree angle and the upper arms are parallel to the floor.	

Name: Date:

Skill: One-hand Forehand Strike **Subtest:** Object Control ✓ Accomplished (check mark) ✗ Needs practice (x-mark)

Task Analysis	Tri
Turns body sideways with nondominant shoulder facing the wall.	
Positions feet parallel and slightly more than shoulder width apart, with weight evenly distributed on both feet.	
Grips paddle with dominant hand.	
Slightly bends knees.	
Holds ball up high and drops ball to floor.	
Shifts weight onto back leg.	
Steps forward as arm swings.	
Sequential rotation of hips and shoulders.	
Hits ball on the off bounce at waist height.	
Follows through across body.	

Name: Date:

Skill: Two-hand Strike/Bat **Subtest:** Object Control ✓ Accomplished (check mark) ✗ Needs practice (x-mark)

Task Analysis	Tri
Turns body sideways with nondominant shoulder facing the direction child is batting.	
Positions feet parallel and slightly more than shoulder width apart, with weight evenly distributed on both feet.	
Grips bat with dominant hand above nondominant hand.	
Brings bat up to dominant shoulder and holds even with or slightly above the shoulder.	
Slightly bends knees with elbows down.	
Shifts weight onto back leg.	
Steps forward as arm swings.	
Sequential rotation of hips and shoulders.	

Hits ball.	
Follows through across body.	

Name: Date:

Skill: Stationary Dribble **Subtest:** Object Control ✓ Accomplished (check mark) ✗ Needs practice (x-mark)

Task Analysis	Trial
Bounces the ball on ground and contacts the ball with hand at belt level.	
Pushes the ball with fingertips/finger pads (does not slap or strike with the palm).	
Ball contacts floor in front of or to the outside of foot on the preferred side.	
Controls the ball for consecutive bounces—as determined by the assessment tool—without moving the feet to retrieve it.	
Maintains a rhythmic pattern for a determined number of consecutive steps.	

Name: Date:

Skill: Catch **Subtest:** Object Control ✓ Accomplished (check mark) ✗ Needs practice (x-mark)

Task Analysis	Trial
Positions hands in front of the body with elbows flexed.	
Places hands face up.	
Extends arms while reaching for the ball as it arrives.	
Adjusts arms and hands to ball flight characteristics; body position may need to adjust to ball as well.	
Hands face each other; catches the ball with the hands only.	

Name: Date:

Skill: Underhand Roll/Throw **Subtest:** Object Control ✓ Accomplished (check mark) ✗ Needs practice (x-mark)

Task Analysis	Trial
Orients body so that chest is facing the wall.	
Swings the preferred hand down and back, extending the arm behind the trunk; keeps chest parallel to wall.	
Steps forward with foot opposite the preferred hand toward the wall.	
Tosses ball forward hitting the wall.	
Swinging arm follows through after release of the ball at chest level or above.	

Q. 3 Briefly describe the areas of assessment and planning for vocational skill building of children with intellectual disability.

Ans: Today, more than 1 million students are trapped in an education system that wasn't built for them. That system wasn't designed to accommodate their disabilities—the kinds of intellectual, cognitive, communicative, and physical conditions that often conjure images of people reliant on wheelchairs and aides, of individuals consigned to dreary, isolated lives. Many of the public schools they attend rest on the assumption that those stereotypes are inevitable truths. But these students, even those with the most severe disabilities, have potential far beyond what they are often educated for. Although the law known as the Individuals With Disabilities Education Act, or IDEA, has long required schools to help students design “transition plans” and provide job training for their lives after graduation, a majority of adults with intellectual or developmental disabilities are unemployed or underemployed. According to a 2012 Bureau of Labor Statistics survey of disabled adults, that's largely because of a lack of training and education, which respondents listed as the most common barrier to employment aside from the disabilities themselves. “The big concern that remains [is] what happens when you're done ... and you're finished with school? Are you sitting at home on the couch?” said Margaret (“Muncie”) Kardos, a Connecticut-based educational consultant who helps students with disabilities plan for the transition. The poor preparation, she said, leaves many special-needs people with few other options. Their prospects at graduating are grim to begin with: Nationally, only about two-thirds of students ages 14 through 21 with disabilities graduate with a regular diploma, while most of the remaining students simply drop out. And these figures encompass all students with disabilities, including those who are relatively high-functioning. The statistics for those who are severely disabled are much more bleak. Compared to their peers from all disability groups, youth with intellectual disabilities, for example, have the lowest rates of education, work, or work preparation after high school. A 2011 Department of Education study that looked at the outcomes of young adults with disabilities up to six years after high school found fewer than half of the young adults with multiple disabilities had a paid job at the time of the survey, compared to 79 percent of young adults with specific learning disabilities such as dyslexia. Specialized workforce academies for students with disabilities are growing in popularity as a solution to these realities, in part thanks to federal grants and legislation such as the Workforce Innovation and Opportunity Act. Special-education advocates often describe these job-training programs—which often place participants in internships with prospective employers—as the long-awaited solution to the perennial challenge of how to support students with disabilities through graduation and into adulthood. But how different are the experiences at segregated workforce academies from those at sheltered workshops, and how effective are they at leading students to mainstream jobs? Historically, specialized programs faced scrutiny for separating disabled students from their peers, a practice that fueled emotional, often bitter, debates over how to best educate kids with unique and complex learning needs. Through the early 1970s, many students with disabilities were denied access to regular public schools and forced into special schools—a practice known as “institutionalization.” Broader stigmas also developed around vocational academies, which, American RadioWorks's Emily Hanford has reported, were perceived as “a kind of dumping ground for kids who weren't succeeding in the traditional academic environment.” By the 1990s, the pendulum had swung in the other direction: Institutionalization had become a taboo word in special education, and “inclusion”—the integration of special-needs students into mainstream classrooms as much as possible—became the gold standard. “Regular schools with this inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all,” a UNESCO report on special education proclaimed. Even children in special schools, the report contended, shouldn't “be entirely segregated.” Specialized and completely segregated programs never disappeared completely, however—and neither did those emotional, bitter debates over inclusion. Vociferous opposition to the idea has challenged the movement since it took hold. “This is about the Special Education Department's philosophy of inclusion,” Mary Andrews, whose mentally disabled son attended a Chicago high school for special-needs students, told the *Reader* in 1994 in response to district plans to close the school down. “They have something to prove, and they want my son to be the guinea pig in their experiment.” Many school districts now seem to be pivoting away from full-blown inclusion toward more-specialized options like the workforce academies that are, oddly, in some ways reminiscent of the institutionalization era. Not

surprisingly, the same concerns are re-emerging, with some critics worrying that such programs are an extreme form of tracking in which students perceived to have limited potential are pigeonholed into non-academic settings and low-paying jobs that nobody else wants. Compounding the issue is the reality that students of color are disproportionately assigned to special education. Do the programs perpetuate inequality and stifle socioeconomic mobility? Do they prevent students from pursuing college? What if the ones who benefit most aren't the students but the companies that often get to rely on their labor for free? Then there's the question of whether these programs are truly effective in improving students' prospects at getting jobs they want. While the country's schools are still struggling to shepherd students with disabilities into fulfilling lives, experts tend to agree that they're getting there—and that, with a little trial and error, the newly emerging workforce-preparation programs may be a model that sticks.

Kelly Custer stands at the front of a classroom at the River Terrace Special Education Center, gesturing as he walks his students through the math of a problem-solving exercise about money. After pacing in front of a gleaming interactive whiteboard, he pivots toward a group of students sitting in front of a sequence of iMacs and school supplies and asks them to help him solve the question. A few raise their hands gingerly; some look around, smiling; some stare off in another direction completely. He gets a similar response from another group of students, who are sitting against a wall covered in words such as “photosynthesis,” “stomata,” “chlorophyll,” and “carbon dioxide.” Custer guides them through the math and then moves on with the lesson. This is about as academic as things get in this modern Washington, D.C., classroom—at least in the traditional sense of the word. It's not even a classroom, really. Forget the neatly aligned rows of desks and multiple-choice worksheets and textbooks; forget posters motivating kids to apply to college. The room feels more like a spacious laboratory that blends in with the patio and trees right outside. The north-facing wall is made almost entirely of glass, allowing sunlight to illuminate the room on this chilly day. Potted anthuriums are sitting on each of the several tables where the class's dozen or so students are clustered. And it smells faintly of dirt—probably because the room is attached to a greenhouse filled with plants and soil and spray bottles and shovels. Custer's course aims to equip special-needs high-schoolers with the basic training they need to get jobs in horticulture. The year-long certificate program is comprehensive and part of River Terrace's larger Workforce Development Center, which opened this past school year in an effort to feed participants into a handful of industries. Aside from Custer's track, another suite exposes students to the health-care field—mainly jobs maintaining hospital facilities—and the third trains kids in hospitality.

When they're in the classroom, students learn soft skills—What does it mean to have a job? How do you keep a job? How do you deposit a paycheck?—and practice their work tasks in retrofitted classrooms. (Students in the hospitality track, for example, learn how to prepare a basic meal, make a bed, clean a bathroom, and load a laundry cart in a room that's equipped with a bed, a hotel-like bathroom, a washing machine, a dining table, and more.) But students spend most of their days doing internships in their respective industries, all of which are paid. Today, Custer's students are about to receive their first paychecks for the jobs they started earlier that month. Hence, the math lesson. “Did you miss a day of work?” Custer asks somewhat rhetorically, looking around the room. Students shake their heads. “You're going to get a paycheck every two weeks,” he continues, “but you'll only get the whole paycheck if you come to work every single day.”

For the roughly 35 students who participated in one of the three tracks this past school year, these opportunities may be their only shot at employment later on: They all fall into the 1 percent of students in D.C. Public Schools with the greatest special-education needs. The experiences of other special-education students in D.C. and around the country suggest they would otherwise struggle to enter the workforce, let alone land even minimum-wage jobs. And River Terrace's students largely live east of the Anacostia River, which has the highest concentration of neighborhoods considered economically challenged in Washington. These are majority-African American neighborhoods with extremely high rates of unemployment, adults without high-school diplomas, and households headed by a single mother. At River Terrace, which is also located in this community, 88 percent of the population is black, 10 percent is Latino, and every single student qualifies for free or reduced-price lunch. The students in River Terrace's workforce-development center are a relatively small subset of the adult special-needs population in D.C. Public Schools who need a more intensive environment, according to Pamela Downing-Hosten, who oversees transition programs for the district. The district's previous workforce-development program, she explained, wasn't adequately preparing students for jobs. So she and

other educators consulted students, assessed what kinds of fields would lead to “viable-income, high-demand jobs,” and decided on the three suites. River Terrace’s workforce center exemplifies one of the most promising models in the effort to better prepare the nation’s special-needs students for life after high school—and, in many ways, it actually promotes integration rather than segregation. “We want to expand the concept of inclusion from the classroom to the workplace ... On the worksite, [students] are just like any other employee,” Downing-Hosten said. “So they’re not separate and segregated, and that’s the experience we want our kids to have.”

While the River Terrace Special Education Campus as a whole serves students in grades two through 12, the workforce component targets young adults ages 18 through 21 who have already progressed through regular high schools. In other words, they’ve already experienced mainstream education; for many, it’s the first time that they’re learning exclusively alongside peers who also have disabilities. We want them to know that, “Okay, here are my abilities, here are my limitations—and I’m going to work competitively despite those limitations,” Downing-Hosten continued. What’s more, unlike many other job-training programs, River Terrace enjoys the ingredients that Erik Carter, a special-education professor and researcher at Vanderbilt University, has found are key to their later success: things like early employment opportunities, involved families, and supportive community employers. “I’m most excited about programs that provide real-life, hands-on work experiences for students at some point throughout their high school that’s not simulated, that’s not ‘pre-vocational,’ that’s not [simply] preparatory but that puts them in a real place where they’re doing real work that matches their interests,” he said. Research conducted by Carter and two other special-education experts suggests that students are more than twice as likely to have paid employment in their first two years after high school if they have early work experience. Yet fewer than one in four students with intellectual disabilities and autism have early work experiences, according to Carter, and while an increasing number of parents hold high expectations, many are under the impression that sheltered jobs are the only option for those with disabilities. Custer, who used to teach special education in an inclusive setting, sees the benefit of a specialized place like River Terrace for the students who attend it—in large part because it’s so different from what they were used to. “Many of [my students] have experienced school as a place where, academically, they’re left out,” he said. “In previous experiences they were the ones that were doing very poorly in class; now, they’re getting 100s in their classwork, and you can see that they really take ownership of that, so it changes their confidence—and that spills over to the worksite.”

He also highlighted the benefits for students who are higher functioning and more socially inclined. In inclusive classrooms, he said, those students are often self-conscious and “don’t try because they don’t want to feel ashamed.” At River Terrace, on the other hand, “there’s a culture that making a mistake or risk-taking is just ingrained ... Students participate. They’re not afraid to get the wrong answer. They’re not afraid to try different things that work.”

Back in Custer’s classroom, I step into the greenroom to take a look. Andreana Washington, a smiling African American 19-year-old with freckles, accompanies me to demonstrate some of what she’s learned in class. Shyly, she sprays a handful of African Violets and points to the other plants she’s helping to maintain; she chose the horticulture track because she likes working with her hands and being outside. Washington, who has one of the best attendance rates at River Terrace, doesn’t say much when I ask her questions, nor does she look directly at me, but it’s clear—from her smile, her gestures, her occasional giggle—that she enjoys working with plants and her teacher. When we go back into the classroom, she takes her seat and listens attentively, keeping her eyes on her teacher the whole time. That sense of belonging is evident in many of the students I chat with over the course of my visit. Each classroom has a different tenor, but all are lively, with students engaging in different activities or raising their hands in response to a teacher’s prompt. One of the most engaged students on campus is Janika Napper, a student in the health-care suite. Napper, who eagerly poses for the camera as she grins a toothy smile and displays her VA Medical Center volunteer vest, spends her shifts at the hospital washing tables, stacking trays, and restocking paper towels in the food court, among other tasks. Her back against a sign detailing how to use syringes, the 20-year-old explains that she enjoys the job—and plans on putting all her earnings into a saving account—but doesn’t want to do it forever: She wants to be a fashion designer. As she goes off to talk to some friends, a teacher motions me over to explain that she’s also the class president and a member of the prom committee. In fact, according to the teacher, she even planned a donation drive for old dresses for last year’s prom. Down the hall, Adrian Bland tells me about her experience in the hospitality suite, which partners with Embassy Suites to train kids in a range of positions,

from housekeeping to food prep. Bland works as a porter, what she later described as her dream job. “I like that I get to talk to people,” responded Bland, 18, when I asked her the best thing about the job, which she elected after trying out a number of positions, including as the door person, laundry attendant, and dishwasher. The fact that she, unlike at the other hotel jobs, gets tips also helps; her biggest single tip amounted to \$20, she adds, beaming. As of early June, Bland is one of the few River Terrace students to have secured a job: She’s been hired by Embassy Suites’s Chevy Chase Hotel. During my visit to River Terrace, Napper and Bland—both of whom are graduating this year—are visibly proud. And they clearly feel at home. When students start to trickle out into the hallways at the end of the school day, chatter reverberates throughout the glass hallways, and the campus looks just like any other high school. “In all the classrooms, there’s a strong sense of community among the students; they applaud each other a lot. When kids come up [to the board] and touch the right answer, everybody applauds,” Custer said. “To see [students] rally around one another and look out for one another and recognize one another’s ability—I don’t think that’s going to happen in a general-education school,” Custer said, “because here, nobody’s worried about being cool.” Although inclusion looks great on paper, such programs seldom succeed in lifting disabled students’ opportunities, and that’s probably why teachers such as Custer and Jamin Hollingsworth, the hospitality teacher, champion places like River Terrace. For many educators, the employment outcomes generated by these specialized programs are more important than the fact that students are segregated from the mainstream population. But that doesn’t give school districts license to prioritize workforce programs that separate special-needs students from their peers over others that promote inclusion, argued Vanderbilt’s Carter, who worked as a transition specialist before getting his doctorate. The conversation, he said, should instead be on how to improve inclusive programs so that special-needs students get the support they need. My experience generally is that segregated experiences tend to lead to segregated experiences,” Carter said. Students may get job training—but for jobs that are filled almost exclusively by people with disabilities. “If we can show that whatever experiences we’re doing actually lead students to attain the kinds of jobs they want and not the kind of jobs we think they ought to fit into then I get much less worried about what the path was,” Carter added. “The problem is that most of the things we do under the auspices of being vocational training [don’t] actually lead to integrated community jobs.” Integrated workforce programs can also help motivate special-needs youth, Carter said, giving them the opportunity to hear about their peers’ college and career goals. Then there’s the more abstract benefit of showing mainstream children and teachers that special-needs students—even those with more severe developmental disabilities such as Down syndrome—have workforce potential. What’s at risk of being lost when special-needs students enroll in specialized programs such as River Terrace are “the opportunities for others in the community to come and see people with severe disabilities as having gifts and strengths and to see them in a different light,” said Carter, who isn’t familiar with the River Terrace program specifically but has researched its general model extensively. Another risk is that the programs pigeonhole severely disabled students into a vocational path and as a result never encourage them to consider college. The DOE’s longitudinal study found that slightly fewer than one in three of the people with multiple disabilities had enrolled in some type of postsecondary schooling. Yet for many of them, higher education is possible; in fact, roughly 250 colleges across the country, including Carter’s Vanderbilt and places like Georgia Institute of Technology and Syracuse University, enroll and provide extra supports for students with intellectual disabilities, often with strong results. The denial of academic opportunity to special-needs students has been a longstanding concern among advocates, and it reflects broader anxieties about the role of vocational learning. “I think a lot of schools will take kids that [have] behavioral issues and will say, ‘You know what? I think technical education is where you need to be.’ I think they will take kids who have learning disabilities, and rather than work with them in academics, push them on that track,” Carol Burris, the executive director of the Network for Public Education, told PBS Newshour in a segment on workforce education. “We just know that historically.”

Nationally, the college-going rate for any students who take some kind of career-and-technical coursework is below average. And the fact that students with disabilities are typically overrepresented in career-and-technical education has raised concerns that schools are negatively tracking them into such programs and directing them away from higher education. “I think it’s very dangerous,” Burris said in her PBS interview. “I have seen so

many kids who have been academic late-bloomers, [and] all of a sudden they mature and they buckle down and they do their studies and they go to college.”

According to Carter, more than a third of all high-school students with intellectual disabilities have in their transition plans the goal of attending some sort of postsecondary educational institution. In a survey of more than 1,000 parents of students with such disabilities in Tennessee, three-fourths of respondents identified college as “an important goal.” Just 15 percent actually end up enrolling within two years after high school. Just because it emphasizes practical skills over academic ones, however, encouraging special-needs students to pursue career-and-technical education isn’t necessarily setting them up for failure; some research suggests quite the opposite.

To assess whether negative tracking was happening in its well-established network of vocational schools, the state of Massachusetts consulted Shaun Dougherty, an assistant professor of education policy and leadership at the University of Connecticut. Dougherty did find that students with disabilities were overrepresented in the state’s voc-tech schools, accounting for about 25 percent of their enrollment (versus 15 percent of the entire high-school population). Yet attending a voc-tech school often enhanced a special-needs student’s educational prospects. Compared to their peers with disabilities who weren’t in the workforce programs, they were more likely to finish high school in four years—a particularly noteworthy statistic considering special-needs students can stay in school until age 21, according to Dougherty. “On all available objective measures, students [with disabilities] were no worse off and actually better off in terms of high-school graduation,” he said.

Still, research on whether such programs actually improve special-needs kids’ long-term economic outcomes is mixed. Although participation in a workforce program tends to boost special-needs students odds at graduating, there isn’t much recent evidence to suggest that it makes a significant difference in terms of their post-graduation employment and wages. In an April study for the right-leaning Fordham Institute, Dougherty looked at schools in Arkansas, where the vast majority of students take at least one career-and-technical course. While taking such courses raised a typically developing student’s employment odds and wages one year after high school, the impact wasn’t as apparent for special-needs students. “For students with disabilities, they’re not worse off—it’s just not clear that they’re experiencing the same benefit as their typically developing peers,” Dougherty said.

Regardless, it’s hard to deny that the workforce-education option is the best route for at least some students with disabilities. “If you’re looking at the 18-to-21 experience to continue to be academic in nature, for some students that may be appropriate but for a lot of students it isn’t,” said Kardos, the education consultant. Indeed, for the students at River Terrace—at least according to the educators there, academics are all but irrelevant.

“We have students who are not readers, and I think probably historically they’ve been told if you can’t read it’s hard to experience success,” said Hollingsworth, the hospitality teacher. “My task is not to teach my students to read—I don’t have time—so that’s not what we’re doing. I don’t care that he can’t read. Today ... I’m showing them how to set up their checking accounts.”

Whether workforce academies are a model worth supporting hinges on what happens after students graduate. Are they actually getting jobs upon completing the program? Are they able to lead lives that are more independent and more fulfilling than they would had they gone a more traditional route? Are they happy? The idea is great in theory, but “it all comes down to how many people are actually going to be employed when you’re done with this—that’s going to be the litmus test as to whether or not [workforce programs] are successful,” Kardos said. “They’re certainly well-intentioned—and students are going to learn lots of things that are critical to their lives—but [that test] is really going to be about who ends up living a more independent lifestyle in a less restrictive environment and whether or not they’re gainfully employed.”

At River Terrace, the ingredients that Carter and Kardos highlighted as key to a transition program’s success seem to be coming together. The school has a deliberate curriculum. The students are doing real work; they’re paid. Parents seem engaged: The school has a thriving PTA that fundraises and helps organize movie screenings at the school’s outdoor amphitheatre. And the respective employers, along with D.C.’s Rehabilitation Services Agency, have bought into the program. Groundworks Anacostia—a nonprofit that focuses on environmental restoration and partners with students in the horticulture track, training them how to do things like grow seedlings and maintain fish traps—even showcases the partnership on its website and encourages other

community organizations to participate in River Terrace's career fair. Even though the company doesn't pay the students' salaries, Embassy Suites treats the students like actual employees, Hollingsworth said. And ultimately, students like Washington and Napper and Bland are at River Terrace because they want to be there. "It comes down to having choice and not having that decision [to enroll in the school] being made based on your disability or your IQ score," Kardos said.

Still, despite all that, the school's end-of-the-year results demonstrate just how tricky transition planning remains. Less than half of the students who enrolled in the workforce center this past year are graduating, and only five have landed jobs so far. The school year ends in just a few days.

Vocational training in Pakistan :

NOWPDP, through its program Dastoor, is providing vocational training to children with disabilities in different skills, such as graphic designing, web designing, textile designing and block printing. The funds provided will cover the costs of curriculum development, training material & equipment, such as laptops, and support the training of 200 students with disabilities in 2017 at special schools.

\$40,000

total goal

\$39,412

remaining

14

donors

1

monthly donor

2

years

Challenge

In Pakistan, there are very few vocational training and skills development opportunities for persons with disabilities. The mainstream institutes lack reasonable accommodations required for persons with disabilities, and special schools often do not have the resources or expertise to offer vocational training. Both these factors combine to limit the access of persons with disabilities to skills development opportunities, which subsequently puts them at a disadvantage when they seek employment.

Solution

NOWPDP, through its program Dastoor, partners with special schools and provides vocational training in different market relevant skills, such as graphic designing, web designing, textile designing and block printing to children with disabilities. Through the six month training, the students learn the basics of the different skills, and become adept at using skill relevant technology, providing a foundation which the students can build upon if they choose to pursue careers in those field

Long-Term Impact

By equipping children with disabilities with the basic skills in the aforementioned skills, NOWPDP enables them to pursue educational and/or employment opportunities, which ultimately contributes towards their socio-economic inclusion.

Q.4 How assessment and intervention for communication disorders is related with receptive and expressive language developmental milestones?

ANS: How do speech and language develop?

The first 3 years of life, when the brain is developing and maturing, is the most intensive period for acquiring speech and language skills. These skills develop best in a world that is rich with sounds, sights, and consistent exposure to the speech and language of others.

There appear to be critical periods for speech and language development in infants and young children when the brain is best able to absorb language. If these critical periods are allowed to pass without exposure to language, it will be more difficult to learn.

What are the milestones for speech and language development?

The first signs of communication occur when an infant learns that a cry will bring food, comfort, and companionship. Newborns also begin to recognize important sounds in their environment, such as the voice of their mother or primary caretaker. As they grow, babies begin to sort out the speech sounds that compose the words of their language. By 6 months of age, most babies recognize the basic sounds of their native language. Children vary in their development of speech and language skills. However, they follow a natural progression or timetable for mastering the skills of language. A checklist of milestones for the normal development of speech and language skills in children from birth to 5 years of age is included below. These milestones help doctors and other health professionals determine if a child is on track or if he or she may need extra help. Sometimes a delay may be caused by hearing loss, while other times it may be due to a speech or language disorder.

What is the difference between a speech disorder and a language disorder?

Children who have trouble understanding what others say (receptive language) or difficulty sharing their thoughts (expressive language) may have a language disorder. Specific language impairment (SLI) is a language disorder that delays the mastery of language skills. Some children with SLI may not begin to talk until their third or fourth year.

Children who have trouble producing speech sounds correctly or who hesitate or stutter when talking may have a speech disorder. Apraxia of speech is a speech disorder that makes it difficult to put sounds and syllables together in the correct order to form words.

What should I do if my child's speech or language appears to be delayed?

Talk to your child's doctor if you have any concerns. Your doctor may refer you to a speech-language pathologist, who is a health professional trained to evaluate and treat people with speech or language disorders. The speech-language pathologist will talk to you about your child's communication and general development. He or she will also use special spoken tests to evaluate your child. A hearing test is often included in the evaluation because a hearing problem can affect speech and language development. Depending on the result of the evaluation, the speech-language pathologist may suggest activities you can do at home to stimulate your child's development. They might also recommend group or individual therapy or suggest further evaluation by an audiologist (a health care professional trained to identify and measure hearing loss), or a developmental psychologist (a health care professional with special expertise in the psychological development of infants and children).

What research is being conducted on developmental speech and language problems?

The National Institute on Deafness and Other Communication Disorders (NIDCD) sponsors a broad range of research to better understand the development of speech and language disorders, improve diagnostic capabilities, and fine-tune more effective treatments. An ongoing area of study is the search for better ways to diagnose and differentiate among the various types of speech delay. A large study following approximately 4,000 children is gathering data as the children grow to establish reliable signs and symptoms for specific speech disorders, which can then be used to develop accurate diagnostic tests. Additional genetic studies are looking for matches between different genetic variations and specific speech deficits.

Researchers sponsored by the NIDCD have discovered one genetic variant, in particular, that is linked to specific language impairment (SLI), a disorder that delays children's use of words and slows their mastery of language skills throughout their school years. The finding is the first to tie the presence of a distinct genetic mutation to any kind of inherited language impairment. Further research is exploring the role this genetic variant may also play in dyslexia, autism, and speech-sound disorders.

A long-term study looking at how deafness impacts the brain is exploring how the brain "rewires" itself to accommodate deafness. So far, the research has shown that adults who are deaf react faster and more accurately than hearing adults when they observe objects in motion. This ongoing research continues to explore the concept of "brain plasticity"—the ways in which the brain is influenced by health conditions or life

experiences—and how it can be used to develop learning strategies that encourage healthy language and speech development in early childhood.

A recent workshop convened by the NIDCD drew together a group of experts to explore issues related to a subgroup of children with autism spectrum disorders who do not have functional verbal language by the age of 5. Because these children are so different from one another, with no set of defining characteristics or patterns of cognitive strengths or weaknesses, development of standard assessment tests or effective treatments has been difficult. The workshop featured a series of presentations to familiarize participants with the challenges facing these children and helped them to identify a number of research gaps and opportunities that could be addressed in future research studies

Q. 5 Write short note on the development of following skills in mentally retarded children:

• **Self-Determination**

ANS: What is Self-Determination?

Self determination is believing you can control your own destiny. Self-determination is a combination of attitudes and abilities that lead people to set goals for themselves, and to take the initiative to reach these goals. It is about being in charge, but is not necessarily the same thing as self-sufficiency or independence. It means making your own choices, learning to effectively solve problems, and taking control and responsibility for one's life. Practicing self-determination also means one experiences the consequences of making choices.

Additional Reading

What does it mean to advocate for yourself? Being your own advocate means that you ask for what you need while respecting the needs of others. For example, if you are at a store and a clerk ignores you, you are able to ask in a polite way to be served. Self-advocacy is asking for what you need in a direct, respectful manner.

Developing Self-Determination Skills

The development of self-determination skills is a process that begins in childhood and continues throughout one's life. Self-determination is important for all people, but it is especially important, and often more difficult to learn, for young people with disabilities. Well-meaning individuals sometimes "protect" children with disabilities by making all their decisions for them. Also, sometimes people assume that people with disabilities can't think for themselves. Self-determination involves many attitudes and abilities including: self-awareness, assertiveness, creativity, and pride, and problem solving and self-advocacy skills. To take charge of your own life, you must be able to set goals, evaluate options, make choices and then work to achieve your goals. Since self-determination skills are most effectively learned and developed by practicing them, students with disabilities should be given ample opportunity to use their self-advocacy, decision-making and socialization skills well before they leave high school to prepare themselves for working and living in their community.

Mentoring

Older and more experienced adults with disabilities can play a helpful role in this process not only by serving as role models, but by working actively and directly with youth as mentors. By sharing the experiences and strategies that led to their own successful employment and independence, mentors can help guide youth through a challenging transition period, offer problem-solving advice on issues that parents lack direct experience with (or that youth may be reluctant to discuss openly with their parents), and provide needed encouragement. Many agencies offer mentoring programs that match youth with an adult mentor. Some specifically focus on youth with disabilities. Investigate what programs may be available in your community by checking with Independent Living Centers for People with disabilities, parent centers in your state, community agencies (such as YMCAs, YWCAs, Boys' Clubs and Girls' Clubs programs), and your state vocational rehabilitation agencies.

Family Support

Families can provide support for their young adults with disabilities in the development of self-determination skills. Parents can help prepare their young adults with disabilities by giving them a growing number of opportunities to make their own decisions. Families should also provide their teenager with opportunities to explore employment, housing options, and community recreation programs in their community by utilizing their

own network of relatives and friends, as well as formal service systems. Most importantly, families should prepare themselves to accept their child in his or her new adult role and allow their adult children to take an active role in the decisions that will determine their future _ even if it means allowing them to make mistakes

- **Self-Care**

ANS: Independent living self care skills are the skills that a person needs on a daily basis to live independently. They include self care skills like eating, dressing, bathing, toileting and grooming.

Teaching independent living self care skills is a process that begins at birth and goes on into adulthood.

Children with disabilities find these skills difficult to perform for various different reasons. However, they will need to acquire these skills as best they can to live as independently as possible. Even if they cannot live independently, being independent in self care will take a lot of burden off the caregivers. Thus, this is often the most important goal for a child with a disability. That is why it is so important to plan independent living skills lessons for students with disabilities. Here are some strategies you can use in your lessons to teach these skills. Young children with disabilities often demonstrate delays in many areas of development. Because of these delays, they may need additional help. In order for children to receive acceptance and acquire as much independence as possible, it is important that self-care skills be a focus during the preschool years.

There are four main types of self-care skills:

Self-feeding. The best way to build independent feeding skills is to learn the normal developmental stages of self-feeding. Encourage children to practice feeding themselves from infancy on. Begin by offering older infants finger foods. Introduce a spoon and fork and give children plenty of time to practice. Let children be as independent as possible during mealtimes. Give them the tools they need to be successful. Consider bowls that attach to the table, child-sized utensils and small cups with handles and spouts (such as measuring cups) for pouring. Encourage children to try for themselves but provide help and encouragement when needed so they don't get frustrated. **Independent dressing and grooming.** Encourage children to dress and groom by themselves; just provide minimal assistance. Begin with older infants and toddlers by encouraging them to help pull socks on and off, pull up pants after diapering and help put their arms through sleeves. As children get older, encourage them to dress themselves but help with challenging steps such as zipping and buttoning.

Hygiene and toileting. Look for signs of readiness for toileting. Encourage children learning to use the toilet to climb on and off the toilet seat, pull clothing up and down, and wash their hands independently. Also teach children how to brush their teeth after lunch and snacks. Be ready to provide support and help if they need it. Encouraging children to take care of everyday hygiene routines and to use the toilet independently helps them learn how to become more independent and self-sufficient, and frees up your time to help children with other activities. Helping with daily chores like table setting and picking up toys. Encourage children to help with clean-up early on. Give toddlers responsibility for placing napkins or utensils on the table. Encourage children to begin clearing their own plates when they are old enough to carry them without dropping them. When children are involved in regular chores starting before the age of 4, they tend to be more independent in early adulthood than children without the experience of helping out. Self-care skills are worth the time and effort in a child care program. The secret to success is to give children age-appropriate experiences and provide the appropriate supports to help children be successful. Child care providers can offer opportunities for children to develop self-care skills and give them ample time to work on these important tasks. Remember that adults are important role models. We model self-care skills; children learn a great deal from watching us.

Techniques to promote self-care skill acquisition:

Rewards: Give rewards to the child each time they perform a self care task, or a part of a task. Rewards can be edible, social rewards, activity rewards, material rewards or even privileges. Tokens are another way to teach and reinforce self care skills. Make a chart where you add a star everyday if the child has completed the task independently. At the end of the month, the child gets a reward based of the amount of stars they got. Different children benefit from different rewards depending on their level of understanding. Use appropriate rewards. Researched-based rewards are individualized, age-appropriate, and naturally occurring in the environment. A

naturally occurring reward for drinking from a cup is relieving thirst. When the child first begins to learn to use a cup, say, “Look at you! You can drink from a cup!”

Forward Chaining: Forward chaining is the process where you break up a task into small steps, and teach the first step. Then you get the child to do the first step, and you complete the rest of the task. Then you teach the second step. After that, you make the child do the first two steps and you complete the rest of the activity.

Forward chaining is usually used to teach tasks where the last step is very difficult.**Backward Chaining:** Backward chaining is the opposite of forward chaining. Here you teach the last step first, then the second last step and so on. So, you do all the steps except for the last step and get the child to do the last step. Backward chaining is more fun for the child, because it helps them feel that they completed the activity. It is used quite often in training of self care skills.

Repetition: Repetition is one of the best ways to reinforce and learn a task. The best part about self care skills is that you need to do them every day, and often more than once in a day. Help the child practice his skills every single time he does that activity.

Shaping: Shaping is when you reward and appreciate the child when they are approximately able to do the task. It means that you don't look for perfection. If a child takes the comb to his head and moves the comb, you reward him and appreciate him for it. It's ok if he can't completely comb his hair, or even if he ends up messing up his hair. Shaping is used in the earlier stages of training.

Grading: Grading is when you give a simple activity to start with, and slowly increase the complexity of the task. Some ideas for grading are – using a large comb, teaching buttoning on large buttons, teaching dressing with over-sized clothes.

Adaptations: Sometimes planning lessons or an independent living skills curriculum is not enough. Some children with special needs, especially children with physical disabilities may need to be taught an adapted way of performing the task. They may also benefit from some adaptive equipment.

Adapting the environment: Some adaptations in the environment that can help are a wheelchair accessible toilet, a bath chair, a low sink. Keeping the clothes and other belongings of the child at an accessible height will promote independence.

Adapting the technique: Sometimes, adapting the technique can help the child to be independent. For example, stabilizing forearms on the table before eating, or sitting down on the bed and putting on pants. An occupational therapist will be able to advise you on techniques based on the child's needs.

Adaptive equipment: There are a lot of different adaptive equipment that can help a child with special needs to be independent. Modified spoons, long handled reachers and modified clothing are some examples.

Select appropriate prompts. While teaching a child to eat with a spoon, for example, the teacher can move from full physical assistance to assisting the child only when moving the spoon directly into his mouth. You may need to use hand-over-hand assistance, but this support needs to be faded as the child becomes more independent.

Establish a routine. Routines play a critical role in the formation of self-care skills. For example, putting on a jacket before going outside to play is a self-care skill that is routinely done prior to outdoor play. Brushing teeth after lunch is another self-care skill that is part of the daily schedule.

Learning, rather than time, should be the focus. It may take longer for a child with a disability to master these skills. Persistence and consistency are the keys to success.

Professionals: Get help from professionals as needed is important.

Expectations: Expect positive outcomes. Sometimes we do not attempt to teach self-care skills to children with cognitive disabilities because we have low expectations. If we expect children to succeed, there is a higher probability that they will.

Integrate: Integrate opportunities to promote self-care skills throughout the day and during play will provide needed practice for successful mastery of targeted skills. Having dress-up clothes in the housekeeping center, for example, provides an excellent opportunity to reinforce buttoning, zipping, snapping, and tying.

Responsibility: Child care providers can help young children become independent by allowing and encouraging them to take responsibility for themselves whenever possible. It can be faster and less messy to do things for children, but they learn so much more from doing things for themselves. When children practice self-

care skills such as feeding and dressing themselves, they practice their large and small motor skills, gain confidence in their ability to try new things and build their self-esteem and pride in their independence.

Stories: Talk about various independent living skills through stories. Use stories also to talk about work, different jobs, and the value of money. All this will help the child be motivated to be independent, get a job and support themselves when they grow up. Rewards should be used judiciously. When the child has toileting successes, affirm him by smiling, clapping, and telling him what a big boy he is. You also can provide treats that he really likes. For rewards to be effective in maintaining skills, the child must be weaned from treats and verbal affirmation gradually. The ultimate reward for the child is staying comfortable and dry, and avoiding embarrassment with classmates.

