# Standard 7 Testing and Assessment



### Standard 7 requires the student:

- A. Be familiar with formal methods of testing.
- B. Be familiar with informal assessment strategies.
- C. Understand how to prioritize skills for an IPP/IEP.

### Key Terms for Standard 7:

Assessment: The formal or informal process of systematically observing, gathering, and recording credible information to help answer evaluation questions and make decisions. A test is one method of obtaining new information within the assessment process. Assessment data may also include observations, interviews, medical reports, data regarding the effects of general education modifications and interventions, and other formal or informal methods.

Reliability: Refers to the extent to which an instrument is consistent in measuring whatever it purports to measure.

Validity: Refers to the extent to which a test measures what it is supposed to measure; in other words, validity concerns the content of the test.

# A. Be familiar with formal methods of assessment.

Different types of assessments offer different types of information. Assessment techniques should be selected according to the purpose of the assessment. Assessments are typically used to gain information for the purpose of screening, eligibility, program development and planning, and evaluation (Browder, 1991).

There is sometimes confusion regarding the terms "assessment" and "testing." While they are related, they are not synonymous. **Testing** is the administration of specifically designed and often standardized educational and psychological measures of behavior and is a part of the assessment process. **Assessment**, also know as evaluation, can be seen as a problem-solving process that involves many ways of collecting information about a child. This information gathering process may include observations, interviews, examining school or agency records, reviewing medical histories, using checklists, evaluating environmental requirements, evaluating the child's type and rate of learning, and using task analysis to identify task components already mastered and in what order unmastered skills need to be taught (Waterman, 1994).

It is important to remember that the assessment process should use a team approach. It should involve families and qualified professionals who use a variety of sources to gather information about a child's strengths and needs.

## The team should design the assessment process to:

- Be age appropriate
- Consider the child's language and motor skills
- Be racially and culturally non-discriminatory
- Be conducted in environments that are comfortable and familiar to the child,
   and
- Reflect the current functional status of the child (DD Guidelines , p. 8)

### **Determining Eligibility**

The Developmental Disability Determination Guidelines based on Idaho Code 66-402 provides a definition of who is determined to have a developmental disability and eligible to receive developmental therapy.

A developmental disability means a chronic disability:

Which appears before the age of twenty-two (22) years of age, and

- Is attributable to an impairment, such as mental retardation, cerebral palsy, epilepsy, autism or other condition found to be closely related to or similar to one of these conditions, or is attributable to dyslexia resulting from such impairments; and
- Results in \*substantial functional limitations in three (3) or more of the following areas
  of major life activity: self-care, receptive and expressive language, learning, mobility,
  self-direction, capacity for independent living, or economic self-sufficiency; and
- Reflects the needs for a combination and sequence of special, interdisciplinary or generic
  care, treatment or other services that are of life-long or extended duration and
  individually planned and coordinated.

\*Substantial functional limitations are considered to be present when scores of in the applicable areas are two or more standard deviations below the norm. A score of two standard deviations below the mean creates a presumption of functional limitation for persons age 3 and older.

A screening is very broad and quickly administered. It is designed to determine whether a child should be referred for further testing. Screening tests such as the Denver Developmental Screening Test (DDST) (Frankenburg, Dodds, & Fandal, 1975) cover a variety of domains such as personal and social, fine and gross motor, language, and self-help development. Screening measures are not used to determine developmental therapy objectives. Instruments designed only for screening purposes should not be used to determine eligibility.

### Norm-Referenced Tests

Formal tests used for eligibility purposes include **norm-referenced tests**, which provide comparisons of a child's skill level with expected levels based on a comparison group. Norm-referenced tests generally yield a numerical score, such as a developmental age or a standardized equivalent.

The Department of Health and Welfare has recommended a variety of standardized test instruments that can assist in determining eligibility for developmental therapy services. It is noted that, "Tests used to determine a developmental disability must reflect the current functional status of the individual being evaluated. Tests over one year old must be verified as to reflect the current status of the individual by an appropriate professional" (DD Guideline cite, p. 6).

### **IDEA**

One of the cornerstones of the IDEA's evaluation requirements is that it is inappropriate and unacceptable to base any eligibility or placement decision upon the results of only one procedure [34 Code of Federal Regulations (CFR) §300.532(d)]. The child must be assessed "in all areas related to the suspected disability, including, if appropriate, health, vision, hearing, social and

emotional status, general intelligence, academic performance, communicative status, and motor abilities" [34 CFR §300.532(f)].

In Idaho a child's evaluation team in a school or a DDA must use the DD State Eligibility Criteria for categorical eligibility to determine eligibility for developmental therapy reimbursed through a Medicaid Provider Agreement.

A child may be eligible for special education services which are listed in Chapter 3 of the Idaho State Special Education Manual (<a href="www.sde.state.id.us/SpecialEd/">www.sde.state.id.us/SpecialEd/</a>), but they are not eligible for developmental therapy because they do not meet one or more or the requirements for services. For example, a child with a learning disability may qualify for special education services under IDEA but not qualify for developmental therapy through Medicaid. In another instance a child with multiple disabilities may qualify for both special education and Medicaid reimbursed school services. Each child's eligibility for developmental therapy needs to be assessed individually.

### Things to remember about norm-referenced tests

Although a team may use a norm-referenced test to make eligibility decisions these kinds of tests have little use for identifying program and service needs. First, few if any norm-referenced tests include children with developmental disabilities in their normative samples. Often, and for a variety of reasons, children with developmental disabilities don't exhibit behavior that could be scored at the lowest level on a norm-referenced test. Infant IQ tests may then be administered which are not age appropriate and focus more on a child's perceptual and motor skills.

Additionally, IQ tests are designed to measure cognitive abilities that include academic facts (e.g., numbers, abstract verbal and pictorial symbols) that many children with developmental disabilities may not have at the time the test is given. A child with multiple disabilities is also at a disadvantage because various neural, sensory, and physical disabilities can interfere with his or her performance on the test (Brown & Snell, 2000).

### Developmental Tests

Developmental tests give information on how a child functions in various skill areas and may provide direction for the next skills to be taught. Test items are usually written in observable terms, so the presence or absence of a skill can usually be determined reliably. When used for program planning, the items that a child can and cannot do are determined. The first items that a child cannot do may be targeted for intervention if the team and the child's family determine that those are the areas in which the child should acquire skills at that time.

# The DS should keep in mind that there are several issues regarding developmental tests:

- Using a developmental approach assumes that the sequence for typical children is appropriate for children with developmental disabilities. A child with a disability may develop in a different sequence, and the relationship among skills may be different.
- The child's disability may impact the necessity of teaching one skill but not another. For example, although head control is a prerequisite for normal walking it is not a prerequisite for using a motorized wheelchair. Although a child might fail the head control item on a test, the test should not stop probing higher-level gross motor skills. If a child is given the appropriate adaptations he or she might score on additional skills.
- A developmental approach also assumes that certain behaviors are necessary in a child's repertoire before other behaviors can be acquired. The results of a test might lead the team to design instruction that is neither age-appropriate nor functional for the child. These kinds of results can also impact a team's expectations of a child (Brown & Snell, 2000).

The DS needs to remember that skills should never be targeted in isolation but be related to functional activities. For example, grasping is an important skill for interacting with the environment. However, grasping has little meaning if not related to other skills or within the context of a functional routine. A child can learn to grasp a hairbrush during a grooming routine, a spoon during snack time or a toy during playtime. Skills only begin to have meaning if they are connected to objects and people in a child's environment (Browder, 1991).

### Criterion Referenced Tests

A criterion-referenced test compares a child's performance to a predetermined level of mastery (criterion). Some criterion-referenced tests assess multiple domains such as those used to assess adaptive behaviors. Adaptive behavior is defined as "the effectiveness or degree with which individuals meet the standards of personal independence and social responsibility expected for age and cultural group" (Grossman, 1983, p.1). Tests of adaptive behavior are usually checklists that measure an individual's functioning in daily environments. They look at domains such as independent functioning, physical development, economic activity, language development, numbers and time, prevocational or vocational activities, self-direction, responsibility, and socialization (e.g., Adaptive Behavior Scale-School, second edition) (Lambert, Nihira, & Leland, 1993).

There are also criterion-referenced measures that assess a single domain (e.g., social functioning in integrated community environments). This kind of test would include different categories or functions that are identified to represent skills involved in social interactions.

Criterion-referenced tests tend to be more relevant to the daily lives of individuals with disabilities. They can, together with other measures, help a child's team identify functional skills and areas to be addressed in an IPP or an IEP.

### Reliability and Validity

Reliability refers to the extent to which an instrument is consistent in measuring whatever it purports to measure. If a test is repeated within a short period of time, the child should receive the same score or rating. Reliability does not address "what" the student is learning, only its consistency. The DS should keep in mind that a test might reliably measure a particular skill across time (consistency) and two evaluators may agree that the child has learned the skill (interrater reliability) but that does not mean that the skill is functional for the child.

Test validity refers to the extent to which a test measures what it is supposed to measure; in other words, validity concerns the content of the test. A test lacks validity if it measures irrelevant information. It is important to remember that test items may need to be adapted for students with sensory or movement disabilities so that the child's disability does not prevent testing the child's ability on a particular test item (Brown & Snell, 2000).

# B. Be familiar with informal assessment strategies.

### Person-Centered Planning

Person-centered planning is an informal assessment process that gathers information directly from the child with the disability and his or her family and friends. It is this "circle's" hopes and dreams that direct the child's program and supports. Kincaid (1996) suggests that personcentered planning activities share a commitment to seeking five essential goals in an individual's life:

- 1) Being present and participating in community life.
- Gaining and maintaining satisfying relationships.
- Expressing preferences and making choices in everyday life.
- 4) Having opportunities to fulfill respected roles and to live with dignity.
- 5) Continuing to develop personal competencies.

One of the most widely used person-centered planning tools is MAPS (McGill Action Plans) and Personal Futures Planning. MAPS (Vandercook, York, & Forest, 1989) involve having a child's family, friends, and non-disabled peers participate in one or more planning sessions.

In a MAPS session individuals discuss questions including:

- What is the child's history?
- What are your dreams for the child?
- What is your nightmare for the child? (e.g., fears about the future)
- Who is the child? What does he/she like and dislike?
- What are his/her strengths, gifts, and abilities?
- What are his/her needs?
- What would an ideal day for the child look like?
- What do we need to make this ideal real?

Other maps (e.g., communication system) can be added to assist the group in developing the child's program. MAPS serves as a guide for the child's team to identify critical areas of focus that are important for the child and the family. At the conclusion of the session the group develops an action plan. Sometimes the session has helped clarify and prioritize a child's IEP goals/objectives. Members of the MAPS session may take on the responsibility of completing certain tasks that are part of the implementation plan. Ideally, the group would meet on a regular basis to evaluate the child's progress and developing additional action plans. A series of maps is an ideal way to introduce a child to a new DS or paraprofessional.

### **Ecological Inventories**

"Ecological inventories are assessments of the activities performed in, and skills required by, a given environment" (Browder, 1991, p. 12). For example, an ecological inventory of eating in the school cafeteria with other students may reveal that skills needed to eat lunch involve standing in line, paying for lunch, getting a tray, choosing lunch items, etc. The following life domains provide the framework for this kind of assessment strategy.

### They include:

- 1) Community street crossing, using public transportation
- 2) Recreation participating in activities in the community
- 3) Vocational skills involved in gaining employment

- 4) Domestic self-care, cooking
- 5) School eating in a cafeteria, using a locker

This kind of strategy has been referred to as a "top-down" approach (Brown, et al. (1979) to skill building. An ecological inventory begins with the requirements of independent functioning within a particular domain in current and future environments. This process identifies skills that are functional and meaningful for the student. "This kind of assessment differs from the developmental approach, in which instructional objectives are chosen from the bottom up, starting with skills normally performed by infants and proceeding to those more advanced" (Brown & Snell, p.90).

Brown et al. (1979) describes five phases of the ecological inventory process:

- 1) Identify the curriculum domains (e.g., domestic).
- 2) Identify and survey current and future natural environments (e.g., house).
- 3) Divide the relevant environments into subenvironments (e.g., kitchen).
- 4) Inventory these subenvironments for the relevant activities performed there (e.g., set table, wash and dry dishes).
- 5) Determine the skills required for performance of the activities.

An ecological inventory is valuable in identifying the obstacles and supports that a child needs to participate in an activity. A child may require different adaptations and supports in one environment, but not in another.

There is not a single format for completing an ecological inventory. Inventories should be individualized to assess the variables that are important for the child. Some inventories simply score a child's performance by checking "yes" or "no." Other inventories look at performance levels (e.g., assist on most steps, assist on some steps, independent) specific skills that are relevant to the child (e.g., has related social skills, make choices, terminates activity, communicates).

An ecological inventory needs to identify the observable activities and skills that are associated with competent performance as well as additional related skills. Certain things such as communication and motor skills may be obvious components of an activity but other skills (e.g., making eye contacts) are more subtle skills that need to be included in a sequence. "Although not always critical to the performance of the routine, these behaviors may nonetheless be crucial to socially appropriate performance of an activity" (Brown & Snell, p. 100).

### C. Understand how to prioritize skills.

There are hundreds of skills and activities identified in an assessment process that are relevant for a child. But, it is not possible to teach every skill. Following the assessment process a team must decide which skills and activities should become part of the IPP or the IEP. Prioritizing skills and activities is important because it creates a guide for the DS and the child. A team approach is critical to this process but it also requires that each member of the team look outside his or her own discipline's perspective to create a balanced and meaningful plan for a child. (Rainforth, York, and Macdonald, 1997).

Brown & Snell (2000) have developed a series of questions that may help a team prioritize skills and develop IPP and IEP goal/objectives:

1) Does the objective reflect the child's chronological age, culture, preferences, strengths, and needs?

A team should take into consideration a child's chronological age, culture, likes and dislikes, strengths, and needs as they develop a plan.

2) Does the objective focus on functional skills and lead to meaningful routines and activities?

Is a skill useful in a child's current and future environments? What is functional for one child may not be functional for another. Can the child use a skill in other environments, over the coarse of his or her life? What kinds of supports will the child need?

3) Can the child participate in the activity in a meaningful way?

An assessment should reveal if, and how, a child might fully or partially participate in a meaningful activity. Adaptive or prosthetic aids, adapted materials, rule or schedule adaptations, and personal support strategies are ways in which a child can meaningfully participate in an activity (Baumgart et al., 1982).

4) Is the activity a family priority?

The team should focus on skills and activities that are important to the family. Conducting an interview with the family can assist the team in developing an IPP/IEP that will help the child be an active participant in a variety of activities and environments.

5) Can the activity be taught in the child's natural environment?

Skills should be taught in the setting where they would naturally occur. Where does the activity usually happen? Who is typically present during the activity? What kind of natural cues do other children use?

6) Does the activity occur frequently?

Priority should be given to teaching skills within activities that occur throughout the child's day. The child should have an opportunity to practice skills that are meaningful and functional in daily activities. Attention should also be focused on skills that will be useful not only for the current, but future environments.

7) Are there health and safety issues?

When prioritizing skills, a team should always consider a child's health issues and safety factors in the environment.

### Points to Remember

- Assessment is a complex but critical component of program development.
- ✓ Information about a child's strengths and needs should come from a variety of sources.
- Using a team approach is part of an effective assessment process.

Student Project: Review an IPP and list the child's objectives (remember not to use any identifiable information). Describe:

- 1) How, and if, the objectives were determined based on assessment data, and
- 2) How, and if, the objectives were prioritized according to Brown and Snell's standards on page 92-93.

Use your dients

### References

- Baumgart, D., Brown, L., Pumpian, I., Nisbet, J., Ford, A., Sweet, M., Messina, R., & Schroeder, J. (1982). Principle of partial participation and individualized adaptations in educational programs for severely handicapped students. Journal of the Association for the Severely Handicapped, 7(2), 17-27.
- Browder, D. M. (1991). Assessment of individuals with severe disabilities: An applied behavior approach to life skills assessment (2<sup>nd</sup> Edition). Baltimore: Paul H. Brookes Publishing Co.
- Brown, F., & Snell, M.E. (2000). Meaningful assessment. In M.E. Snell and F. Brown (Eds.). Instruction of students with severe disabilities (5<sup>th</sup> edition) (pp. 67-114). Upper Saddle, NJ: Prentice-Hall.
- Brown, L., Branston, M.B., Hamre-Nietupski, S., Pumpian, I., Certo, N., & Gruenewald, L.A. (1979). A strategy for developing chronological age appropriate functional curricular content for severely handicapped adolescents and young adults. Journal of Special Education, 13, 81-90.
- Code of Federal Regulations (CFR); title 34; Parts 300 to 399, July 1, 1993. (Available from the U.S. Government Printing Office).
- Frankenberg, W.K., Dodds, J.B., & Fandal, A.W. (1975). Denver developmental Screening test. Denver: Ladoca Project and Publishing Foundation.
- Grossman, H. J. (Ed.) (1983). Classification in mental retardation. Washington, D.C: American Association on Mental Deficiency.
- Kincaid, D. (1996). Person-centered planning. In L.K. Koegel, R.L. Koegel, & G. Dunlap (Eds.). Positive behavioral support: Including people with difficult behavior in the community (pp.439-465). Baltimore: Paul H. Brookes Publishing Co.
- Lambert, N., Nihira, K., & Leland, H. (1993). Adaptive Behavior Scale-School. Austin: Pro-Ed.
- Rainforth, B., York, J., & Macdonald, C. (1997). Collaborative teams for students with severe disabilities: Integrating therapy and educational services. (2<sup>nd</sup> Edition). Baltimore: Paul H. Brookes Publishing Co.
- Vandercook, T., York, J., & Forest, M. (1989). The McGill action planning system (MAPS): A strategy for building the vision. Journal of the Association of Persons with Severe Handicaps, 14, 205-215.
- Waterman, B. B. (1994). Assessing children for the presence of a disability. NICHCY news digest, Vol. 4, 1, 1-27.

# Questions to Help a Team Prioritize Skills

- Does the objective reflect the child's chronological age, culture, preferences, strengths, and needs?
- 2. Does the objective focus on functional skills and lead to meaningful routines and activities?
- 3. Can the child participate in the activity in a meaningful way?
- 4. Is the activity a family priority?
- Can the activity be taught in the child's natural environment?
- Does the activity occur frequently?