Using the DRDP (2015) with Children with Physical Disabilities

The DRDP (2015) is an authentic assessment based on ongoing observations of children in their daily routines and typical environments. This guide is designed to assist teachers and service providers in using the DRDP (2015) to conduct informed and meaningful assessments of children with physical disabilities by better understanding:

1. the learning needs of children with physical disabilities;
2. how an individual child's physical disability influences the child's behavior, interactions, and learning; and
3. how to provide an appropriate learning environment that leads to a more accurate assessment of knowledge, behaviors, and skills of children with physical disabilities.

This guide is a supplement to the guidance that appears in the DRDP (2015) Assessment Manual (draccess.org/assessors). It provides information about suggested practices that will facilitate appropriate assessment of young children with physical disabilities on the DRDP (2015). Please read the introduction and appendices in the Assessment Manual in their entirety, paying careful attention to the sections focused on the following topics:

- **Adaptations**: Adaptations are changes in the environment or differences in observed child behavior that allow children with IFSPs and IEPs to demonstrate their knowledge and skills in typical environments. The adaptations used for the DRDP (2015) are (1) changes or modifications to the environment, activities, or materials and/or (2) one or more skills consistently demonstrated in a unique way. See examples of adaptations on the Desired Results Access Project web site: draccess.org/adaptations
- **Collaboration**: An accurate assessment of a child with a physical disability involves collaborating with the child's family and other service providers, including the child's physical therapist, occupational therapist, speech and language pathologist, teacher(s) credentialed in physical and health impairments (PHI) and/or early childhood special education (ECSE), early childhood teachers, and childcare providers. Refer to Appendix F of the DRDP (2015) Assessment Manual for further guidance on collaboration.
- **Universal Design**: In the context of assessment, "Universal Design" refers to the development of assessments that are appropriate for all children to the greatest extent possible. The measures of the DRDP (2015) were developed by applying the principle of Universal Design so that *all* children can demonstrate their knowledge and skills in a variety of ways. For more information, refer to the Introduction of the DRDP (2015) Assessment Manual.
- **Mastery Criteria**: A developmental level is mastered if a child demonstrates the knowledge, skills, and behaviors defined at that level consistently over time and in different situations or settings (DRDP, 2015). It is important to adhere to these criteria for demonstration of mastery when rating the DRDP (2015). Sometimes a child with a physical disability will demonstrate a skill at a level of mastery even though the skill is demonstrated in a way that is different than peers. Similarly, a level can be rated as mastered even when earlier levels of the measure have not been mastered.

In addition to the information included in the Assessment manual, many useful resources are available at the Desired Results Access Project web site: draccess.org

Recommended Practices for Using the DRDP (2015) with Children with Physical Disabilities

1. Become knowledgeable about the child's physical disabilities

- Type and level of physical disabilities
- Gross and fine motor skills
- Recommended assistive technology and augmentative or alternative communication devices
- Physical disability with additional disabilities

2. Support the child's language and communication skills

- Be familiar with the child's home language
- Obtain the child's full attention
- Give the child time to respond to a question before repeating it
- Give the child ample opportunity to use an AAC device and make sure positioning is appropriate
- Provide concrete experiences for the child to develop and demonstrate understanding of the meaning of words and what they represent
- Check frequently for understanding

3. Optimize the environment for observation

Optimize accessibility

- Make sure the child has and uses recommended assistive technology
- Provide required supports to optimize the child's participation in activities
- Adapt materials as needed to promote the child's functional use of fine motor manipulative skills

Optimize positioning

- Provide appropriate seating to promote the child's optimal functional positioning in activities
- Make sure the child's back is to the window or light source
- Provide preferential seating in groups

Optimize physical access

- Make sure that the physical environment is safe, accessible, and predictable
- Provide opportunities for the child to engage in gross locomotor movement activities
- Provide opportunities for the child to engage in gross motor manipulative activities
- Provide opportunities for the child to engage in fine motor manipulative activities
- Organize the environment to facilitate peer interactions

Optimize visual access

- Minimize visual distractions to optimize participation and engagement

- Arrange the environment to support visual access
- Use visual schedules

Optimize auditory access

- Minimize auditory distractions to optimize participation and engagement
- Create quiet spaces and activities
- Promote the child's participation in conversations with peers in group activities

4. Rating the measures of the DRDP (2015)

- Determine mastery
- Identify interests and preferences
- Be aware of prompt dependency

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1 Become knowledgeable about the child's physical disabilities

- Type and level of physical disabilities
- Gross and fine motor skills
- Recommended assistive technology and augmentative or alternative communication devices
- Physical disability with additional disabilities

Type and level of physical disabilities

To make accurate observations for the DRDP (2015) the assessor must be familiar with the child and must locate and understand information about the child's type and level of physical disability and subsequent influence on the child's skills. This includes reviewing reports by the child's physical therapist, occupational therapist, speech and language pathologist, and teacher(s) credentialed in physical and health impairments (PHI) and/or early childhood special education (ECSE) and gathering information from the family and others who care for or know the child well.

Physical disabilities may affect (a) gross motor skills (i.e., head control, sitting, standing, and locomotion), (b) fine motor skills (i.e., grasping, releasing, and manipulating objects), and (c) oral-motor skills (i.e., eating, swallowing, producing sounds, and speaking). A physical disability may also influence the functioning of one or more body parts (such as the face, arms, legs, and/or trunk). There are many different causes of physical disability (e.g., arthritis, cerebral palsy, muscular dystrophy, and spina bifida). Cerebral palsy (CP) is the most common motor disability in childhood (Centers for Disease Control and Prevention, 2016).

Muscle tone

Normal muscle tone allows the muscles to efficiently shorten and lengthen in order to provide the right amount of muscle tension needed to promote ease and success with accomplishing everyday activities. Children with physical disabilities may present with one of the three main types of muscle tone conditions:

- **Hypotonia (low tone)** refers to not enough tension in the muscles, which may result in reduced or lack of postural stability, decreased strength, reduced endurance, and excessive range of motion. Children may appear floppy and weak. Children may have difficulty with grasping and pushing with their fingers as well as assuming and maintaining upright postures such as sitting or standing. They may also have difficulty sustaining sounds when crying or talking. Hypotonia occurs in children with various diagnoses including muscular dystrophy, Down syndrome, Prader–Willi syndrome, or ataxic cerebral palsy.
- **Hypertonia (high tone)** refers to too much tension in the muscles, which results in reduced mobility and decreased range of motion. Children with hypertonia have movements that are jerky and stiff and have difficulty assuming and maintaining postures that go against gravity, such as sitting, creeping, and standing. Children with hypertonia are typically diagnosed with spastic cerebral palsy. In children with spastic hemiplegia, one side of the body is affected. In spastic diplegia, the legs are primarily affected, but the trunk and arms may also be involved. In spastic quadriplegia, all four extremities and the trunk are involved.
- **Fluctuating muscle tone** occurs when muscle tension is not consistent resulting in shifts between too much tension and not enough tension. For example, when the child is at rest, the muscles may be hypotonic but an attempt at voluntary movement will usually trigger increased muscle tone. Athetoid cerebral palsy is the most common type of motor disability in which fluctuating tone occurs. Involuntary facial movements (mouth opening and closing and the tongue moving in and out) are often related to fluctuating muscle tone.

Oral motor difficulties

Oral motor difficulties can be caused by a disruption in the message that the brain sends to the muscles of the mouth. Low or high muscle tone can result in challenges controlling the lip, tongue, cheek, or jaw muscles and lead to difficulty in lip closure, chewing, swallowing, controlling drooling, and producing intelligible speech. Additional difficulties can occur such as problems drinking from a straw or cup, removing food from utensils, or moving food around the mouth while eating. However, children with physical disabilities vary in their oral motor skills. Some children have no oral motor involvement and develop typical speech, while other children are unable to produce speech. In between these two extremes there are children with a range of needs and skills.

Level of physical disability

Physical disability may alter muscle control, coordination, balance, dexterity, and strength. The degree of physical disability may range from having a mild to a severe impact on a child's gross motor skills, fine motor skills, oral motor control, self-care, or communication skills. (Please see the appendix for the range in gross and fine motor skills). Difficulties with oral-motor control or hand movements may affect communication and speech skills. Assessors should be aware of how the level of physical disability influences the child's skills and determines the types of adaptations that should be in place to support the child. In the case of a child with a severe physical disability, assessors should identify the part(s) of the body over which the child has the most control so that the child's voluntary movements may be observed and materials and devices can be offered and positioned accordingly.

Gross and fine motor skills

Information from the child's family and educational team as well as careful observation are essential for assessors to obtain an accurate picture of an individual child's gross and fine motor skills and their influence on other areas of development. This includes any alternative response modes that an individual child may use to demonstrate mastery of a skill, for example, making marks on paper by moving the head with a marker attached to a head pointer.

Note: The quality of a child's movements is important when planning for a child's instructional programming; however, these characteristics are not considered when rating for mastery of a given skill on the DRDP (2015). When observing a child with a physical disability, it is important to consider the construct being measured, which may be demonstrated in a different manner than is described by the examples. For example, Ricky takes several minutes to slowly move his wheelchair with frequent stops and starts to complete an obstacle course on the playground. Ricky moves his wheelchair in this manner consistently in this activity and in other activities. These examples suggest mastery on two measures: *PD-HLTH 2: Gross locomotor movement skills* at an Integrating Earlier level (combines a variety of locomotor movements and moves effectively across a range of activities), and *PD-HLTH 9: Active physical play* at an Integrating Earlier level (seeks to engage in active physical activities or play routinely, with increased intensity and duration).

Ongoing observations of a child's participation in a daily routine provide assessors with opportunities to rate several measures on the DRDP (2015). For example, during lunch, Delia always buckles her seat belt as she sits in the adaptive chair. When asked what she wants to eat, Delia touches one picture to make a selection from an array of four options that the adult offers on a tablet. She uses an adaptive spoon to scoop food from an adaptive bowl and feeds herself. She consistently holds a banana with one hand and pulls the peel with the other when an adult begins the peel, and she uses both hands to hold and drink from an adaptive cup. With physical prompting to scoop, she uses a large serving spoon to serve herself beans from a large bowl that an adult holds and tips. Delia takes a cloth napkin and wipes her mouth when an adult offers a napkin. If observed consistently over time and across different situations, these behaviors could inform the ratings on the following six measures.

- *LLD 2: Responsiveness to language* at a Building Earlier level (responds to one-step requests or questions that involve a familiar activity or routine). Delia uses a communication board to make a choice when an adult asks her to do so. She wipes her mouth with a cloth napkin when asked to do so.
- *LLD 3: Communication and use of language (expressive)* at the Exploring Middle level (uses a variety of single words to communicate). Delia touches the picture of specific foods when asked what she wants to eat.
- *PD-HLTH 4: Fine motor manipulative skills* at the Building Middle level (manipulates objects with both hands doing different movements). Delia holds the banana and peels it after the adult starts the peel. This behavior

demonstrates mastery at a higher level than the Exploring Later level (uses both hands to hold and drink from cup with some spilling).

- *PD-HLTH 5: Safety* at the Building Earlier level (follows basic safety practices, with close adult supervision). Delia sits in her adaptive chair and buckles her seat belt.
- *PD-HLTH 6: Personal care routines: Hygiene* at the Building Earlier level (carries out some steps of own hygiene routines, with specific adult guidance or demonstration). Delia wipes her mouth with the cloth napkin that she takes from the adult.
- *PD-HLTH 7: Personal care routines: Feeding* at the Building Earlier level (feeds self a wide variety of food using a spoon, fork, and an open cup). Delia scoops soft foods, feeds herself, and holds a cup with both hands and drinks from it. She requires physical guidance to scoop beans with a large serving spoon while the adult tips and holds the serving bowl, so this behavior does not yet demonstrate mastery of PD-HLTH 7: Personal care routines: Feeding at a Building Later level (serves self or others by scooping or pouring from containers).

Remember, a child cannot be rated confidently on a measure based on only one observation—one sample of behavior does not provide enough information. To confidently rate a measure, we need to observe the child in a variety of different settings and tasks and/or collect observations from other people in the child's life.

Children who do not have one or both hands or legs may still be rated as demonstrating mastery by using other body parts or prosthetic devices to perform the target skill. For example, Teresa uses an elbow to keep the banana on the tray while peeling it with her mouth. This behavior demonstrates *PD-HLTH 4: Fine manipulative skills* at the Building Middle level (manipulates objects with both hands doing different movements). This is an example of the adaptation "Alternative Response Mode," in which the child demonstrates a skill in a unique way.

Recommended assistive technology and augmentative or alternative communication devices

According to the 2004 Individuals with Disabilities Education Improvement Act (IDEA) 20 U.S.C.1400 §1401(B), assistive technology (AT) is any commercial, individualized, or homemade item, piece of equipment, or system that is used to support the functioning of a child with a disability. AT includes low-tech materials (e.g., Velcro straps, adaptive spoons, pictures) and high-tech equipment (e.g., computers and power wheelchairs) and are examples of assistive equipment or devices, one of the seven categories of adaptations identified for the DRDP (2015).

See the short glossary at the end of this guidance for definitions of selected terms.

When there are concerns, teachers and early interventionists should identify local resources, including school district and community professionals who are qualified to do the following:

- evaluate a child's need for AT,
- identify and help obtain appropriate devices,
- provide training for communication partners (adults and children) in the case of augmentative and alternative communication systems, and
- help evaluate the effectiveness of the AT on the child's learning.

The Resources section at the end of this guidance provides websites with information on AT. Once a child obtains recommended AT, it must be used consistently in order to promote the child's learning outcomes. Teachers should know how to use and maintain assistive devices and where and when to seek help as needed. Research has found that the use of AT is associated with improvements in young children's social, cognitive, communication, adaptive, motor, and literacy skills. However, these studies also indicate that a primary reason for the non-use or inconsistent use of recommended AT is related to the lack of sufficient training for teachers and parents to become competent and confident in using the devices (Dunst, Trivette, Hamby, & Simkus, 2012).

Augmentative and alternative communication (AAC) is one type of AT. Use of an augmentative or alternative communication system is also an adaptation for the DRDP (2015). Augmentative communication supplements difficult to understand or limited speech. Alternative communication provides a means of communication for children who do not

have spoken language. However, the same types of systems are used for both.

Manual signs for key words. For all young children, including those with disabilities, moving the arms and hands to produce signs is easier than producing speech. The use of selected key word signs can facilitate vocabulary development and communication in children with language delays (Lederer & Battaglia, 2015). Producing signs to highlight one or two key words in a sentence is different than signing an entire phrase or sentence in American Sign Language or Signed English. Some children with physical disabilities may use manual signs for key words for expressive communication if they have sufficient control over arm and hand movements to do so. Assessors should be aware of any sign approximations that a child may produce, for example, patting the chest to communicate "want". Some children may use very subtle movements such as a slight hand movement for "yes."

Visual communication. Pictures or photographs may be used for receptive and expressive communication. How the pictures are displayed and how the child will refer to them must be considered to create an effective means of communication for an individual child with a physical disability. For example, Michael has the most control over his eye gaze and uses it as a means of communication. His teacher sits across from him and holds up a piece of clear Plexiglass on which two pictures about 6 inches apart are attached. Michael looks at the picture representing his choice. Looking through the Plexiglass allows the teacher to monitor Michael's eye movements and identify his choice.

Voice output communication devices. Voice output communication devices include speech-generating devices (SGDs) or an app on a tablet that generates messages in spoken language to help young children's expressive communication. They should be individualized so the child is able to activate them. For example, the size of a picture on an app or the placement of a switch (e.g. under the hand, foot, or side of the head) may be important to enable use of the device. The child must have the motor control necessary to use the system and must also be able to understand the speech output. Also, he or she must learn to use the device for communication rather than as a sound-making toy. Assessors should remember that a voice output system may not be the preferred way for some children to communicate as they may much rather just vocalize or use gestures. These children will need encouragement to use their voice output system to make their communication understandable across people and settings. If a child uses a SGD, as with any adaptation, it must be available and used consistently across all environments, including early education settings and at home.

Children with physical disabilities may require a variety of supports to facilitate engagement in activities. When observing children with physical disabilities for the DRDP (2015), assessors must make sure that the required adaptations or supports that have been identified by the IFSP or IEP team are in place. These may include (a) methods of communication other than speech (such as pictures or communication devices) that allow a child who is unable to use spoken language to communicate with others, and (b) AT (assistive technology equipment or device) that helps the child to move and participate in activities.

Supports may include the following:

- AAC devices (e.g. pictures or voice output systems)
- AT devices such as
  - prostheses (e.g., artificial devices that function as limbs)
  - orthotics (e.g., braces, splints, shoe inserts)
  - mobility devices (e.g., walkers, wheelchairs)
  - adaptive equipment (e.g., corner chairs; standers; tricycles with head, seat, and back support and foot-pedal straps) or
  - writing aids (e.g., built up handles for grasping)

Physical disability with additional disabilities

Some children have a physical disability and also additional disabilities. In these cases, the assessor and other service providers must become knowledgeable about the child's physical disability and overall development as well as the child's additional disability. Children who have a physical disability that is caused by neurological damage (e.g., cerebral

palsy) are at risk for co-occurring disabilities, including visual impairment, hearing loss, cognitive disabilities, and autism spectrum disorders (Bottcher, 2010; Centers for Disease Control and Prevention, 2016; Christensen et al., 2014; Dufresne, Dagenais, & Shevell, 2014; and Dutton, McKillop, & Saidkasimova, 2006). In order to provide optimal learning opportunities and obtain accurate information about children's skills and abilities, assessors must collaborate with relevant members of the child's educational team and implement adaptations or strategies specific to the additional area(s) of disability as well as those specific to the physical disability.

2 Support the child's language and communication skills

- Be familiar with the child's home language
- Obtain the child's full attention
- Give the child time to respond to a question before repeating it
- Give the child ample opportunity to use the AAC device and make sure positioning is appropriate
- Provide concrete experiences for the child to develop and demonstrate understanding of the meaning of words and what they represent
- Check frequently for understanding

Children should be involved in communication opportunities during all aspects of the daily routine. Adults should encourage the use of appropriate and responsive interaction strategies and ensure that the child understands what is happening in the environment. Strategies to help a child engage in communication should be in place when assessing a child with physical disabilities on all measures of the DRDP (2015) and are particularly important for the language and literacy measures. Furthermore, the child's primary mode of communication (i.e., speech in English or a home language, or AAC) must be used when observing the child's language and literacy skills.

Be familiar with the child's home language

Some children with physical disabilities may be dual language learners because they are learning English at school and use another language at home. Children with physical disabilities, like all children, may come from homes where a variety of languages are used. The assessor must know what language(s) is used in the child's home, know what language the child uses and understands, and be able to communicate with the family about the home language to understand the impact of this language on the child's communication. If a child is a dual language learner, he or she may benefit from speech output and printed words in the home language on AAC devices both at home and school. To ensure family–professional communication and collaboration, the educational team must develop a plan for communicating with family members in those situations where the home language of the child's family is other than spoken English. Communication with the parents of young children with physical disabilities is crucial and may require the services of a qualified interpreter.

Note about ELD measures: The English Language Development (ELD) Domain of the DRDP (2015) is designed for use with preschool children whose home language is a *spoken* language other than English. If the child is Deaf or Hard of Hearing and not learning a spoken language, mark "No" and do not complete the ELD measures.

Obtain the child's full attention

This includes visual (i.e., being in a position where the child can easily see the speaker while maintaining a stable and symmetrical position) and auditory attention (i.e., calling the child's name and waiting for the child to respond) before speaking to the child. During classroom observations of group activities, the assessor should obtain the child's attention, call the child's name, face the child, and maintain proximity of 3 to 6 feet when speaking to him or her. Assessors should *not* position themselves where it is likely to be physically difficult for the child with a physical disability to turn toward

and attend to them or where the action of turning to face the assessor will disrupt the child's efforts to maintain postural stability. When observing infants and toddlers with physical disabilities during home visits, it is important to make observations when caregivers are face-to-face with children and at their physical level, (e.g., sitting in a chair facing a child in a high chair or lying on the floor when the child is positioned on the floor) to help focus attention.

Give the child time to respond to a question before repeating it

When asking questions, give the child sufficient time (at least 5 seconds) to respond before repeating the question. Children with physical disabilities may need more time to process verbal information and to respond. It takes additional time and physical effort for the child to produce a spoken or gestural response or to respond using an AAC device. Assessors should recognize that when children take more than expected time to respond, this does not necessarily indicate that they do not understand questions or directions. However, if the child does not seem to understand and respond to a question after sufficient "wait time," consider restating the question in a slightly different way; for example, "Which one do you want?" could be reworded as "Do you want this one or this one?" adding a visual prompt by showing the child the two options. Also observe the individual child's nonverbal communication behaviors; for example, some children with physical disabilities may communicate interest or excitement by grimacing or increasing muscle tension. Be aware of a child's alternative response mode; for example, a child may express "no" by moving his head back rather than shaking it side to side. A young child may only be able to attend to one action, communication exchange, or person at a time. Adults should identify specific strategies to encourage a child's responses to interactions and should understand that a child may need more time or may need prompts (visual, auditory, or tactile) to shift attention to the speaker.

Give the child ample opportunity to use the AAC device and make sure positioning is appropriate

A child's AAC device must always be available and placed so it is easy for the child to use. The child should also be positioned appropriately. It takes both physical and cognitive effort to initiate communication using an AAC device, so a child needs frequent and meaningful opportunities to use the device and sufficient time to respond. In addition, the child's communication partners must be familiar with how to use the child's AAC.

Provide concrete experiences for the child to develop and demonstrate understanding of the meaning of words and what they represent

Children with physical disabilities will need experience and time handling and manipulating objects in order to understand descriptive words or categories. For example, before expecting children to understand certain concepts such as prepositions (e.g., "in," "on," "under," "beside," or "behind"), they must have actual physical experiences to develop an understanding of what these words mean. These concepts may be more easily developed by children's experiences with moving their bodies in certain positions (e.g., sitting "on" a bench), then having opportunities to place an object "on" a bench, before being expected to identify a picture or drawing of an object "on" a bench or explain the word "on."

Check frequently for understanding

The child may be focused on watching or manipulating materials during an activity and may not be following conversations or listening to accompanying auditory information. Some children may also be distracted by other sounds in the environment while they are observing an activity or manipulating materials. Consequently, children may miss some elements of spoken instructions or conversations. It may appear that a child is not attending, understanding, or able to follow instructions. As a result, teachers may need to check frequently to determine if a child understands what is said. One strategy is for the assessor to ask the child a question to determine whether the child has heard and understood information or a direction that is being given, such as asking a child, "What happens next?" It is important that children have access to information and communication and that their individualized communication modes are in place and utilized (e.g., speech, gestures, pictures, real objects, or AAC).

3 Optimize the environment for observation

- Optimize accessibility
- Optimize positioning
- Optimize physical access
- Optimize visual access
- Optimize auditory access

Optimize accessibility

- **Make sure the child has and uses recommended assistive technology:** To obtain an accurate assessment of the child's skills, assessors should make sure that all recommended AT is in working order and is available to and used by the child.
- **Provide required supports to optimize the child's participation in activities:** In addition to providing the required AT and AAC, there are strategies to facilitate children's participation and engagement. These include:
  - using the child's interests and preferences to motivate attention and participation, such as offering a favorite toy or activity;
  - providing a visual sequence of pictures illustrating an activity so the child can anticipate what will occur; for example, showing what will happen after snack;
  - eliminating environmental distractions so the child can attend to an activity;
  - using natural consequences to reinforce participation; for example, the child receives a requested object;
  - using first/then cards to sequence high and low preference activities; and
  - tailoring the duration and pacing of activities to fit the child's attention, understanding, and stamina.
- **Adapt materials as needed to promote the child's functional use of fine motor manipulative skills:** Simple adaptations to the materials in all activity areas (e.g., art, literacy, manipulatives, and pretend play) of the classroom will support a child's fine motor movements. These include:
  - placing materials on a tray with edges so the child can locate what is needed for the activity;
  - adding Velcro to handles of brushes or markers or build them up with duct tape for the child who has difficulty grasping;
  - providing nonslip shelf liner to keep materials in place for a child's manipulation;
  - using objects with magnets (e.g., letters and shapes) so a child can slide them if grasp is difficult; and
  - attaching a small, plain hair clip at the lower right corner of pages to help a child turn them.

  For additional suggestions on adaptations, refer to the DRaccess adaptations gallery and other websites about AT listed under the Resources section at the end of this guidance.

Optimize positioning

- **Provide appropriate seating and positioning to promote the child's optimal functional positioning for activities:** Ensure that the child is positioned to normalize muscle tone and stabilize his or her body. Children should be in comfortable, stable, and symmetrical positions. For example, when seated, the child's pelvis should be in the center of the seat and against the back of the chair; the hips, knees, and ankles should be flexed approximately 90 degrees with the feet and ankles positioned slightly under the knees. The feet should be flat with toes pointed forward and supported on a surface. Place a nonslip material (e.g., shelf liner) on the seat to help with proper seating position and place a block of wood or create a footrest using old catalogs wrapped

together with duct tape to support the child's feet if they dangle above the floor. When seated at a table, the child's elbows should rest comfortably on the tabletop. Appropriate seating and positioning create greater opportunities to optimize learning, practice skills, and facilitate interactions, including parallel and cooperative play. Consult with the physical therapist or occupational therapist regarding optimal positions for a child during daily activities.

- **Make sure the child's back is to the window or light source:** Glare interferes with visual attention and a child's reactions may disrupt his or her postural stability. Distractions should be eliminated or reduced whenever possible.
- **Provide preferential seating in groups:** During group activities, a child with a physical disability should be positioned to facilitate social interactions with other children and participation in activities. The child should be seated in a position that enables visual access to the teacher guiding the activity and to the other children in the group. If children are on the floor playing with toys, the child with a physical disability should also be at the same physical level to encourage eye contact, sharing, and turn taking. Using a variety of materials such as wedges, sidelyers, bolsters, beanbag chairs, and other modified chairs may support requirements for positioning. Large beanbags can also assist with positioning. During group activities, observe how a child uses an alternative response mode to interact with and imitate the movement of peers (e.g., by consistently rocking back and forth while other children are jumping).

Optimize physical access

- **Make sure that the physical environment is safe, accessible, and predictable:** Arrange furniture and clear pathways so that children with mobility aids, walkers, or wheelchairs can move independently and safely from one area of the classroom to another. Rugs should be taped down or removed to avoid tripping accidents. Keep doors either completely open or closed. Furniture and equipment within the child's reach should be heavy, stable, and not easily pulled over. Teachers and service providers should collaborate with families to figure out how to make the home environment safe, accessible, and predictable for their infants, toddlers, and preschoolers.
- **Provide time and opportunities for the child to engage in gross locomotor movement skills:** The preschooler should have opportunities to move freely about the classroom and participate in physical activities on the playground and during group motor activities. Similarly, infants and toddlers need opportunities to explore and move around their home. As appropriate for the child's physical abilities, observe how the child moves using different gross motor skills. For example, how does the toddler move around the furniture in the living room at home, and how does a preschooler navigate an obstacle course on the playground? This might include not only specific motor skills but also how the child transitions from one movement to another. Multiple observations of the child over time, in typical routines and across settings, are required to obtain accurate ratings on the DRDP (2015).
- **Provide time and opportunities for the child to engage in gross motor manipulative activities:** The child also needs opportunities to reach, kick, grasp, throw and catch as appropriate for his or her physical abilities. During these observations, make sure required adaptations are in place to support and enable the child's participation; for example, use a slightly deflated beach ball or balloon that is easy for the child to catch, move, or push off a tray. All children can enjoy these types of activities.
- **Provide time and opportunities for the child to engage in fine motor manipulative activities:** A child with physical disabilities may require more time than classmates to manipulate and explore materials, particularly if he or she has difficulty with eye-hand coordination and/or hand use, even if adaptations are in place to enable the child's participation. For example, in preschool, tape paper to a slant board, binder, or table for the child so it stays in place for scribbling or drawing activities. Provide interesting materials (e.g., bubble wrap) that elicit the child's curiosity and initiative to figure out different ways to manipulate them. In home-based settings, assessors should observe the children's manipulation of and interaction with favorite and familiar items at home. All young children benefit from hands-on learning opportunities and communicating with others about what they are experiencing or doing.

- **Organize the environment to facilitate peer interactions:** The physical environment and learning areas should be organized to maximize opportunities for peer interactions throughout the day. Adults may facilitate peer interactions in numerous ways:
  - providing supportive seating so that children are able to engage in the activity by being at the same physical level and in proximity to their peers,
  - offering interesting materials that elicit play and that all children can manipulate,
  - encouraging children with similar interests to play together, or
  - commenting on what one child is doing and inviting another to join in.

Optimize visual access

- **Minimize visual distractions:** Avoid competing light from a window or shadows and movements of people that may distract children who rely on visual information. Eliminate visual clutter that may distract a child's visual attention from a specific item or ongoing activity; for example, remove extraneous materials from the table. The assessor should also have optimal visual access for careful observation of the child's facial expressions, behaviors, and responses.
- **Arrange the environment to support visual access:** Position the child to facilitate his or her view of what other children are doing in the classroom or what family members are doing at home. Computers and play areas should be away from windows or doors that cause glare. Some preschoolers may be able to increase their visual attention if a cardboard study carrel is placed around the computer screen to block other sources of light in the environment.
- **Use visual schedules:** A visual schedule provides a concrete reminder of the daily routine in preschool. Provide easy-to-see photos, drawings, or objects that represent daily activities. Refer to them during transition times and for all daily routines. For example, involve children in removing the picture of an activity that is completed so it is easy to see what activity is next. Adapt pictures (e.g., by gluing a popsicle stick on the edge or a magnet behind the picture) so the child with a physical disability can move them. Pictures illustrating classroom rules and routines also help young children understand classroom expectations.

Optimize auditory access

- **Minimize auditory distractions:** To optimize participation and engagement in learning, provide an environment that minimizes or eliminates background noise such as street or classroom noise, air conditioning, or forced air heating. Eliminate background music in the classroom particularly when the child is focused on listening and speaking. Similarly, families should be informed that television, radio, and other background sounds may interfere with an infant's or toddler's learning to understand spoken language and communication.
- **Create quiet spaces and activities:** Quiet spaces may help a child regulate his or her behavior when overwhelmed or overstimulated by a noisy or large group activity. Quiet activities such as looking at a book, coloring, and sitting at listening stations can assist with self-regulation which in turn can optimize the child's readiness for participation and engagement in learning. The instructional team should collaborate to tailor quiet activities to meet the self-regulation needs of individual children.
- **Promote the child's participation in conversations with peers in group activities:** Position the child so that he or she can see, hear, and interact with other children in the group. Make sure that peers are familiar with the child's AAC and provide time for the child to initiate and respond to conversations.

4 Rating the measures of the DRDP (2015)

- Determine mastery
- Identify interests and preferences
- Be aware of prompt dependency

Determine mastery

A developmental level is mastered if a child demonstrates the knowledge, skills, and behaviors defined at that level consistently over time and in different situations or settings (DRDP, 2015). A level can be rated as mastered even when earlier levels of the measure have not been observed. Measures should be rated at the latest developmental level the child has mastered. For example, for measure *SED 3: Relationships and social interactions with familiar adults*, a child may demonstrate skills at the Integrating Earlier level by working cooperatively with familiar adults to plan and carry out activities but may not demonstrate behaviors at earlier levels such as engaging in extended interactions with adults in a variety of situations (DRDP, 2015). In order to determine the level of performance that the child demonstrates most consistently (mastery), provide multiple opportunities for the child to demonstrate the skill across people, materials, and activities. Assessors should be familiar with any alternative response modes that an individual child may use to demonstrate mastery of a skill.

A child may demonstrate a specific skill at a much higher level within one domain than in other skill areas or domains (i.e., splinter skills). Observations of splinter skills can be used to guide learning objectives in targeting areas that need additional support. If there is a gap between earlier skills and skills that are mastered at later levels, then the child might benefit from opportunities to practice those skills throughout the day but will still have mastery rated at the later developing level.

Identify interests and preferences

It is important to identify a child's preferred objects and activities through conversation with families, observations of the child, or by conducting a preference or reinforcement assessment. A preference or reinforcement assessment is a strategy that can be used to determine the items, activities, and events that are reinforcing for a child (Da Fonte, et al., 2016; Peine, [n.d.]). Use a child's preferred objects and activities to observe targeted skills that are being assessed. Building on a child's interests and preferences is likely to motivate the child's engagement, persistence, and participation so that the child's level of skills is more accurately observed. A child's interest may be used to scaffold an emerging skill. For example, Julie loves songs, so she is more motivated and likely to imitate body movements and identify body parts when her teacher sings "Head, Shoulders, Knees, and Toes."

Be aware of prompt dependency

Assessors should be aware of any verbal or physical prompts that may help to elicit a child's correct response during instruction. Prompted behaviors, however, do not reflect a child's true level of performance when rating the DRDP (2015). Furthermore, a child with a physical disability is not demonstrating mastery if he or she needs a person's physical support such as hand-over-hand assistance or a physical prompt to demonstrate the targeted behavior. Opportunities should be provided for the child to spontaneously and independently demonstrate the target behavior with any needed positioning, AT (assistive equipment or devices), or AAC. During observations for particular skills, it will be important that the child with a physical disability has an opportunity to demonstrate the skill without a prompt or physical support. Remember that prompts are not considered adaptations.

Summary

A physical disability can affect a child's ability to successfully interact and engage in the environment and, as a result, can influence the results of the DRDP (2015) assessment. This guide has provided suggestions for the person completing the DRDP (2015) and what should be considered or in place in order to ensure that the assessment is as accurate as possible. The assessor should obtain information about the child prior to observation by communicating with the family and other service providers as well as reviewing information on the IFSP or IEP and from the child's records. The assessor should also be knowledgeable about the child's type and level of physical disability and use that knowledge to understand the child's behavior in the home or classroom. In addition, the assessor or someone working with the assessor must be able to communicate with the child so that the child will understand and will be understood. It is important that the physical aspects of the environment be optimized in a way that will facilitate the child's participation in activities and the environment for accurate observation.

For more information about the DRDP (2015):

Website: draccess.org
Email: info@draccess.org
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Glossary

Augmentative and Alternative Communication (AAC): Augmentative and alternative communication is one type of assistive technology. Augmentative communication supplements difficult to understand or limited speech. Alternative communication provides a means of communication for children who do not have spoken language. However, the same types of devices do both.

Access: Providing access refers to removing physical and environmental barriers, making adaptations, and providing different ways to promote children's learning and participation.

Adaptation: Changes in the environment or differences in observed child behavior that allow children with IFSPs and IEPs to demonstrate their knowledge and skills in typical environments. Adaptions include (1) changes or modifications to the environment, activities, or materials or (2) recognition of a skill(s) consistently demonstrated in a unique way. For examples of adaptations, see https://draccess.org/adaptations

Assivitve Technology (AT): Assistive technology (also assistive equipment or device) is any item or piece of equipment sold commercially, modified, or created that is used to increase or maintain the functioning of a child with a disability.

Cruises: Holds onto furniture and other physical supports to begin walking.

Key word signs: The use of manual signs to highlight one or two main words in a spoken phrase or sentence. Using key word signs is not the same as using American Sign Language or Signed English because phrases or sentences are not signed.

Prompt: Any assistance provided by another person to assist children in performing a target behavior or task. These include verbal and visual cues, gestures, demonstrations, positional prompts (e.g. placement of the correct item of two closest to the child), and physical guidance.

Prone: Lying on stomach, face down

Reciprocal movements: Alternating movements of opposite sides of the body, e.g., to crawl, an infant moves forward by placing weight on the right hand and the left knee and then switching to the left hand and right knee.

Sidelyer: A piece of equipment that enables positioning of a child to lie on the side of his or her body.

Supine: Lying on back, face up

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Resources

Selected Websites about Assistive Technology

Miami–Dade County Public Schools Office of Exceptional Student Education
Prekindergarten Adaptation Station
prekese.dadeschools.net/adaptationstation.html
Provides descriptions and photos of classrooms materials, instructional strategies, and assistive technology/devices to help children with disabilities access the curriculum. Links to web pages are organized by the following topics:

- Activities of daily living/self-help
- Augmentative and alternative communication strategies
- Books and literacy (shared reading, phonological awareness, and story time)
- Communication tools
- Computer access
- Hearing
- Physical access to play and participation
- Positioning, seating, and mobility
- Prewriting /creative representation
- Positive behavior supports/organization strategies
- Vision

Pacer Center
www.pacer.org
The Pacer Center was established in Minnesota in 1977 as a Parents Helping Parents. It is now a national resource center for parents of children with disabilities. It provides online resources for using assistive technology with young children with disabilities, including:

EZ AT
Assistive technology (AT) activities for children ages 3–8 with disabilities: A guide for professionals and parents (2015)
www.pacer.org/stc/pubs/STC-16.pdf
Describes instructional activities, ways to adapt the activity, and needed technology or materials.

EZ at 2
Simple assistive technology (AT) ideas for children ages birth to two. A guide for increasing young children's participation in activities and daily routines (2011)
www.pacer.org/stc/pubs/EZ-AT-book-2011-final.pdf
Provides photos and descriptions of devices to facilitate a child's participation at home, during meals, playtime, reading, around the community, and special events and places.

Pacer Examples of Assistive Technology for Young Children
www.pacer.org/stc/pubs/STC-29.pdf
Two-page handout describing assistive devices to encourage a child's participation during daily routines and activities and to promote social, fine motor, and communication skills.

Two projects on assistive technology funded by the U.S. Department of Education, Office of Special Education Programs (OSEP):

Center on Technology and Disability
www.ctdinstitute.org
The goal of this center is to increase the capacity of families and service providers to acquire and use effective assistive and instructional technology practices, devices and services. It has a library resource that includes information for early childhood.

Let's Participate
www.letsparticipate.org
This project serves to assist IDEA Part C and B preschool programs to use promising practices in the use of technology with young children with disabilities and to improve child outcomes. It provides AT support examples for participation in daily routines and activities. Funded by the U.S. Department of Education's Office of Special Education Programs (OSEP).

Selected Websites about Cerebral Palsy

Cerebral Palsy Foundation
http://yourcpf.org
An online resource that includes fact sheets, videos, and blogs

Cerebral Palsy Guidance
www.cerebralpalsyguidance.com
An online resource focused on providing information for parents of children with CP, including types of CP, financial assistance, AT and AAC, and other aspects of parenting a child with CP. Includes a blog.

United Cerebral Palsy (UCP)
http://ucp.org
UCP is the oldest and largest nonprofit charitable organization with a network of almost 100 affiliates across the country. It provides services for individuals with CP and other developmental disabilities. Families and individuals may contact local UCP affiliates in their county or state of residence. The local affiliates provide "housing, physical therapy, assistive technology training, early intervention services, individual and family support, social and recreational programs, community living, state and local referrals, employment, employment assistance and advocacy."

Appendix: Range in Gross and Fine Motor Skills

The following sections outline two classification systems, one for gross motor and the other for fine motor skills. They demonstrate a range from mild to severe effects on the motor function of children with cerebral palsy. This information may be helpful in considering the child's functional motor abilities as you plan to make observations for the DRDP (2015).

For infants, toddlers, and preschoolers, the Gross Motor Function Classification System (GMFCS) organizes the range of gross motor skills that children with cerebral palsy may demonstrate by age groups: by 2 years, between 2 and 4 years, and between 4 and 6 years of age (Palisano, Rosenbaum, Bartlett, & Livingston, 2007). The range within each of these age-related descriptions is outlined below. The arrows indicate the continuum from "more control of movement" at the top to "less control of movement" at the bottom.

By 2 years of age:

- moves in and out of sitting and sits on floor with hands free to manipulate objects. Crawls on hands and knees, pulls to stand, and take steps holding on to furniture (cruises). Walks independently between 18 and 24 months old;
- sits on floor, may use hands for balance. Creeps on stomach or crawls on hands and knees. May pull to stand and take steps holding onto furniture;
- sits on floor when lower back supported. Rolls and creeps forward on stomach;
- has head control but needs trunk support to sit. Can roll to supine (back) and may roll to prone (stomach); and
- limited voluntary control of movement. Unable to hold head or trunk up when sitting or lying on stomach. Needs assistance to roll.

Between 2 and 4 years of age:

- sits on floor with both hands free to manipulate objects. Moves in and out of floor sitting and standing without help. Prefers to walk to move around;
- sits on floor but may have difficulty balancing when using both hands to manipulate objects. Can move in and out of sitting independently. Pulls to stand on a stable surface. Crawls on hands and knees with reciprocal movements, cruises holding onto furniture and walks using a walker;
- sits on floor often by "W-sitting" (sitting between flexed and internally rotated hips and knees) and may need adult help. Creeps on stomach or crawls on hands and knees (often without reciprocal leg movements) as main method of mobility. May pull to stand on a stable surface and cruise short distances. May walk short distances indoors using a walker with adult help to steer and turn;
- sits when placed but unable to maintain body alignment and balance without using hands for support. May require adaptive equipment for sitting and standing. Moves independently for short distances in a room by rolling, creeping on stomach, or crawling on hands and knees without reciprocal leg movement;
- limited voluntary control of movement and ability to maintain upright head and trunk postures. All areas of motor function including sitting and standing are limited even with adaptive equipment. Some children may move independently with a powered wheelchair with adaptations.

Between 4 and 6 years of age:

- gets into, out of, and sits in chair without any support. Moves from sitting on floor or chair sitting to standing without any support. Walks indoors and outdoors, climbs stairs, and learns to run and jump;
- sits in chair with both hands free to manipulate objects. Moves from sitting on the floor or chair to standing but requires a stable surface for arms to push or pull up on. Walks short distances, climbs stairs holding rails, and cannot run or jump;
- sits on regular chair but may require support at pelvis or trunk to use hands. Moves in and out of sitting on chair using a stable surface for arms to push or pull up on. Walks using a hand-held walker on level surfaces and climb stairs with adult assistance;
- limited voluntary control of movement and ability to maintain upright head and trunk postures. All areas of motor function including sitting and standing are limited even with adaptive equipment. Some children may move independently using a powered wheelchair with adaptations.

Similarly, the Manual Ability Classification System (MACS) provides the following description of manual skills for children between 1 and 4 years and 4 and 18 years of age:

Mini MACS between 1 and 4 years of age:

- handles objects easily and successfully;
- handles most objects but with reduced quality and/or speed;
- handles objects with difficulty;
- handles a limited selection of easily managed objects in simple actions;
- does not handle objects and has severely limited ability to perform even simple actions (Eliasson, Ullenhag, Wahlström, & Krumlinde-Sundholm, 2017).

MACS between 4 and 18 years of age:

- handles objects easily and successfully;
- handles most objects but with reduced quality and/or speed;
- handles objects with difficulty, needing assistance to prepare and/or modify activities;
- handles a limited selection of easily managed objects in adapted situations;
- does not handle objects and has severely limited ability to perform even simple actions (Eliasson, et al., 2006).

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