Evaluation and Assessment
Accommodations to Consider When Using the Battelle Developmental Inventory, 2nd Edition (BDI-2) for Children with Disabilities

In order to fulfill reporting requirements from the Office of Special Education Programs (OSEP) for child outcome measurement indicators in the State Performance Plan for Part C and Part B, one standardized instrument, the Battelle Developmental Inventory, 2nd Edition (BDI-2), is being used in Florida to evaluate progress as children move through the Early Steps Program, Part C, and the prekindergarten Exceptional Student Education (ESE) Section 619 programs. The BDI-2 is the tool being used to gather entry and exit data on these children.

Using a standardized instrument such as the BDI-2 may be more challenging for young children with specific disabilities. Using appropriate accommodations during the administration of the test will ensure that the scores obtained represent the true abilities and needs of the child and get a more accurate picture of the performance levels (strengths and concerns) of the child. The BDI-2 Examiner’s Manual describes information related to general accommodation strategies and accommodations for populations with specific disabling conditions. These strategies can be applied to a variety of assessment items in the instrument.

It is important to remember that providing accommodations for children with special needs in the testing situation helps these children show what they can do. Accommodations are not meant to make the test items easier or change the scores.

Accommodations for testing:
- Are ways to increase the probability that children with disabilities will receive credit for the skills that they have
- Allow for alternative ways of responding in order to indicate a skill is present
- Are not ways to give credit for behaviors and responses that are simpler than those called for in the test item
- Are not ways to circumvent standard scoring criteria
**Best Practice**
The following are strategies for examiners from the *BDI-2 Examiner's Manual* (pp. 36–41) to assist in making accommodations for children with special needs:

**General Strategies**
- Be knowledgeable about and have a good comfort level with administration of the BDI-2.
- Be knowledgeable about the child’s disability.
- Be aware of the child’s strengths that will support reliable responses or those behaviors that may hinder reliable responses.
- Use information from families to identify what may act as a motivator to facilitate the child’s optimal performance.
- Facilitate an atmosphere of play.
- Keep a record of the accommodations implemented.
- Be cognizant of the test items and the way in which certain accommodations may impact performance and scoring.
- Because very few of the BDI-2 test items are timed, permit the child sufficient time to initiate or complete activities.

**Specific Strategies**

**Motor Impairment**
Many of the tasks on the BDI-2 require motor responses, even though motor skills are not being directly assessed. Therefore, difficulty with motor movements, such as eye-hand coordination or motor control, may negatively impact performance. There may be some tasks that a child just cannot do (i.e., stacking blocks for a child with cerebral palsy who has limited hand movements). Consider using a parent, teacher, or other caregiver to properly position the child or alert the evaluator regarding the child’s communication mode.

**Strategies to use:**
- Note the degree of the child’s head and trunk control.
- Ensure that the testing environment is as non-threatening and calm as possible.
- Position the child to maximize functioning.
- Permit the child to use adaptive seating or other adaptive devices.
- Be aware of the clues that the child uses to make a response, such as eye movement or the initiation of gestures.
- Provide the child additional time to coordinate motor responses, if permitted.
**Vision Impairment**
Visual impairments can range in severity and in the type of visual loss. This will, in turn, affect what type of material the child may use to take the test, including use of regular or enlarged text, braille, and/or recorded materials. Also, children with low visual acuity may experience increased stress as they try to see items. Make sure there are frequent breaks, if needed.

**Strategies to use:**
- Allow for time to establish rapport with the child.
- Set the testing area up to maximize the environment for the child.
- Be aware of lighting, the position of the child in relation to the materials, and supply needed technology, such as magnifiers, slant boards, etc.
- Allow time for tactile exploration of test items.
- Be aware that methods to physically guide children are not intrusive and prepare children for touch.
- Provide clear, detailed directions related to what is being done and what is expected of the child.
- Be aware of any secondary behaviors, such as rocking or eye pressing that may be associated with the loss of vision.

**Hearing Impairment or Deafness**
Loss of hearing significantly impacts the child’s ability to effectively communicate with others and will affect the teaching of cognitive skills or linguistic concepts. The examiner must be familiar with the level of permanent hearing loss, whether it is in one or both ears, the way in which the hearing loss impacts functioning, and the child’s preferred method of communication. The evaluator should also be aware of the possibility of undiagnosed, temporary losses as a result of ear infection, allergies, or other medical conditions.

**Strategies to use:**
- Be knowledgeable about the way the child communicates and receives information, and allow the child to use his/her communication system.
- Use an interpreter if the examiner is not familiar with the child’s primary communication system.
- Obtain the child’s attention, and make sure the child can see the evaluator clearly before each test item is administered.
- Use practice and demonstration trials when indicated for an item.
- Simplify language for assessment prompts if it will not change the test construct or the intent of the item.
- Consider beginning the test at an age younger than the child’s chronological age to establish the basal level, to account for possible language delays for children with hearing impairments.
**Speech Impairment**
Children with speech or articulation issues may or may not have associated language impairments. However, the inability of the child to correctly produce speech sounds, and the inability of the examiner to decipher the child’s meaning, may impact those test items that require a verbal response. Similar strategies to the ones used for children with hearing impairments or deafness may be used.

**Strategies to use:**
- Spend time listening and interacting with the child prior to beginning the evaluation to get a feel for the child’s speech patterns.
- Provide the child the opportunity to use alternate methods of response if test item constructs are not compromised.
- Enlist the assistance of someone who is familiar with the child’s speech patterns (parent, other caregiver, or teacher) to help with the interpretation of the child’s meaning.

**Emotional or Behavioral Disorders**
A child with emotional or behavioral issues will certainly provide a challenge to the evaluator. It is important to gather information from parents, caregivers, and/or teachers prior to the evaluation to determine optimal ways of interacting with the child. Time of day, level of excitement or agitation, or stress of the situation may also impact the child’s behavior.

**Strategies to use:**
- Refer to information provided by the family or caregivers to identify motivators or reinforcers.
- Use positive reinforcement freely, not limiting it to just correct responses.
- Speak in a calm, lowered voice and provide limited distractions. Keep the child’s attention. Consider the use of puppets.
- Avoid pressuring the child to perform.
- Use practice and demonstration trials, when indicated, for an item.
- Allow alternate responses (pointing, drawing, etc.), when acceptable.
- Set limits with clear expectations early in the evaluation session by telling children what to do.
- Plan for multiple sessions if the child cannot maintain performance.
- Be cognizant of the difference between unwillingness, or refusal to perform, and lack of knowledge.
Multiple Disabilities

The BDI-2 Examiner’s Manual indicates that the test can be given to children with multiple disabilities as well as children with a single disability. The use of any strategy for the disabilities listed above can be used for children with multiple disabilities. Although the BDI-2 provides general accommodation strategies for children with special needs, evaluators must use professional judgment when determining which strategies are appropriate for each individual child.

- Evaluators must understand early childhood development and know the child’s skills and abilities as well as ways to optimize the child’s performance.
- In addition, evaluators must understand the construct being measured by test items to be sure that the accommodation does not compromise the integrity of the assessment.
- Evaluators who are unfamiliar with specific disabilities should consult with a specialist in the child’s area of disability, or with others who are knowledgeable about the use of accommodations for specific disabilities during formal assessments.
References and Resources


Note: The SERVE Center is one of ten laboratories providing research-based information and services nationwide. These laboratories form an education knowledge network, building a bank of information and resources shared and disseminated nationally and regionally to improve student achievement. Resources and information are available on a variety of topics for Pre-K programs, including transition, early literacy, and evaluation and assessment. http://www.serve.org/