Infant Toddler Development Training
Module 3

Module Description

This module presents information about the assessment of infants and toddlers with disabilities from First Contacts through intervention planning and monitoring.

Information about formal and informal assessment strategies is described including standardized tests, observation, running records and other data collection strategies.

Required Readings

The required text for this module: Sandall, S., McLean, M.E., Smith, B.J. (Eds.) (2000) *DEC Recommended Practices in Early Intervention/Early Childhood Special Education*. Denver, CO: Division of Early Childhood. Learners will also need to access the Resource Bank for Adobe Acrobat (PDF) documents and website material. Learners should be aware that links to websites and additional articles are likely included within the various lessons of this module. Participants are expected to carefully read the assigned materials and be prepared to answer questions regarding all content during the self-assessments and final evaluation.

Module Objectives and Corresponding Florida Department of Health (FDOH) Competencies

1. Describe formal and informal assessments including observation techniques during free and structured play as a part of daily routines and use of assessment information for developing and evaluating Individualized Family Support Plans (IFSP). (FDOH C7, C8, E5, E7, E9, E10)
2. Demonstrate an understanding of assessment terminology (e.g., mean, reliability, validity). (FDOH C5, E3)
3. Demonstrate an understanding of the diagnostic process and assessment model/approaches, including strength-based and family-driven assessment principles (FDOH C1, C2, C3)
4. Describe typical norm-referenced, criterion referenced, and informal measures utilized in early intervention settings for various functions (screening, diagnosis, instructional planning). (FDOH C5)
5. Describe the functions of various assessment activities in early intervention including child find, screening, eligibility determination, ongoing assessment, and monitoring progress in intervention. (FDOH A5, E5)
6. Demonstrate an understanding of the following influences on assessment and identify resources to meet the unique needs of families. (FDOH C4)
7. Identify the use of open and focused observation, curriculum and norm-referenced tests, criterion-referenced checklists, interviews, and parent report for data collection appropriate to different assessment functions and eligibility/program planning. (FDOH C5, E5, E9)
8. Describe the uses and abuses of assessment instruments and the limitations to administration and interpretation of assessments as applied to young children with special needs. (FDOH C5)
9. Identify alternative approaches to designing data collection systems to collect developmental and behavioral information on young children, including family-based assessment and transdisciplinary assessment. (FDOH C2, C3)
10. Describe approaches for observing child/environment interactions, including play environments daily routines, parent/infant, and child/child interactions. (FDOH C2, E5)
11. Identify at least one instrument in each of several types of approaches to data collection (screening instrument, developmental assessment, informational interview, behavior rating, parent-child interaction scale, play observation). (FDOH C5, C6)

12. Identify and discuss the development of an IFSP and its importance in partnership with family members, incorporating both family goals and approaches, appropriate to the cognitive, affective, language and motor needs of the child. (FDOH C9, F1, F2, F5, G1, G12)
13. Discuss knowledge of assessment strategies to determine family concerns, priorities, and resources (FDOH C9)

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Introduction

In this lesson the participant will explore Early Steps policies regarding eligibility criteria. The purposes of measurement processes for intervention decision-making will be highlighted. In addition, several issues relative to the evaluation and assessment of infants and toddlers with disabilities will be presented.

Objectives

After completing this lesson, the participant should be able to:

1. Identify major legal provisions related to assessment of infants and toddlers with disabilities in Florida
2. Describe specific regulations pertaining to assessment of infants and toddlers with disabilities in Florida
3. Discuss the purposes of assessment
4. Define the issues and trends related to assessment of young children with disabilities

Resources

The following resources are those necessary for the completion of this lesson. Learners may wish to access and print hard copies of the resources prior to beginning the lesson and for future reference. Some resource documents can be found in the Resource Bank. Others are available online.

- The Early Steps Service Delivery Policy and Guidance: Delivering Services in the Routines and Daily Activities of Children with Disabilities and their Families
- The Implications of Culture on a Developmental Delay
- The Philosophy behind Assessment: What is it we really want?

Key Words

The following key words are important terms from *Early Steps Service Delivery Policy and Guidance: Delivering Service in the Routines and Daily Activities of Children with Disabilities and their Families*. The definitions are unique to that document. Definitions of key words are found in the glossary.

- Assessment
- Screening
- Evaluation

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Evaluation and Assessment Purposes

Assessment, in the broadest sense, is defined as a systematic process for collecting information and data to make instructional and program decisions about young children (McLean, 2004; Mindes, 2003; Salvia & Ysseldyke, 2001). Assessment (in the broad sense) has multiple purposes and functions. Within the Early Steps program the process of gathering data and information for decision making occurs during the identification process which includes screening (First Contacts), determination of eligibility for Early Steps services

(evaluation) and assessment for program planning and the development of the Individualized Family Support Plan (IFSP).

In addition to those purposes defined by Early Steps, there is the function of monitoring child progress to determine if the intervention is effective and to adjust activities and interactions to insure progress. To provide data for our own instructional decision-making as well as share program data with stakeholders, we must use evaluation and assessment information to determine our overall program effectiveness.

Information Gathering Terms and Functions in Decision Making
- **Screening** - The functional reason for screening is to determine if children need further evaluation and assessment. Screening should occur within the context of First Contacts. Children who have documented established conditions do not need to participate in the screening process, although this is permissible based on individual situations. Screening is not designed to establish delays or to determine eligibility.
- **Evaluation** - The evaluation phase of collecting information is to determine if the individual children meet specific program eligibility criteria. We evaluate children using standardized, norm-referenced tests and instruments which will be discussed in Lesson 2.
- **Assessment** - During the assessment phase, we determine strengths and needs for planning services and developing the IFSP. Within the context of the Early Steps program, an arena assessment must be conducted. There are a variety of different methods used to collect information and data during the assessment process.
- **Monitoring** - Early Steps defines this function as Evaluation of Strategies and Outcomes. It is critical to monitor programs and individual child and family progress to continue, modify or create new plans if strategies are not working and if children have moved beyond the original IFSP. We use data to make these decisions.
- **Program Accountability** - Ultimately, data and information gathered through the assessment and monitoring phases are used to determine overall program effectiveness. This is particularly true in entitlement programs like Early Steps where federal and state dollars are supporting early intervention services. Accountability is becoming more and more critical, and stakeholders are demanding to see positive child outcome data.

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Challenges and Opportunities
There are numerous challenges and opportunities currently facing early intervention personnel as they address the needs of infants and toddlers with disabilities. Many are unique to the identification and development of services for young children. The following highlight the status of assessment for young children with disabilities and their families:

1. It is challenging to assess infants and toddlers since this group of children has short attention spans, have limited expressive skills, struggle with separation issues, fatigue easily, adapt slowly to new surroundings, and exhibit a wide range of typical behaviors for their chronological age. (McLean, 2004)
2. The continuity and stability of the behavior of infants and toddlers varies from hour to hour or day to day. A toddler may display a behavior one minute and not demonstrate the milestone again for several weeks. (Mindes 2003; Overton, 2003)
3. There are few appropriate instruments for this population. Those that are in use may not be used appropriately. For

example, often screening instruments such as the Denver Developmental Screening Test II (DDST-II) are used to define eligibility or as a pre - posttest measurement to define child progress because it yields developmental scores. The DDST-II is a screening instrument and should never be used to determine eligibility or as a form of accountability. In addition, the technical data on many of the instruments to determine eligibility is often inadequate. This is sometimes due to the small number in the standardization sample and the reliability of the instrument. Therefore, multiple instruments and strategies should be utilized in the decision-making process. Clinical judgment becomes critical throughout the process.

4. A high priority is placed on family-centered assessment and intervention. Families are vital within the evaluation and assessment process and must be a key member of the team. (McLean 2004) However, it should be noted that many providers have difficulty accepting the role of the family in the evaluation and assessment process.

5. Assessment should be conducted by a team of personnel including family members. Team members should be knowledgeable about child development, atypical development, and family systems, and share procedures, data, and observations to produce a collaborative assessment process and intervention plan. Family members are critical in the process and should participate throughout the assessment process as part of the team. (Mindes, 2003)

6. There is emphasis placed on assessment in natural environments within everyday routines, activities, and places. The child is seen in the context of the familial, cultural and community systems. Each system is changing as the child develops, and assessment personnel must consider the transaction and reciprocity between the child, the family, the culture, and community. Assessment must be conducted and interpreted within the framework of how the child functions within these systems.

7. The presence of a disability can greatly complicates the assessment process particularly if the child has a motor or sensory impairment. Those involved in the process of gathering information and observing the child will have to make accommodations to determine the child's strengths and needs. In addition, one must be observant of the secondary effects of the disability on the functioning of the child. For example, a child with a visual impairment may show delayed motor development because of his inability to see the world beyond his blanket or close surroundings. The child with a hearing impairment may use an alternative form of communication which would require the personnel to be knowledgeable about that form of communication. (McLean, 2004).

8. Evaluation and assessment of children who are from different cultures, and families whose primary language is not English, is particularly challenging. Assessment of English Language Learners (ELLs*) and children from different cultures should focus on observation and more informal procedures. It might also be helpful to compare the ELL who is suspected of having a disability with another child from the same culture and linguistic background to determine if the behaviors are typical. It is also important to determine the child's proficiency in his native language.

*The term English Language Learners (ELL) is used by the Florida Department of Education to describe children for whom English is not their first language.

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Activity #1
Read the letter from Jean Bury, a parent of a child with a disability. The letter is in the Resource Bank under the title [The Philosophy Behind Assessment: What is it that we really want?](#) Ms. Bury challenges professionals to consider the way they view a disability. She stresses how important it is to consider the child within the context and culture of the family. Ms. Bury emphasizes, as professionals, "it is important for us to consider the compromises and supports needed to enhance the child's quality of life, his group membership and his personal sense of competence."

- Consider how you view an infant and toddler with a disability.
- What do you think that the author means about "interventions always have both a positive and negative impact on the family"?
- Think about how an Infant Toddler Developmental Specialist (ITDS) can support a child's membership, quality of life and personal sense of competence.

Activity #2
Read the section of the [Early Steps Service Delivery Policy and Guidance: Delivering Service in the Routines and Daily Activities of Children with Disabilities and their Families](#) related to evaluation and assessment of infants and toddlers in the state of Florida. This document can be found in the Resource Bank.
While you are reading, consider the following questions:

1. What is the difference between evaluation and assessment?
2. What instruments are used in screening, evaluation, and assessment?
3. What procedures are followed during First Contacts?

Activity #3
An issue in the assessment of young children with disabilities is the evaluation and assessment of children and their families from different cultures and children for whom English is their second language.

Read the article [Implications of Culture on Developmental Delay](#) by Rebeca Valdivia
As you are reading the article,

1. consider the impact that culture has on the evaluation and assessment process of young children with disabilities and their families, and
2. consider how children from diverse cultures may be labeled as having a developmental delay but, the delay may be situated in the belief and child rearing patterns of the family whose beliefs and cultural values differ from the majority culture.

Lesson 1 Highlights
In this lesson you have thoroughly reviewed the Early Steps Service Delivery Policy and Guidance: Delivering Service in the Routines and Daily Activities of Children with Disabilities and their Families. Through reading the document and the lesson content you should understand the purposes of the evaluation and assessment process. In addition, several opportunities and challenges were highlighted with particular emphasis on assessment issues in relation to children from diverse cultures.

References
Department of Health (2005). Early Steps Service Delivery Policy and Guidance: Delivering Service in the Routines and Daily Activities of Children with Disabilities and their Families. Florida Department of Health-Children's Medical Services-Early Steps. Tallahassee, FL.

McLean, M. (2004). Assessment and its importance in early intervention/early childhood special education. In M. McLean, M. Wolery, & D. B. Bailey, Jr. (Eds.), Assessing infants and preschoolers with special needs (3rd ed) (pp. 1-20). Upper Saddle River, NJ: Pearson Prentice Hall.

Mindes, G. (2003). Assessing young children (2nd ed.). Upper Saddle River, NJ: Merrill

Overton, T. (2003). Assessing learners with special needs: An applied approach (4th ed.). Upper Saddle River: NJ: Merrill.

Salvia, J. & Ysseldyke, J. (2001). Assessment (8th ed.). Boston, MA: Houghton Mifflin Co.

Valdivia, R. (1999). The implications of culture on developmental delay. Eric Digest #E589. ED438663. Eric Clearing House on Disabilities and Gifted Education. Reston, VA.

Websites
- The philosophy behind Assessment: What is it that we really want?

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Introduction
The information obtained through screening, evaluation and assessment can be formal or standardized or informal. By formal, we mean that the assessment and evaluation are standardized, or norm referenced. According to the Early Steps Service Delivery Policy and Guidance: Delivering Service in the Routines and Daily Activities of Children with Disabilities and their Families, teams must use norm-referenced tests in the evaluation of infants and toddlers to determine eligibility for program services. In the assessment phase, information is gathered for intervention planning. During the assessment process, more informal assessment strategies and instruments are to be used and team members from at least two disciplines are to be in involved in an arena assessment format. In this lesson we will explore the properties of norm referenced tools as well as informal and authentic instruments and strategies.

Learning Objectives
Upon completion of this lesson, the participant will be able to:

1. Describe characteristics of effective observation
2. Identify the purposes of various formats for observation
3. Define terminology related to standardized (norm-referenced) evaluation
4. Label and describe uses of various authentic forms of assessment for infants and toddlers with disabilities
5. Identify criteria for the selection and application of appropriate assessment tools/ instruments/ strategies to use for child evaluation and assessment
6. Describe types of assessment tools/instruments and their uses and limitations.

Resources
The following resources are necessary for the completion of this lesson. Learners may wish to access and print hard copies of the resources prior to beginning the lesson for future reference. Some resources listed below are found in the Resource Bank.
Others are available online.

- Informed Clinical Opinion
- Figure 2: Percentiles
- Figure 3: Running Record Observation
- Figure 4: Event Sampling

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Key Words
Definitions of key words are found in the glossary.

- Standardized test
- Validity
- Anecdotal recording
- Informal assessment
- Portfolio
- Reliability
- Observation

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Section

Norm referenced or standardized evaluation tools are used when we want to measure an individual child's trait, skill, or ability in comparison to a large population of children of a similar age or characteristics. A standardized test is normed on a large sample of the population. The population or group on whom the test is normed is of utmost importance. Those who are users of norm referenced or standardized evaluation tools/instruments want to be sure that there is adequate and representative sampling. It is important that the population sampled is large enough and representative of the group being assessed. Most test developers consider age, gender, race, parental education, socio-economic status, and geographical distribution in determining a national sample. For example, one would not want to use a test with diverse children in Florida that was normed on children who only lived in the northeast and were largely Caucasian female.

Buros Mental Measurement Yearbook published annually provides technical information (standardization data, reliability, and validity) on tests. Consulting Buros can be helpful before purchasing an evaluation or assessment instrument. Note: The website does not report technical data.

Figure 1 shows a normal distribution (the bell-shaped curve). The normal curve represents the distribution of many human attributes including height, weight, and in this case test scores. The line in the center of the curve is the mean. The mean represents the average score in the distribution. The pattern shows that most children are average and that they (68%) cluster either above or below the mean.
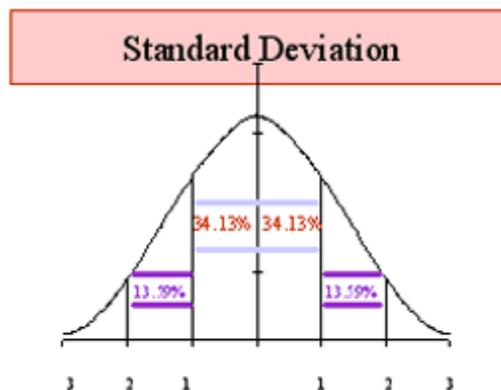
Terminology Related to Standardized Assessment

Converted Scores - When we give a standardized assessment instrument, we get a raw score. This has little meaning to the person interpreting the score. Thus, we statistically convert the scores to compare individuals to the population on which the test was standardized. Types of converted scores are standard scores, percentiles, and age scores for infants and toddlers.

Standard Deviation - The standard deviation represents the spread of the distribution from the mean. It measures the distance scores depart from the mean. In Figure 1, 34.13% of the individuals are less than one standard deviation below and 34.13 % are less than one standard deviation above the mean. If we go two standard deviations below and two standard deviations above the mean, we have considered 96% of all scores.

The eligibility criteria in Early Steps for a developmental delay are that the child must score 1.5 standard deviations below the mean in at least one of the following areas: cognition, physical/motor, communication, social-emotional or adaptive development.

Percentiles - Percentiles are converted scores which indicate the percentage of children in a norm group who received the same raw score as the test taker. As noted in Figure 2 a child who scores at the 50th percentile is scoring at the mean. Percentile should not be interpreted as percentage correct. For example, a child who scores at the 65th percentile is scoring above the mean on the test and is performing equal to 65 % of the children who took the test and worse than 35 % of the children who took the test. Look at Figure 2: Percentiles in the Resource Bank. A toddler was given a screening test. The toddler scored in the 10th percentile in motor, the 15th percentile in social, the 3rd percentile in language, and the 12th percentile in cognitive. If you look at Figure 2, you can see that this toddler probably failed the screening and needs to be referred for evaluation. This toddler is scoring significantly below his age group peers. One can also see from the screening that this child has severe delays in language and her strength is in the social area.

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Informal and Authentic Assessment

Professionals who work with young children particularly infants and toddlers with disabilities need to be aware of informal assessment instruments and strategies. Norm referenced or standardized instruments measure a child's relative standing compared to a large population of children of the same age. This type of measure is valuable for eligibility decisions but has little value in measuring change and how the child is developing over time. Thus, early intervention personnel rely on other forms of assessment to determine goals and objectives as well as to monitor child progress. Next, we will discuss more informal and authentic instruments and strategies. Strategies such as observation, portfolios, criterion referenced assessment, curriculum-based assessment, and play based assessment will be highlighted.

Criterion Referenced Tests compare the performance of a child to a given criterion and or skill mastery criteria. Criterion referenced tests (CRT) typically are made up of items selected because of their importance in function and in mastering a developmental sequence. Because of the importance of the items, they frequently become teaching targets. The information obtained from a CRT indicates a child's ability relative to a set of specific skills and does not compare a child's performance to a norm group. The results focus on a child's strengths and needs. Criterion referenced measures typically do a better job in identifying functional needs than do norm referenced tests. The Early Learning Accomplishment Profile (ELAP) and the Battelle Developmental Inventory, 2nd Edition (BDI-2) are examples of criterion referenced assessments. Either of these may be used by Early Steps professionals in determining the child outcomes on the IFSP.

Curriculum Based Assessment (CBA) is the practice of obtaining direct and frequent measures of a child's performance on a group of sequentially arranged objectives derived from the curriculum used in the classroom or home. Curriculum based assessment links assessment to curriculum and instruction. The foundation is a sequence of developmental objectives or learner outcomes, which constitutes a program's curriculum. This form of

assessment traces a child's achievement along a continuum of objectives within a developmentally sequenced curriculum. This approach is based on direct and frequent measures and is a data-based approach to monitoring a child's progress. The Hawaii Early Learning Profile for Infants and Toddlers (HELP) and the Assessment, Evaluation, and Programming System for Infants and Children (AEPS) are examples of curriculum-based assessments that may be used in Early Steps programs.

Observation's Contribution to the Assessment Process

Observation is the most direct method of becoming familiar with the developmental strengths and needs of young children. Observation is a valuable tool that provides information that may not be gathered from standardized methods of measurement. It allows the team members to observe patterns of responses over time instead of a one-shot interaction. One of the strengths of observation is that it provides team members with opportunities to use natural environments as the context of the assessment. In addition, individuals can focus on the targeted behavior of interest during the assessment process.

Using Observation as a Strategy for Assessment Information Gathering

- In using observation as a form of assessment, it is important that early intervention personnel be familiar with developmental guidelines for young children. According to Wortham (2005), there are three major purposes of observation: (1) to understand children's behavior; (2) to evaluate children's development and (3) to evaluate progress. With infants and toddlers, particularly those with delays, the three purposes are often intertwined.
- For young children who have not mastered the use of expressive language and cannot explain the reasons for their behavior, observers gain a great deal of insight by watching and taking detailed notes. A good observer pays attention to the context as well as the frequency of the behavior, facial expressions of children, their actions, and their reactions.
- While observing, the observer records information about the child's strengths and perhaps areas of skill that have not been attained. Likewise, observation is an excellent tool to determine progress and accomplishment of certain milestones and goals.
- A danger in this form of assessment is observer bias. The observer may have a preconceived idea of the behavior which can affect the interpretation.
- Children may be aware that they are being watched and not perform the behavior of interest.

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Assessment Strategies that Rely on Observation

There are several types of observational strategies and recording systems. One selects the system that best addresses the purpose and type of information needed to make informed decisions. Observations need to be planned and structured as in all forms of assessment. Types of observation systems which will be described below include the anecdotal records, running record, specimen record, time sampling, event sampling, checklists, and rating scales.

Narrative descriptions include various types of observational recording systems. Narrative recordings typically include the observation of behaviors as they naturally occur. When

recording narrative observations, the observer should be cognizant of recording the observations by clearly describing the observed behavior without inferences.

For example, consider the following observation. An observer wrote:

Sally wouldn't give Marion the block, so Marion pushed Sally **as hard as she could** shouting, "You dummy!" Sally was **very surprised**.
In the above written observation, the observer does not really know if Marion pushed Sally **as hard as she could**. Nor does the observer know if Sally was **very surprised**. A better way of recording this observation would be:

Sally wouldn't give Marion the block, so Marion pushed Sally, shouting, "You dummy!" Sally's eyes got bigger, and she gasped for breath.
- **Anecdotal Records** - An anecdotal record is a written episodic description of a child's behavior, event, or incident. It is an objective account of an incident that tells what happened when and where. The anecdote may be used to record and then understand some aspect of behavior. Although the narrative itself may be objective, comments of the observer may be added as an interpretation of the behaviors. The following are characteristics of anecdotal records according to Mindes, 2003:
    - Result of direct observation
    - Prompt, accurate and specific account of an event or behavior
    - Includes the context of the behavior
    - Interpretations of the incident are recorded separately from the incident
    - Focuses on either typical or atypical behavior of the child being observed.
- Anecdotes may be recorded on a sticky note, a note card, in a child diary or a daily log. It is important to record as soon as the event occurs to not forget any of the details.
- **Running Records** - A running record is more detailed than an anecdotal record in that all behaviors are recorded as a sequence of events. The description is objective. An effort is made to record everything that was said or happened within the observational period. Running records may be recorded over a period ranging from minutes, to hours, to days and even weeks. When one is recording a running record, the times and places of observation should be selected purposefully. The running record is particularly useful in monitoring a child's progress.
- **The Specimen Record** - The specimen record is very similar to a running record only more detailed and concise. Specimen records are usually recorded by outside observers. In a specimen record, the observer is often looking for a predefined behavior or interaction.
- **Event Sampling** - Event sampling is when the observer records the occurrence of the behavior of interest. The simplest form of event sampling is when the observer records a tally each time the target behavior occurs. This system is best used when the behavior has a beginning and an end and is short in duration. For example, if a staff member is interested in a child's engaged behavior during free play, he might use event sampling to record each time the child is engaged over a specified period.
- When doing event sampling, it is necessary to clearly define the targeted behavior and note the occurrence or non-occurrence of the behavior. Sometimes an observer is interested in accuracy of the behavior and will want to record that also. The more precise the definition of the behavior is, the more meaningful the data.
- **Time Sampling** - Time sampling is used to record the frequency of the behavior for a designated period. The observer decides ahead of time what behaviors will be observed, what the time interval will be and how the behavior will be recorded. The observer observes these behaviors and records how many times they occur during preset, uniform time periods. Other behaviors that occur during the designated period are ignored.

- **Checklists and Rating Scales** - A checklist is a list of sequential behaviors arranged in a system of categories. The observer can use the checklist to determine whether the child exhibits the behaviors or skills listed. Rating scales are used to determine the degree to which the child exhibits a certain behavior or the quality of the behavior. Each trait is rated on a continuum.

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Activity #1
Read the article Informed Clinical Opinion by Jo Shackelford in the Resource Bank. This article has important information in respect to the decision-making of the team of professionals and family members making decisions about the eligibility and intervention recommendations for the child during evaluation and assessment.
Note the following as you are reading:

1. What does inform clinical opinion mean in the context of Part C?
2. How does informed clinical opinion effect the determination of eligibility?
3. Why is it necessary to document informed clinical opinion?

Activity #2
Consider the following examples below and determine if they are good observations or inferences:

1. Johnny likes to read.
2. Sammy is a mean boy.
3. Katie has a smile on her face.
4. Mark looks unhappy.
5. George hit Steve on the playground
6. Betty has emotional problems.

Activity #3
Review Figure 3: Running Record Observation in the Resource Bank. This data is for an 18-month-old child. The purpose of the observation was to observe the child's behavior and his fine motor skills. Consider what this observation tells you about the child and his fine motor skills. Consider whether the child shows a hand preference? Can the child reach and grasp? Can he let go of an object?

Activity #4
Consider Figure 4: Event Sampling in the Resource Bank.
Sammy wears hearing aids.
- On Day 1, Sammy had his hearing aids in.
- On Days 2-5, Sammy should have on his hearing aids. The childcare workers were to put them in on his arrival. The person who was trained to put them in was absent on Days 2-5.
- The ITDS wanted to impress on the childcare providers how important it was for Sammy to have his hearing aids in. Data was taken to determine how many times Sammy turned toward sounds with his hearing aids in and when he was left without his aids.
- What conclusions do you think the childcare staff made regarding Sammy's ability to hear without his hearing aids? One of the things that the ITDS noticed on Day 2 was

that Sammy was placed by a mirror. He watched in the mirror to see if the staff was trying to get his attention. He turned toward the sounds when he saw the staff talking to him.

- Is this type of observation helpful in terms of identifying outcomes for the child and family?

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Activity #5

Read and study Figure 5: Score Summary for Jim's performance on the Battelle Developmental Inventory and the Case Study below. Jim is 32 months old.

CASE STUDY 1: JIM

Date of Birth: 09-10-01

Date of Test: 05-12-04 Chronological Age: 2-8

BACKGROUND INFORMATION

Jim is a 2 year, 8-month-old boy. He was screened for possible placement in November 2003. The screening results are as follows:

1. Developmental Activities Screening Inventory developmental age: 20 months
2. Vineland Social Maturity Scale age equivalent: 20 months

On May 02, 2004, the BDI Screening Test was administered. The results indicated that he very likely had deficits in eight of the nine Screening Test components as well as the Total Test; performance in the remaining components was borderline. As a result, it was recommended that Jim be referred for a complete assessment with the entire BDI-2. During the administration of the BDI-2, Jim was uncooperative and withdrawn. His caregivers have stated that he often behaves this way at the childcare center. Him mother has indicated that she is concerned that he does not talk as well as his two cousins that are a little younger than he is and the children in the neighborhood don't like to play with him.

- **TEST INTERPRETATION**. Jim's overall score falls significantly below the expected level for a child in his age group (percentile rank 1, and his standard score is 1). His domain scores vary, with adaptive skills in the average range, cognitive skills and communication skills in the borderline range, and personal-social and motor skills showing significant delay. The uncooperative behavior that Jim displayed during administration may have a negative effect on his scores.
- **PERSONAL-SOCIAL**. When compared with other children in Jim's age group, he demonstrated adequate development in skills relating to adult interaction, self-concept, coping, and social roles. However, he demonstrated significant delays in expression of feeling/affect and peer interaction. Overall, Jim's personal-social skills are average for an 18-month-old child. He is beginning to respond to adult social contact, enjoys playing with others, and occasionally enjoys being read to. He is also beginning to follow directions relating to daily routines.
- **ADAPTIVE**. In the adaptive domain, Jim demonstrates average development for his age. Jim's overall adaptive skills are at the 28-month level.
- **MOTOR**. In this domain, Jim shows significant delay in skills related to locomotion and perceptual-motor, gross-, and fine-motor development. Compared with other children his age, body coordination is also delayed. Jim's withdrawal mood may have contributed to his depressed scores. Jim's gross-motor skills are at the 19-month level, and his fine-motor skills are at the 13-month level. Overall, his motor skills are at the 16-month level.
- **COMMUNICATION**. Compared with other children within the same age group, Jim's expressive and receptive language skills are mildly delayed. His overall communication skills are at the 21-month level.

- **COGNITIVE**. In the cognitive domain, his skills are reasonably varied. Perceptual discrimination is well below average for his age group. Memory and conceptual skills are slightly below average for his age group. Reasoning and academic skills indicate normal development. Overall, Jim is at the 23-month level in his cognitive development.

In interpreting the scores for Jim, note his percentile rank. Based on the percentile rank, what would some of his strengths and weaknesses be? Remember if a child scores at the 50th percentile, he is performing at an average level.

In looking at the percentile scores for the sub-domains, Jim is scoring above average in toileting and reasoning and academic skills.

Note the age scores in months for each of the domains. Is he scoring at age level in any area? According to Early Steps, a child is eligible for services if he demonstrates a delay of 25% in terms of months. Since Jim is 32 months of age. A 25% delay would be 24 months. We must ask ourselves in what domains are Jim's age scores below 24 months. One notes that his age equivalent score is below 24 months in the personal-social, motor, communication and cognitive (although just barely). His age equivalent total score is below 24 months, so Jim qualifies for services based on his age equivalent scores on the BDI II.

Now note the Standard Score column which is the third column. The mean Standard Score on the BDI II is 50 for the total score and domain scores. Is Jim scoring above the mean in any area? The standard deviation on the BDI is 21 points for the total score and domain score. One standard deviation below the mean would be 29. Two standard deviations below the mean would be a standard score of 8. Jim's total standard score more than 1 ½ standard deviations below the mean as are his scores in the personal-social, motor, and communication. His scores in the cognitive and adaptive domains are not 1 ½ standard deviations below the mean. Because Jim is scoring at least 1 ½ standard deviations below the mean in at least one area of development, he would be eligible for early intervention services.

Since Jim would participate in further assessment to determine IFSP goals, in which areas should the team decide to get further information?

Lesson 2 Highlights
In this lesson, evaluation and assessment procedures were presented. Various strategies were presented in collecting information for instructional decision making. Through the activities, you are given an opportunity to interpret a variety of evaluation and assessment information related to instructional decision-making.

References
Mindes, G. (2003). Assessing young children (2nd ed.). Upper Saddle River, NJ: Merrill.

Shackelford, Jo (2002). Informed clinical opinion. NECTAC Notes. Issue No 10 National Early Childhood TA Center. Chapel Hill, NC.

Wortham, S.C. (2005). Assessment in early childhood education (4th ed.). Upper Saddle River, NJ: Merrill.

Websites
- Buros

Infant Toddler Development Training
Module 3, Lesson 3

Introduction

We have just completed two lessons about evaluation and assessment of infants and toddlers with disabilities. In lesson 3 we will focus on the contribution that families make as true collaborators in the assessment process. Information will be included about assessment of family priorities, concerns, and resources in addition to the contribution that families might make to the assessment process. The Modules on Families and Teaming in this series will further elaborate on these relationships and roles.

Learning Objectives

Upon completion of this lesson, the participant will be able to:

1. Describe the critical role the family plays in the screening, evaluation, and assessment processes
2. Define assessment strategies to determine family concerns, priorities, and resources
3. Identify strategies to establish a collaborative partnership with the family and engage them in the assessment process
4. Describe effective communication principles and techniques with families including consideration of cultural and linguistic differences

Resources

The following resource is necessary for the completion of this lesson. Learners may wish to access and print hard copies of the resource prior to beginning the lesson for future reference. Some resource documents listed below are found in the Resource Bank. Others are available online

- Assuring the Family's Role on the Early Intervention Team: Explaining Rights and Safeguards (2nd Ed)
- Tips for Writing Family-Centered Reports
- When Parents and Professionals Communicate: Tips for Professionals.
- Discovering Family Concerns, Priorities and Resources: Sensitive Family Information Gathering.

Key Words

Definitions of key words are found in the glossary.

- Arena assessment
- Concerns
- Priorities

Infant Toddler Development Training
Module 3, Lesson 3

Families and the Assessment Process

Traditionally the emphasis in involving families in the assessment process was on asking the family questions about family history and the child's developmental history in relation to the assessment process. Families were viewed as obligatory members of the team rather than a true collaborator in the process. Clearly families have unique knowledge, concerns, and priorities for their children. Assessment activities must evolve out of the family and caregivers' concerns, priorities, and resources.

Family information gathering is an important part of the process of providing early intervention services to children from birth to age three and their families. Rather than discrete activity, information gathering should be viewed as an on-going process (Banks, Santos, & Roof (2003). The early intervention provider should be continually modifying his/her understanding of a family's resources, priorities, and concerns both in relation to their child as well as to broader family issues. At the beginning of service delivery, a family

may have a need for information about the child's disability. However, once the parent has obtained that information a new concern or need may evolve.

Family support and children's services are linked according to the requirements of the IFSP. Part C stipulates that an important part of the assessment process of infants and toddlers is to determine the family's resources, concerns and priorities related to enhancing the development of their child.

If the goal is to provide services for infants and toddlers with disabilities and their families in natural environments, then it is critical to involve parents in the assessment process within natural environments. Professionals need to know and understand the dynamics of the family's everyday routines, activities, and places to support the planning of activities which will enhance the child's development within those contexts. Asking and observing family members about those routines and activities is a critical component in the assessment process.

Infant Toddler Development Training
Module 3, Lesson 3

Roles of Family Members in the Assessment

The family member may assume the role of *interpreter* of the child's behavior to professionals. This is a unique and important role that family members and caregivers can provide as a member of a collaborative team during the assessment process (McLean and Crais 2004). For example:
- The family member(s) may translate the communicative attempt of a child who the professionals cannot understand.
- The family may be a *participant* in the process particularly in the more informal process.
- The family or caregiver may be able to elicit a response or interact with the child.
- The family member may be asked to elicit a social routine such as peek-a-boo.

Members of families might also serve as *validators* of the assessment activities (McLean & Crais). They can serve as coaches to professionals to elicit a response. They can validate the accuracy of the assessment plans, the implementation, and the results.

Families may choose just to be on-lookers in the planning and implementation of the evaluation and assessment activities. They may not have a complete understanding of the process and not feel comfortable in saying or doing anything.

Families need to be offered a variety of roles in the assessment process in terms of those in which they feel comfortable. Not all family members will want to be involved as a participant in the assessment process.

Early Intervention professionals often see the child as the primary target of their services. However, the family support component should not be viewed as secondary and family needs determined after the child's needs are focused on. Family assessment activities should be on-going from the First Contact through the child assessment process. It is in the context of the evaluation and assessment activities that the most important family assessment information is acquired (Bailey, 2004)

According to Bailey there are many areas in which families and professionals might disagree. Families are less interested in the causes of the disability than the meaning for the child and their family. Families and professionals may disagree on the value and usefulness of a certain therapy or service. Another area of disagreement is on the actual needs of the family and/or child. Professionals must, for the most part, accept the family's view as the legitimate assessment at a particular point in time.

Family Participation in Arena Assessment
The arena approach to assessment, also advocated by Early Steps, utilizes the transdisciplinary model in that all members of the team are involved with the child in evaluation and assessment activities simultaneously. The members of the transdisciplinary team watch and record their observations while a designated facilitator interacts in multiple situations. Play evaluations, communication tasks, informal play opportunities, cognitive skills and motor tasks can all be presented utilizing this format. Arena assessment should occur in natural environments whenever possible. Of course, some homes may not be able to accommodate all the members of the team and other circumstances may exist where an assessment at home is not feasible. Some programs may use a playroom in a childcare center or clinic as an alternative to the home.

The team model reduces the time in which the child and family are involved in the assessment process and should result in a more unified outcome especially for the family. Family members provide the information once rather than having to answer the same questions multiple times. Professionals can access the information immediately and everyone is aware of the context of the child's behavior. Family members are in a position as participants to explain a child's performance and provide insight if the performance is typical of what they see every day. There exists a common sampling of behavior available to all members of the team. One member of the team serves as the primary facilitator. Sometimes another member of the team may serve as a coach for the facilitator to remind the facilitator of the assessment plan or items that may be overlooked by the facilitator during the process.

The arena assessment process should include a preassessment planning meeting at which time the intake (First Contacts) information is discussed. The team members can determine the testing tools which might be utilized and the types of skills which should be assessed. For example, the speech/language pathologist may want to obtain a natural language sample and suggest that the team might want the child to talk about a favorite picture book. The team would also be reminded of the family's priorities and concerns.

In the sharing of assessment results family members may be asked to participate by preparing in advance for the sharing session. The family member may be asked to consider, "What were your overall impressions during the assessment today? What did you think that your child did well? What skills did you notice that your child needed help with? What seemed difficult? Did you notice anything that did not seem to be typical of your child?"

Infant Toddler Development Training
Module 3, Lesson 3
Assessing Family Resources, Priorities and Concerns
As in other forms of assessment, family assessments should be evaluated rigorously and regarding their effect and usefulness. There are many formal family assessment tools, but this is not the purview of this lesson. However, to simply gather information from a family using an instrument which has no value in recognizing the resources, priorities and concerns is of little use. Sometimes information is gathered which is filed away and is not

incorporated into the IFSP and is not functional for the family or child (Bailey, 2004). Family members of course would feel frustrated when they take time to fill out a survey and the information is not used.

One of the most frequently used forms of family assessment is informal communication that occurs with the family in the context of daily routines and interactions between families and professionals (Bailey, 2004). Family resources, priorities and concerns are continually changing particularly as the child attains new skills and families gain new information and insights.

It is critical that personnel have excellent communication skills in interacting with families particularly throughout the assessment process. Listening, questioning, and responding are critical in obtaining information from the family. Being open and non-judgmental and showing genuine concern and interest are important attributes for professionals gathering information from families.

When assessing the resources, priorities, and concerns of families it is important to keep in mind that all families are different. Family members will differ in terms of education level, income, age, background experiences, and experience being a parent.

In determining resources, one might start by having families generate a list of persons, social organizations, and agencies that they have contact with on a regular basis. By "mapping" their personal networks it will be possible to identify which sources of support may have resources necessary for meeting their needs. Some questions which might be asked: Who do you talk to about that...? What are you currently doing to handle that situation?

Dunst, Trivette and Deal (1995) make a distinction between concerns and needs. **Concerns** are conditions that lead to recognition that the difference between what is and what ought to be is sufficiently disparate to warrant attention. Whereas **needs** are **conditions** that lead to a recognition that something will reduce the discrepancy between what is and what should be. One of the major functions of the team member is to assist the family in clarifying concerns in order that resources might be identified to reduce that concern. Some of the questions which might be asked to identify concerns are:
1. What do you see as one of your child's concerns?
2. What do you worry about for your child?
3. What is the biggest problem you and your family have in meeting your child's needs?
4. What concerns you about getting services from Early Steps?

Priorities are based on the area in which the family wishes to focus their energy, time, and resources. While professionals can provide information, input, and suggestions, it is ultimately the family that must follow through on the goals that are established. Some suggestions that might help families consider their priorities are:

1. If we were to write just one goal, what goal would you choose?
2. Are there some skills that would enable your child to participate in family activities?
3. Are there skills that would make your home life easier?

Infant Toddler Development Training
Module 3, Lesson 3

Activity #1

Read [Assuring the family's role on the early intervention team: Explaining rights and safeguards (2nd Ed)](#). This article is available in the Resource Bank.
After you have completed the reading, consider the following questions:

1. What are the procedural safeguards provided to families?
2. How do these safeguards effect the evaluation and assessment process?
3. What are the provisions regarding confidentiality and release of information?
4. How can the explanation of the safeguards become more family friendly?

Activity #2
Read [Discovering Family Concerns, Priorities and Resources: Sensitive Family Information Gathering](#). In this article, the authors stress that information gathering is an on-going process when determining family concerns, priorities, and resources.
1. What is the best way of doing sensitive family information gathering?
2. Think about the practices that your program uses to do family information gathering. What changes would you recommend?

Activity #3
Read [When Parents and Professionals Communicate: Tips for Professionals located in the Resource Bank](#).
The reading you have just completed has several good suggestions about parent professional communication. Consider two suggestions that would be helpful to you as you communicate with families.

Activity #4
Read [Tips for Writing Family-Centered Reports](#) located in the Resource Bank.
Reflect on the suggestions that are made to make the report family centered. An example is given of how to reframe your writing to have your comments be more positive toward the parent. Look at one of the reports you have written. Is your report family centered?

Lesson 3 Highlights
This lesson focused on determining family concerns, resources and priorities and their involvement in the evaluation and assessment process. It was emphasized that families are as different as their children and will become involved in the assessment process in different ways. Procedural safeguards were presented which are important for parents to be cognizant of to protect the rights of their child. Tips were provided for writing family centered reports. You were encouraged to evaluate your own report writing. In the article by Banks, Santos and Roof, the authors highlighted the impact of diversity on family information gathering.

References
Bailey, D. B. Jr. (2004). Assessing family resources, priorities, and concerns. In M. McLean, M. Wolery, & D. B. Bailey, Jr. (Eds.), Assessing infants and preschoolers with special needs (3rd ed) (pp. 172-199). Upper Saddle River, NJ: Pearson Prentice Hall.

Banks, R. A., Santos, R. M., & Roof, V. (2003). Discovering family concerns, priorities, and resources: Sensitive family information gathering. Young Exceptional Children, 6(2), 11-19.

Dunst, C., Trivette, C., & Deal, A. (1995). Enabling & empowering families: Principles & guidelines for practice. Cambridge, MA: Brookline Books.

Hurth, J.L.& Goff, P. (2002). Assuring the family's role on the early intervention team: Explaining rights and safeguards (2nd Ed). Chapel Hill, NC: National Early Childhood Technical Assistance Center.

McLean, M. & Crais, E. R. (2004). Procedural considerations in assessing infants and preschoolers with disabilities. In M. McLean, M. Wolery, & D. B. Bailey, Jr. (Eds.), Assessing infants and preschoolers with special needs (3rd ed) (pp. 45-70). Upper Saddle River, NJ: Pearson Prentice Hall.

Websites
- Tips for Writing Family-Centered Reports
- When Parents and Professional Communicate: Tips for Professionals

Infant Toddler Development Training
Module 2, Lesson 4

Introduction

The focus of this lesson is on effective vs. ineffective team processes. Since most all teamwork occurs during meetings, the lesson begins with a presentation of guidelines for conducting a successful team meeting. Teams are known to evolve and change over time. The four 'classic' stages of team development (forming, storming, norming and performing) are discussed, along with the defining features of the fifth stage, known as 'transforming.' Problems can occur at any stage of team development. Common problems, including Groupthink, are presented, and discussed. In the Activities of this Lesson, participants are encouraged to evaluate the functioning of their own teams, and to analyze teaming issues in a transition scenario.

Learning Objectives

Upon completion of this lesson, the participant will be able to:

1. Describe the components of a successful team meeting
2. Describe the stages of team development (forming, storming, norming, performing, transforming)
3. Discuss the defining features of the transforming team
4. Discuss problems that can occur during the early stages of team development
5. Summarize the research on qualities of effective teams
6. Discuss helpful and harmful team processes
7. Define Groupthink, describe its symptoms and discuss strategies for preventing its occurrence

Resources

The following resources are necessary for the completion of this lesson. Learners may wish to access and print a hard copy of the resources prior to beginning the lesson and for future reference. Some resource documents can be found in the Resource Bank. Others are available online.

- Building a Collaborative Team Environment
- Groupthink of Irving Janis
- Tuckman's Model

Key Words

Definitions of key words are found in the glossary.

- Ground Rules
- Groupthink

Evaluation and Assessment Information Needed for Planning Intervention

If the overall evaluation and assessment process is to benefit children, then evaluation and assessment must be linked to the learning experiences and intervention. Multiple sources of data should contribute to the planning of learning experiences and instruction. After it has been determined that a child is eligible for services then information from more informal sources is needed. Of course, one of the most important sources of information is the family's concerns and priorities for their child. Information from observations of the child involved in everyday routines, activities, and places within the context of natural environments is critical. In addition, information from developmental checklists and rating scales will provide insight into the child's developmental status.

Early Steps requires assessment data from criterion referenced instruments such as the HELP, AEPS, or the ELAP. These instruments tend to yield developmental as well as functional information about the abilities of the child. Information from any one of these instruments is helpful for planning an intervention program. Each assessment instrument yields information that tells the child's strengths and needs in the developmental areas and is easy to translate into program and IFSP objectives. It is up to the Infant Toddler Developmental Specialist (ITDS) to determine how to embed these objectives into everyday routines, activities, and places.

Early intervention staff should consider both the developmental and functional perspective in determining needs. Many would say that we need to move away from the developmental perspective towards a more functional perspective that looks at the child's ability to participate in essential daily activities such as communication, personal care, and functioning in natural environments. In addition, objectives should be developmentally appropriate, realistic, and achievable.

Parental input in terms of concerns and priorities is critical for identifying functional objectives. Needs such as playing with neighborhood kids, crawling, and walking, catching a ball, feeding oneself are all critical functional considerations.

Information from interviews and observations is needed about patterns of interacting socially within the environment. We need to know the nature of child engagement and the child's task persistence as well. Through observational data we can determine a child's interest, preferences, choices, and reinforcers to incorporate these into the child's goals and objectives and the planning of appropriate functional activities.

Assessment information for planning programs for individual infants and toddlers should be gathered from **multiple sources** and from **multiple perspectives** in developing the IFSP. In Early Steps the information gathered from the arena assessment is used to develop the initial IFSP. However, professionals and families know in working with infants and toddlers with disabilities that gathering information and data is a continuous process. As children make progress, grow, and develop, we must modify and alter our intervention goals and plans.

Infant Toddler Development Training
Module 3, Lesson 4

Establishment of Priorities

Assessment results will yield far more goals and objectives than can possibly be addressed within a designated time frame (Wolery, 2004). Thus, the team is going to have to prioritize their goals. In considering which goals and objectives should be selected, the following should be considered:

1. Does the outcome have immediate benefit and provide an opportunity for the child to become more independent and function better in natural environments?
2. Does the outcome allow the child to learn skills that will result in learning other skills?
3. Are the outcomes functional across multiple settings currently and in the future?
4. Can the outcomes be carried out in everyday routines, activities, and places?

Development of IFSP Outcomes and Intervention Plans

Child outcomes need to be developed based on the information gathered from the family, the evaluation and assessment process, and observations within natural environments. Outcomes are defined as changes that a family wants to see for their child and themselves. Outcomes are written in understandable language for caregivers (Bricker, et al 2002)

In planning intervention services, child outcomes should be embedded into everyday routines, activities and places using logically occurring antecedents and consequences to develop functional and generative skills (Bricker, Pretti-Frontczak, McComas, 1998).

Steps in Developing a Systematic Approach to Monitoring

After the IFSP has been developed, which includes child and family outcomes, an individualized instructional plan for each prioritized outcome needs to be developed. Often the objectives need to be analyzed into smaller steps to develop a plan for instruction and a monitoring system. This task analysis may become part of the monitoring system.

For example, an outcome for Mario on his IFSP, is that while holding a railing or hand, Mario will be able to walk up the steps to his room where he can play with his toys. To monitor progress of this outcome it is necessary to analyze the task and break it into smaller steps leading to the desired outcome. This could involve practice in various settings where steps exist (e.g., church, childcare center).

The analysis might look like this:

1. Mario will walk up two steps using same step placement holding adult's hand
2. Mario will walk up three steps using same step placement holding adult's hand
3. Mario will walk up four steps using same step placement holding adult's hand
4. Mario will walk up four steps using same step placement with adult hand over his on railing
5. Mario will walk up four steps using same step placement holding railing without assistance
6. Mario will walk up two steps using alternate feet holding railing or a hand
7. Mario will walk up several steps using alternate feet holding railing or a hand.
8. Mario will walk up all the steps to his room using alternate feet holding railing or a hand

In planning for Mario, the team determined the everyday routine, activity, and place in natural environments (home) where Mario could best practice the development of this skill. Important questions to consider would be:

1. Is there an upstairs railing?

2. Are there steps on the bandstand in the park? Or the library? Or at the church?
3. Are there steps of appropriate size in the home on the front porch?
4. Does Mario attend a center program with a stationary set of steps in the motor area?
5. When, during the day, could Mom work on this skill with Mario? How often?
6. When could Mario's primary service provider help coach Mom to work on this skill?
7. How often?

For an example, look at Figure 1: Monitoring Form used by Ms. Fuentes, a mother who worked on this same outcome for her daughter, Maria. The form is for the objective which includes the task analysis into steps for Maria. Using this system, the parent recorded Maria's progress in the accomplishment of the functional outcome.

From the form, it is easy to see that Maria still needs help alternating feet when going up steps. Maybe it could be suggested to Mom that she use colored chalk or foot patterns of different colors and have Maria put her foot on the outline. Maybe Maria is not sure of her balance. She may need to practice standing on just one foot for a short time to become more confident.

Recommended practices and those advocated by Early Steps indicate that children learn best when they are actively engaged in everyday routines, activities, and places in natural environments. Infants and toddlers are most actively engaged in an activity when skills are taught using materials and activities to which children are attending and when teaching occurs in the environment where children need those skills (Sandall, McLean, & Smith, 2000). In routine-based instruction, objectives should be embedded into the routines.

Infant Toddler Development Training
Module 3, Lesson 4

Purposes for Monitoring Progress in Early Intervention
Monitoring is essential for documenting changes in children over time, progress over time, and the appropriateness of interventions (Wolery, 2000, 2004). Yet according to Raver (2003), teachers always seem to have reasons for not monitoring their teaching and children's progress. Comments are heard such as "monitoring takes too much time, I don't have time to collect the data, I have too many children to keep track of," or "I have the data, but I don't have time to transfer the information to the recording sheets". Certainly, collecting data to make instructional decisions and determine progress is time consuming but well worth the time. The problem becomes more compounded when infants and toddlers are being served in the home or community based childcare facilities.

The ITDS is happy for the parent or community based childcare teacher to implement the activity but are often reluctant to ask them to record the data on a day-to-day basis. Perhaps one of the reasons for the low rate of recording data is the absence of a systematic method for keeping track of children's individual skills. Without a systematic approach to data collection providers will not collect the necessary data they need to report to parents, alter their own intervention, or move on to a new skill once the child has met the criteria.

Ways to Monitor Progress
The ITDS may monitor progress through a variety of strategies. Curriculum based measures such as the AEPS, HELP, or ELAP include their own monitoring forms embedded into the assessment process. The ITDS can also monitor using a matrix, anecdotal records, narrative recordings, portfolios, checklists, and interval behavior sampling. Many of these methods were previously discussed in Lesson 2, except for portfolios (described below). Additionally, directions for developing a matrix are included here.

Directions for Developing a Monitoring Form

1. Develop a matrix with a column for the objective, schedule, activity/material/progress data, and comments.
2. Down the left-hand column of the matrix, list the objectives and criteria for accomplishing the objective.
3. In the second cell from the left, write the time in the daily schedule in which an interventionist or parents might embed the objective. In the case of a center based childcare program include times like center time, arrival, departure, snack etc. In the case of the home, include times such as going for a walk, going to the grocery store, visiting grandmother, or going to the playground. You may include the exact time of day.
4. In the third cell from the left, briefly describe the activity. The example in Figure 1 will give you some ideas.
5. In the fourth cell from the left on the matrix, indicate the child's progress on the skill.
6. In the fifth cell from the left, include a place in which you might write comments.
7. Include a key at the bottom of the matrix to monitor the child's progress in meeting the objective.
8. The matrix may not include all the objectives on the child's IFSP but at least includes those that are feasible to accomplish in a week. The next week the objectives might change based on the progress of the child, his ability to accomplish the objectives and other factors which might affect his performance (e.g., illness).

Figure 2: Activity/Routine/Objective Matrix for Carlos is provided as a sample matrix for you to review.

Use of Portfolios by the ITDS to Monitor Progress

Portfolios are a collection of a child's work and data from informal performance assessments to evaluate development and progress (Wortham, 2005). There are some who feel that portfolios are not appropriate for infants and toddlers. If one is thinking in terms of portfolio usage from the perspective of school age children, they are correct. However, portfolios are appropriate for children birth to three, particularly toddlers. Portfolios are a collection of artifacts, information and data which can be used to monitor the progress that children make in meeting the objectives set forth by the IFSP. Portfolios are created by adults working with the children and organized by developmental domains rather than content areas.

For young children a portfolio may include photographs, checklists of skills that children have achieved, monitoring forms, social play records, anecdotal records, scribbles and drawings, early attempts at painting, transcriptions of language samples, and a variety of other things to document progress. The portfolio can be used to communicate with parents in a meaningful way what the child is doing, what he has done and the progress that he has made over time. In addition, the portfolio is an authentic form of assessment which communicates the types of activities that the child is engaged in and provides documentation of ways that he is growing and learning. In Activity 5 you will have an opportunity to view two portfolio entries.

Infant Toddler Development Training
Module 3, Lesson 4

Activity #1

There is an interesting family story about Zahra from Project TaCTICS at Florida State University. Read the background on Zahra and her family. Notice what she likes to do. As you are reading pay attention to the fact that Masooma, Zahra's mom, talks to Zahra in her native language and is not concerned about Zahra's communication. Her biggest concern is that Zahra will walk.

Included with the information about Zahra are several planning documents based on the assessment of the family's concerns, priorities, and resources. The planning documents are part of the Zahra packet. Note that the information from the family assessment is translated on the Routine Based Intervention Plan. On the plan for mealtimes, note that the targets are functional objectives for Zahra. As you glance at the plan, note the other sections of the plan. This format is an excellent way to embed objectives into everyday routines, activities, and places. The contingencies and cues parts of the plan are extremely important for the parent to support the child achieving the target behavior.

Consider how you might use this planning routine in your own work with young children with disabilities.

Activity #2
Read the article by the staff of Project FACETS, Consideration for Planning Routines Based Intervention. This reading discusses the use of planning interventions based on functional IFSP outcomes.
We looked at an example of this planning process in Activity 1. If you wish to utilize this planning format, there is a Blank Routine Based Intervention Plan form provided for your use. Activity 2 provides you with information based on assessment data to plan appropriate interventions embedded in everyday routines.
Consider the following:

1. Are there other areas that you would add to the planning format? Why?
2. Are there areas you would delete? Why?
3. Do you agree that opportunities for generalization should occur? Why?
4. Why is it important that the opportunity not interfere with carrying out the routine?
5. What does it mean to use "encouragers" rather than rewards?

Keep in mind that this is a planning format and not a format monitoring the child's progress. Think about how you might develop a format for monitoring a child's progress using this planning format. Consider why this would be important?

Activity #3
Read the article by Sharon Raver, Keeping Track: Using Routine-Based Instruction and Monitoring. This article is available in the Resource Bank. In this article, Dr. Raver presents two different monitoring formats, one for an individual child, and one for a group. The objectives on both formats are embedded into everyday routines.
1. Consider how you would adapt this format for the work that you do with young children.
2. What are the advantages of this type of system?
3. What are the disadvantages?
Dr. Raver also states in the article that teachers tend not to monitor instruction.

Reflect on some reasons you would give parents and other professionals to monitor IFSP objectives on a systematic on-going basis?

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Activity #4

In considering the discussion of early childhood portfolio assessment, one can see how portfolios would be a useful tool for monitoring toddler progress. Consider how you might use portfolio assessment with young children.

1. What would you include in a child's portfolio?
2. How would a portfolio be helpful to early intervention staff in communicating progress with parents and families?
3. How would a portfolio be helpful in communicating with other professionals during transition planning?

Activity #5

M'Lisa Shelden and Dathan Rush, with the Family Infant Preschool Project (FIPP) in Morganton, North Carolina, use child portfolios to communicate with families and professionals as the child makes a transition into a center-based program and/or during the transition from Part C to Part B programs. Look at the Child Portfolios for Charmaine and Trevor that were adapted from samples of prior work by Shelden and Rush. These portfolios provide two examples of how a portfolio may be developed. Often included in portfolios are hopes and dreams, anecdotal notes, checklists, running records, developmental domain skills and recorded language samples. As you look at these examples think about-

1. What information the portfolio would convey about each child to parents and professionals?
2. How could you use this strategy to communicate child progress and do continuous progress monitoring for a child you work with?
3. Ways portfolios would be useful in the assessment process?
4. The advantages of this type of data collection system?

Activity #6

Again, review the monitoring system for Carlos that you saw earlier in this lesson in Figure2: Activity/Routine/Objective Matrix and consider the following:

Lesson 4 Highlights

This lesson provided the participant with information about linking assessment and intervention through embedding objectives into everyday routines, activities, and places. In addition, the content explained how a monitoring system could be developed based on a task analysis of a functional objective.

References

Bricker, D., Pretti-Frontczak K., Johnson, J., Straka, E., & Slentz, K. (2002). Assessment, evaluation and programming system for infants and children (2nd ed.). (Vol 1). Administration Guide. Baltimore: Paul Brookes Publishing Co.

Bricker, D., Pretti-Frontczak, K., & McCormas, N. (1998). An activity-based approach in early intervention (2nd ed.). Baltimore: Paul H. Brookes Publishing Co.

Raver, S. (2003). Keeping track: Using routine-based instruction and monitoring. Young Exceptional Children, 6(3), 12-20.

Sandall, S., McLean, M. E., Smith, B.J. (2000). DEC Recommended Practices in Early Intervention/Early Childhood Special Education. Longmont, CO: Sopris West.

Wolery, M. (2004). Using assessment information to plan intervention programs. In M. McLean, M. Wolery, & D. B. Bailey, Jr. (Eds.), Assessing infants and preschoolers with special needs (3rd ed) (pp. 517-542). Upper Saddle River, NJ: Pearson Prentice Hall.

Wolery, M. (2000). Recommended practices in child-focused interventions. In S. Sandall, M.E. McLean, & B.J. Smith (Eds) DEC Recommended Practices in Early Intervention/Early Childhood Special Education. Longmont, CO: Sopris West.

Wortham, S.C. (2005). Assessment in early childhood education (4th ed.). Upper Saddle River, NJ: Merrill.

Websites
- Blank plan
- Consideration for Planning Routines Based Intervention
- Developing a Routine by Outcome Matrix
- Zahra

Infant Toddler Development Training
Module 3, Lesson 5

Introduction
This lesson will discuss the informal assessment of the child during play. Few areas of development are as critical for infants and toddlers as play (Casby, 2003). Play can serve as both the process and content of early intervention. Play also has a relationship to early social, cognitive, motor, and linguistic development (Casby, Linder 1990, Blasco 2001). Through transdisciplinary play assessment in natural environments, families and members of the assessment team can gather authentic information about the infant and toddler's strengths and needs.

The assessment of the developmental areas of cognition, communication, social - emotional development and motor development will be briefly discussed in this lesson. Although the developmental areas are discussed as domain specific, it is imperative that you keep the following point in mind. Infant and toddler development is interdependent and while one area of development may be the primary target for assessment data, skills from other areas may be assessed at the same time.

Learning Objectives
Upon completion of this lesson, the participant will be able to:

1. Describe strategies for assessing infants and toddlers with disabilities
2. Define informal strategies for assessing cognitive development
3. Explain informal strategies for assessing motor development
4. Identify strategies for assessing communication skills
5. Discuss strategies for assessing social competence
6. Identify the benefits and challenges of arena assessments

Resources
The following resource is necessary for the completion of this lesson. Learners may wish to access and print a hard copy of the resource prior to beginning the lesson for future reference.

- Assessing Young Children for Whom English is a Second Language
- Figure 1: Running Record Observation

Key Words
Definitions of key words are found in the glossary.

- Phonology
- Pragmatics
- Syntax
- Semantics
- Morphology
- Arena Assessment

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Components of Play Based Assessment

The role of play in the development of infants and toddlers is undisputed. Much can be revealed about the developmental status of an infant and toddler through observation, assessment, and evaluation of a child's play (Casby, 2003). Play lends itself to the transdisciplinary arena assessment approach advocated by Early Steps, as well as being an excellent vehicle for more informal observation processes. Play in and of itself can be the basis of a valuable context for developmental assessment. According to Casby, play activities, behaviors and interactions are very often some of the only performances available for observation of infants and toddlers suspected of having a developmental delay.

Systematic play-based assessment procedures have been developed to provide early interventionists with structured tools to assess play both qualitatively and quantitatively. There are five basic components of play-based assessment (Linder1990; Blasco.2001). The components and the actions of team members are:

Play Based Assessment Components

Components	Actions of team members
1. Team selection based on child and family characteristics; team members (to include family member); defines purpose of assessment	Identify and assign roles (e.g., facilitator, play facilitator)
2. Information about priorities, resources, and concerns disseminated to team members; review previous results and information	Gather information related to child and family background
3. Selection of appropriate assessment materials (toys)	Identify written observation format

Identify and develop activities to support the child's demonstration of skills |
| 4. Conduct assessment | Structure environment in child- and family-friendly manner |

	Review assessment purpose
	Review team member roles
	Play facilitator presents activities to the child and/or allows the child to lead the interactions
	Facilitator supports family members during the assessment and/or gathers additional information from family
	Team members make suggestions for additional activities
	Team members record descriptive information on observation forms and record demonstration of behaviors on developmental checklists
5. Assessment staffing	Include family as team member
	Review past assessment data
	Review information gathered during play-based assessment
	Brainstorm insights and recommendations
	Develop group consensus in relation to Individualized Family Support Plan (IFSP) goals and outcomes
	Generate IFSP and/or assessment report

Adapted from Early intervention services for infants and toddlers and their families by Patricia Mulhearn Blasco (2001), Boston: Allyn and Bacon.

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Skills Observed during Play Assessment
Observers should focus on the skills the child performs or demonstrates. The following are some examples of skills and behaviors that might be observed:

1. Engagement in pretend play
2. Curiosity
3. Frustration levels and response
4. On task
5. Interactions with peers

6. Types of symbolic play
7. Communication
8. Use of objects/toy
9. Shows evidence of pleasure
10. Interactions with facilitator
11. Task persistence
12. Toy preference
13. Problem Solving

Toys Appropriate for Infants during Play Based Assessment

Toy List A	Toy List B
mobiles	simple cause and effect toys such as those with switches or buttons
teething toys	texture or yarn balls
rattle	sound toys
small, simple toys to hold	foam blocks
toys safe to throw	soft balls
little things to climb on	safe things to cuddle
safety mirrors	toys safe to bang

Toys Appropriate for Toddlers during Play Based Assessment

Toy List A	Toy List B
nesting objects	modeling clay
non-toxic bubbles	markers, chalk, crayons, paints
toys to ride, push, or pull	blocks
things to climb on	toy telephone
simple animal or action figures	sand and water
musical instruments	dress-up items
dolls representing various races and cultures	books
small broom	balls

The Role of Parents in Play Based Assessment

Parents should be involved before, during and after the play-based assessment. Before the assessment is to begin the family service coordinator might ask the parent what the child likes to play and what their favorite toy is. During the process the parent may be the person to interact with the child to elicit a more typical response. Or the parent role may be to observe the play and perhaps coach the facilitator. The facilitator might even make suggestions to the parent regarding what the parent might do to extend or facilitate the play of the child. After the session, parents should be involved in the discussion of the child's performance and how they view the next steps for interventions. This is particularly important if the parent asks a question such as, "Do you think that Billy (the child's brother) can play ball with Sam?"

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Cognitive Skills
Strategies for Assessing Cognitive Skills
Cognition is difficult to define. We use many synonyms to define cognition such as intelligence, thinking, problem solving, mental processes, and concept development. As educators we rely on indirect measures to estimate cognition (Cohen & Spenciner, 1998). Often the term intelligence is used synonymously for cognition.

Salvia and Ysseldyke (2001) describe several processes and behaviors that are sampled by intelligence tests. Those behaviors include:

- **Discrimination** - When given a shape, can the child find another shape similar or one that is different.
- **Generalization** - When given a stimulus, can the child find another item that goes with it such as when shown a cup, the child identifies a saucer.
- **Classification** - The child can group similar items together based on a common trait.
- **Sequencing** - The child put things in the correct order for a series of items such as organize blocks from biggest to smallest.
- **Detail recognition** - The child determines the missing item. For example, if shown a face without a mouth, the child recognizes the missing mouth.
- **Vocabulary** - For infants and toddlers, vocabulary development is often measured by naming or pointing to pictures of familiar objects.
- **Comprehension** - The child is asked to demonstrate understanding of directions or certain situations such as what is something with wheels that you ride in.
- **Memory** - These items typically ask a child to repeat a phrase, several words, or numbers. A child may also be shown a series of objects which are then hidden. The child would be asked to recall the items.

Below are some of the items measuring cognition from the Hawaii Early Learning Profile for Infants and Toddlers (HELP). These items are fairly like other assessments of cognitive abilities. Note that the items measure the processes listed earlier.

- Guides action of toy manually (9-12 mo.)
- Uses locomotion to regain object and resumes play (9-12 mo.)
- Unwraps a toy (10 ½ -12 mo.)
- Imitates several new gestures (11-14 mo.)
- Nests two then three cans (12-19 mo.)
- Pulls string horizontally to obtain toy (12-13 mo.)
- Makes detours to retrieve objects (12-18 mo.)
- Looks at place where ball rolls out of sight (12-13 mo.)
- Recognizes several people in addition to immediate family (12-18 mo.)
- Recognizes and points to four animal pictures (16-21 mo.)
- Solves simple problems using tools (17-24 mo.)
- Matches sounds to animals (18-22 mo.)
- Rights familiar picture (18-24 mo.)
- Remembers where objects belong (21-24 mo.)
- Demonstrates use of objects (24-28 mo.)
- Identifies clothing items for different occasions (24-28 mo.)
- Engages in simple make-believe activities (24-30 mo.)
- Selects picture involving action words (24-30 mo.)

- Obeys two-part commands (24-29 mo.)
- Matches shapes-circle, triangle, square (toys) (26-30 mo.)
- Matches colors (26-29 mo.)
- Matches identical simple pictures of objects (27-30 mo.)

Assessment of cognitive abilities is very complex in young children since the developmental areas overlap. In surveying the items, it appears that some of the items are motor, and some are language.

An excellent way of assessing cognitive skills is in the context of play. Some of the cognitive skills which can be assessed are early object use; symbolic and representational skills, imitation skills, problem solving skills, and discrimination and classification skills (Linder, 1990).

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Communication Skills

Communication is often referred to as language. Indeed, language is part of the domain of communication but includes other ways children, particularly infants and toddlers, let adults and other children know their desires, intents, and ideas. Communication is defined "as the transfer of information between or among individuals; it may be verbal but with infants and very young children it might also be gestural or through the use of an augmentative device." (Cohen & Speciner, 1998). Language is the use of symbols which may be expressive or receptive.

Assessment of communication skills in young children previously was left to the speech and language clinicians in early intervention programs. However, the shift towards transdisciplinary and interdisciplinary service models, as well as assessment and intervention in natural environments, has created the need for all professionals to know and understand the area of communication (Crais & Roberts, 2004). Assessment of communication skills is no longer the sole responsibility of the speech and language clinician but needs to involve the family and all professionals interacting with the child.

Procedural Considerations in Assessing Communication Skills
- There are numerous concerns related to traditional assessment approaches in the use of standardized and norm referenced instruments with infants and young children with disabilities (Crais & Roberts).
- Standardized testing does not typically describe how children communicate in natural environments.
- Young children with disabilities typically do not perform well in communication with an unfamiliar examiner.
- Sociocultural background of the child influences many aspects of communication, including when and how a child interacts with adults or strangers, the dialect used, and the way the child interacts with adults. For children who are non-English speaking, it is critical to determine whether the communication difficulties occur in the primary language and whether the behavior differs substantially from the norms and expectations of the child's own language community (Battle, 2002). It may be helpful here to examine the consideration of high or low cultural context. A high context culture relies less on verbal communication and more on nonverbal cues and messages and shared experiences. Within some high context cultures, silence is

valued. Whereas low cultural contexts that exist among Euro-Americans rely on direct communication and verbal messages (Kalyanpu and Harry, 1999). These differences in interpersonal communication effect child-rearing and communicative interactions between young children and their caregivers. Thus, children from diverse cultures may not have the communicative behaviors which are critical for formal assessment and must be kept at the forefront in the decision-making during the assessment process particularly in the communication domain.

Assessment of Communication in Everyday Routines, Activities and Places

- **Phonology** - Phonology is the study of the sound system of language. Caregivers can notice the sounds infants and toddlers make. It is important to keep in mind that children between birth and three can produce most sounds. However, the r, l and th sounds typically do not appear until 48 months.

- **Syntax** - Syntax is the rules governing the order and combination of words to form sentences. One-word utterances are typically produced by 12-15 months, two-word utterances by 18 months and 3-word utterances by 24 months. These early utterances are not grammatically correct, but they do communicate meaning and communicative intent (Crais and Roberts, 2004). For example, a child will say "me go" or "eat cookie" or "Mommy with Daddy". Professionals can note the syntactic structure by recording a language sample and making an analysis of the syntactic complexity of children's language. According to Crais and Roberts, a good estimate of young children's syntactic complexity is to determine the mean length utterance (MLU). MLU is computed by dividing the number of morphemes in a language sample by the number of utterances.

- **Semantics** - Semantics is the study of meaning or features that structure a language's vocabulary. Young children's early words relate to things that are meaningful to them such as names of people, objects in their natural environment, places they go frequently particularly those that they enjoy. Words like mommy, daddy, doggie, ball, and cookie are common in young children's vocabulary. Young children who are typically developing have acquired an expressive vocabulary of 50 words and a receptive vocabulary of about 300 words at 18 months (Cross, 2000).

- **Pragmatics** - Pragmatics is the study of language in context and focuses on the intent of communication. While infants do not acquire words until the end of the first year, they are actively involved with people in their natural environment. Nonverbal exchanges between child and caregiver form the basis for later conversation turn-taking (Cross 2001). Between 8 and 12 months, infants' sound vocalizations and gestures begin to be used consistently and others begin to understand the intentionality of communication. At 12 months, children begin to use words to communicate their intentions. The use of words becomes more sophisticated the older the child gets. Between 12 and 15 months, children are using single words and between 18-24 months children begin to combine words to communicate their intent. By 21 months, children can maintain a topic of conversation 50% of the time (Crais & Roberts, 2004).

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Suggested General Guidelines for Assessment of Communication

1. Choose developmentally appropriate toys and materials
2. Include the parent or primary caregiver to "break the ice".

3. Begin the interaction with tasks that require little or no verbalization.
4. Follow the child's lead in the interaction by maintaining the child's focus on objects or things that he is interested in.
5. Let the child choose activities, topics, and materials that he is interested in. Be prepared to watch and interact when the child shows interest.

Strategies to Assess the Child at the Preverbal Stage

1. Determine the child's primary means and the function of communication. In other words, how does the child communicate (babble, point, facial expressions) and function (hungry, wants an object, wants attention)?
2. Note the word approximations that the infant/toddler is using. Note the sounds (phonemes), sound combinations, and word approximations attempted by the child.
3. Note children's receptive language. What are the words that they seem to understand?
4. Note turn-taking skills. If the child vocalizes and the caregiver imitates, does the child repeat, and then the caregiver continues?
5. Does the child make eye contact with the caregiver when the caregiver speaks?
6. Does the child make eye contact with the caregiver when the child is attempting to communicate?

Strategies to Assess the Child at the Verbal Stage

1. What are some functions of communication (attention, requests, greeting, answering, protest, comments on object, comment on action, and acknowledgement)?
2. Classify the semantic categories of the words that the child uses (people, objects, places, verbs, etc.).
3. Note the child's conversational skills (does the child take turns, initiate, maintain a topic).
4. Note the context and who the child interacts with during conversation.
5. Determine the semantic relations in the child's prelinguistic, one-word, two word, and multiword utterances.

Methods of Assessment of Communication Skills in Very Young Children

- **Standardized Tests (Evaluation)** - There are numerous evaluation instruments for the purpose of determining eligibility for services pinpointing the language and communication area. The evaluation instruments designated by Early Steps have a communication subtest as part of the total battery. Thus, it is possible to identify a delay in development in the language/communication area. Standardized instruments have their weaknesses, particularly for infants and toddlers. It is highly recommended that observational and informal assessment procedures be used to determine the most effective intervention contexts within everyday routines, activities, and places.
- **Informal Assessment Instruments** - such as criterion referenced instruments, developmental scales, and curriculum-based assessment instruments such as the Hawaii Early Learning Profile (HELP) and the Assessment, Evaluation and Programming System (AEPS) may be helpful in identifying skills and areas for intervention planning. However, there are limits to these instruments in that professionals still need to broaden the assessment process to include observing the child's communication skills within their natural environments with the people they interact with routinely (Crais & Roberts).
- **Communication Sampling** - Collection and analysis of communication sampling is one of the more in-depth methods of assessing children's communication skills. Sampling could determine how a child intentionally communicates (requests, protests, comments, seeks attention, answers, or acknowledges). The communication sample could determine the mean length utterance, or the typical

form of communication (gesture, vocalization, etc.). Ideally, the sample would be audio or video recorded and then transcribed and analyzed.

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Areas Assessed during Motor Assessments

Motor assessment with very young children with disabilities should not be limited to standardized instruments but assess functional motor skills such as patterns of locomotion, the child's ability to move in the environment, to act on their environment and to make meaningful use of information from their environmental interactions (Harris & McEwen, 1996).

Domains of motor assessment include gross motor skills that involve the large muscles of the body and include rolling over, creeping, crawling, walking, and running. Functional gross motor skills include transferring from a wheelchair to the floor or toilet. Fine motor skills include the use of small more distal muscles such as the fingers. Fine motor milestones include reaching, grasping, and releasing. Functional fine motor skills include eating, drinking, and picking up small toy pieces. Oral motor skills involve those with the mouth, tongue, teeth, facial and jaw muscles. Milestones in the oral motor area involve sucking, swallowing, biting, and chewing. Functional oral motor skills include eating and talking.

There are many excellent norms referenced instruments that measure motor skills. In the case of a child with motor impairments, it is helpful to get the assistance of a physical or occupational therapist in the evaluation and assessment process.

There currently is less emphasis on the attainment of motor milestones or measurement of muscle tone, strength or balance reactions and more emphasis on functional motor goals within natural environments (Harris & McEwen, 1996).

It is important to "correct for prematurity" in the motor assessment of children who were born less than or equal to 37 weeks gestation (Harris and McEwen). It is also important for caregivers including the parent to adjust their expectations on the child's corrected age rather than chronological age.

Strategies in the Assessment of Social Skills

The development of social skills is a critical domain for infants and toddlers with disabilities. Infants and toddlers with disabilities often have trouble interacting with others. A primary focus from birth to 12 months is the child's response to adults. During the second year, the infant expands on his relationships with others, primarily adults and engages in increasingly sophisticated social behavior (Blasco, 2001). According to Blasco, the child's ability to sustain his own wants and needs to share with others begins to increase as the child reaches his second birthday. From 24 to 36 months, the focus changes as the child's interest in peers increases (Odum et al 2004).

Social development begins with positive interactions that develop between the infant and caregiver (Blasco). The interactions are reciprocal as the behavior of each member of the dyad influences the other. Failure of either the infant or caregiver to fully participate in early critical interactive interchanges may result in less participation by the other member of the dyad. For some infants and toddlers with disabilities, impairments or delays in development will compromise the quality of interactions.

The primary focus of assessing social competence and social skills of infants and toddlers with disabilities is on the interaction of the child with his caregiver rather than peers. Infants show individual differences in the contribution they bring to the relationship based on factors related to temperament, medical status, or disability. It is not until the age of three, that social interactions with peers emerge and become more frequent and complex (Noonan & McCormick, 1993). Assessment of children's social development may occur at the level of individual social behavior, social interactions, or social relationships.

Development of Social Interactions in Infants and Toddlers

Age	Social Development
Birth to 2 months	Infant attends selectivity to faces, smiles, discriminates between self and others, attends to social play
2 months	Smiles in response to stimuli, crying is instrumental, reciprocates with social partners
3 months	Develops social smile, responds differentially to facial expressions
6 months	Shows more interest in objects than people, enjoys parent initiated social play
9 months	Uses adults for social reference, taking cues from their behavior, actively imitates, participates in social games with partner
9-15 months	Stranger anxiety appears, imitation skills are firmly established, establishes, and maintains proximity to caregiver
15-24 months	Increasing language skills allow parent infant interactions to become increasingly verbal, engages most of the time in solitary activity watching other children, refers to self by name
24-36 months	Interest in peers increase, sociodramatic play skills become more refined, inclusion of peers in symbolic play, plays simple games

Adapted from Odum, Schertz, Munson, and Brown (2004).

Methods for Assessing Social Skills
The assessment of social skills, social interactions and social competence is different than other developmental areas. The use of standardized instruments in this domain is neither appropriate nor available (Odum et al, 2004). Social skills can be most effectively measured in natural environments with familiar adults and peers. Social skills cannot be directly assessed in isolation, although social skills can be determined through caregiver interviews.

Assessment of social skills with infants and toddlers rely on observation ideally in natural environments. However, the addition of a strange observer can affect the validity and reliability of the observation. Therefore, observers need time to establish rapport with the child.

It is important to use multiple sources of information and different informants. For example, parent ratings and a childcare providers rating may differ. However, this discrepancy may provide information about the child's social skills across settings. Assessment of social skills can occur through anecdotal data collection, questionnaires, direct observation, rating scales, interaction scales and checklists which were discussed in Lesson 2 of this module.

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Activity #1
John Jones is 32 months old. Consider Figure 1: Running Record Observation which targets his interactions with caregivers.
Reflect on how John communicates based on the observational data. What cognitive skills do you note? Do you see any data about his social skills with adults? What do you note about John's behavior?

Activity #2
Early Steps has recommended that arena assessment be used when evaluating and assessing infants and toddlers. This model of assessment has received increasing attention in the professional literature as a transdisciplinary family centered approach.

The pragmatics of the approach are worthy of consideration as professionals work across disciplines. Given the widespread usage of the arena assessment approach in early intervention settings across the nation, Parette, Bryde, Hoge and Hogan (1995) provided a close examination of the pragmatic aspects of the approach including benefits and challenges in their article, *Pragmatic Issues Regarding Arena Assessment in Early Intervention.* A summary of the article is provided below.
Benefits discussed by Parette et al. (1995) included:

1. less intrusion on family time since duplication of efforts is not required when disciplines and domains assess together
2. greater consistency in assessment findings among team members
3. the advantage of keeping the facilitator with the best rapport engaged with the child over a period, allowing other team members to make suggestions and ask questions
4. less fatigue and resistance on the part of the young child to the assessment experience
5. immediate use of information obtained by other professionals since the team is included in simultaneous observation and assessment, as opposed to waiting for the information in a written report
6. valuable interaction among team members for answering questions such as how to position a child, or what part of the vision field is most useful
7. the simultaneous availability of personnel from multiple disciplines to families for providing information and answer specific questions
8. more comprehensive information with a picture of the "whole child"
9. more closely aligned with family-centered philosophy underpinning the development of the IFSP

Challenges discussed by Parette et al. (1995) included:

1. arranging space in an ecological setting familiar to the child which also accommodates the needs of team members (e.g., ideally the family home free of distracters with adequate space for team members and any special testing items to accommodate augmentative needs)
2. providing for adequate rapport building time between the team member, who will serve as facilitator, and the child
3. addressing professionals' individual comfort levels in having colleagues watch them work with a child
4. exercising care in choosing assessment instruments which are conducive to valid measurements within an arena environment
5. clarifying the role families will play in the arena assessment
6. accommodating and respecting family cultural differences that protect the integrity of the family unit
7. scheduling adequate planning time for the arena and allowing for appropriate staff utilization
8. managing sensitivities related to professional disciplines unwilling to relinquish their "turf"
9. using appropriate billing procedures which vary across disciplines and agencies

In sum, even with the challenges, Parette et al. (1995) conclude that the arena assessment approach allows for professionals and families to work collaboratively in a significant and meaningful manner. Further, they state that traditional fragmented assessments of yesteryear have examined children with a domain specific focus and not yielded the benefits of the arena approach with its holistic picture of the child.

Having read the summary of the Parette et al. (1995) article, reflect on the following mental picture of an arena assessment.

Jared, a 6-month-old, was cocaine exposed in utero. "He is still jittery sometimes" according to his family, has concerns with reflux and significant hypertonia. He lives with his dad and paternal grandmother who are very devoted to him. Today the team will do an arena evaluation and assessment at the family's home.

The arena assessment team is sitting on the floor in the family room. The room is well lit and pleasant with several Jared's favorite baby toys neatly stacked in a toy basket at the end of the couch.

The Service Coordinator has formed a comfortable relationship with Jared and his family during a prior visit to the home. The family has told her that their biggest concern is that "Jared has a stiff body and they are afraid he won't be able to sit up."

Jared's arena assessment team consists of his dad and grandmother, a physical therapist, an ITDS and the Service Coordinator. The Service Coordinator talked with the family about the role they wanted to play during the assessment. They said they wanted to be observers but would be happy to help with anything other team members needed them to do. Given this, the team agreed on the roles that each team member would play during the evaluation and assessment in their pre-assessment planning meeting.

1. Which team member do you think would be the best choice as facilitator during Jared's arena evaluation and assessment?
2. From what you know about Jared, are there other team members who may need to be used as consultants for further evaluation and intervention planning?
3. How do you think the family could feel involved as a true team member in the arena assessment and what could be done to increase their comfort level with the process?

Activity #3
Read the article [Assessing Young Children for whom English is a Second Language](#) by Mary McLean. You will find this article in the Resource Bank. Dr. McLean discusses several considerations in assessing young English Language Learners (ELLs). Consider the strategies that are suggested and how you might apply them to your setting.

Activity #4
The final activity for this lesson and module is a culminating activity.

Read Recommended Practices in Assessment (p.17-27) by John T. Neisworth and Stephen J. Bagnato from *DEC Recommended Practices in Early Intervention/Early Childhood Special Education*. Eight qualities are mentioned in the chapter operationalizing the concept of developmentally appropriate practice in assessment for early intervention. The qualities are utility, acceptability, authenticity, collaborative, convergence, equitability, sensitivity, and congruency.
As you review the practices considering the eight qualities, determine how these practices apply to you in your role as an ITDS. Consider your role in the assessment process within Early Steps. Are there changes you professionally need to make? Are there changes your local Early Steps agency needs to make?

Lesson 5 Highlights
Strategies were presented for assessing infants and toddlers with disabilities during play. In addition, several methods were discussed for assessing children in the cognitive, communication, motor, and social areas. Assessment is an on-going process especially with young children. It is important that ITDS have knowledge of a wide variety of strategies to identify the strengths and needs of the child.

References

Blasco, P. M. (2001). Early intervention services for infants and toddlers, and their families. Boston: Allyn & Bacon.

Casby, M. W. (2003). Developmental assessment of play: A model for early intervention. Communication Disorders Quarterly, 24 (4), 175-183.

Cohen, L. G. & Spenciner, L. J. (1998). Assessment of children and youth. New York: Longman.

Crais, E. & Roberts, J. E. (2004). Assessing communication skills. In M. McLean, M. Wolery, & D. B. Bailey, Jr. (Eds.), Assessing infants and preschoolers with special needs (3rd ed) (pp. 345-405). Upper Saddle River, NJ: Pearson Prentice Hall.

Cross, L. (2001). Early communication development. In M. S. Lue (Ed.) A survey of communication disorders for the classroom teacher. Needham Heights: MA: Allyn & Bacon.

Linder, T. W. (1990). Transdisciplinary play-based assessment: A functional approach to working with young children. Baltimore, MD: Paul H. Brookes Publishing Co.

Kalyanpur, M. & Harry, B. (1999). Culture in special education: Building reciprocal family-professional relationships. Baltimore, MD: Paul H. Brookes Publishing.

McLean, M. (1998). Assessing young children for whom English is a second language. Young Exceptional Children, 1(3), 20-25.

Neisworth, J.T. and Bagnato, S. J (2000). Recommended practices in assessment. In S. Sandall, M.E. McLean & B. J. Smith (Eds.), DEC recommended practices in early intervention/early childhood special education. Longmont, CO: Sopris West.

Noonan, M.J. and McCormick, L. (1993). Early intervention in natural environments: Methods and procedures. Pacific Grove, CA: Brooks/Cole.

Odum, S. L., Schertz, H., Munson, L.J. and Brown, W. H. (2004.). Assessing social competence. In M. McLean, M. Wolery, & D. B. Bailey, Jr. (Eds.), Assessing infants and preschoolers with special needs (3rd ed) (pp. 412-450). Upper Saddle River, NJ: Pearson Prentice Hall.

Parette, H.P., Bryde, S., Hoge, D.R., Hogan, A. (1995). Pragmatic issues regarding arena assessment in early intervention. Infant Toddler Intervention, 5, 243-254.

Salvia, J. & Ysseldyke, J. (2001). Assessment (8th ed.). Boston, MA: Houghton Mifflin Co.

Infant Toddler Development Training
Module 3

Congratulations!
You have completed Module 3. You may want to review the Module before taking the Module 3 Final Assessment on TRAIN. **Please contact your local Early Steps TRAIN to enroll you in these modules through the TRAIN learning management system**

Module 3 Resources

- The Early Steps Service Delivery Policy and Guidance: Delivering Services in the Routines and Daily Activities of Children with Disabilities and their Families
- The Implications of Culture on a Developmental Delay
- The Philosophy behind Assessment: What is it we really want?
- Informed Clinical Opinion
- Figure 2: Percentiles
- Figure 3: Running Record Observation
- Figure 4: Event Sampling
- Figure 5: Score Summary
- Assuring the Family's Role on the Early Intervention Team: Explaining Rights and Safeguards (2nd Ed)
- Tips for Writing Family-Centered Reports
- When Parents and Professionals Communicate: Tips for Professionals.
- Discovering Family Concerns, Priorities and Resources: Sensitive Family Information Gathering.
- Child Portfolios
- Keeping Track: Using Routine-Based Instruction and Monitoring
- Figure 1: Monitoring Form
- Figure 2: Activity/Routine/Objective Matrix
- Assessing Young Children for Whom English is a Second Language
- Figure 1: Running Record Observation