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Administering the AEPS

Content, Organization, and Administration Guidelines

The key to an approach that links assessment, goal development, intervention, and evaluation is a measurement instrument that permits the collection of program-related performance data that can be used to formulate children's IFSPs/IEPs, guide intervention efforts, and monitor child progress. The assessment/evaluation instrument should meet certain recommended practice guidelines to be appropriate for use with infants, toddlers, and preschool children who are at risk for or who have disabilities (e.g., Bagnato & Neisworth, 1991; Bagnato, Neisworth, & Munson, 1997; Bricker, 1989a; McLean & McCormick, 1993). In particular, the instrument should

- Contain content reflective of the philosophy and goals of the intervention program
- Be usable by a range of team members (e.g., interventionists, specialists, families), particularly those who interact with the child on a regular basis in familiar settings
- Offer a logical developmental sequence of items that can be directly linked to intervention content
- Specify a range of performance criteria that indicate if a child has a particular skill and if the skill is a functional part of the child's usual repertoire
- Permit adaptations and modifications for a variety of disabling conditions
- Provide procedures for family participation
- Have reliability and validity data to support its use

The *Assessment, Evaluation, and Programming System for Infants and Children (AEPS®)* meets these recommended guidelines and provides useful programming and evaluation information. The AEPS Test is a curriculum-based measure (CBM) designed to assist teams in 1) determining a child's present level of functioning, 2) developing meaningful IFSP/IEP goals/objectives,

3) planning intervention, and 4) evaluating a child's performance over time. Teams comprised of family members, direct services personnel (e.g., classroom interventionists, home visitors, child care providers, assistants) and specialists (e.g., speech-language pathologists, occupational and physical therapists, psychologists) can use the AEPS Test to assess and evaluate the skills of infants and young children who are at risk for or who have disabilities. The test was specifically developed to link assessment, goal and objective development, intervention, and evaluation activities.

The AEPS Test has two separate developmental levels, Birth to Three Years and Three to Six Years, which cover six broad curricular areas including Fine Motor, Gross Motor, Adaptive, Cognitive, Social-Communication, and Social. Items on the AEPS Test for Birth to Three Years cover the developmental period from birth to 36 months. Items on the AEPS Test for Three to Six Years cover the developmental period from 36 to 72 months. For children with significant delays, the AEPS Test can be used up to age 9. Significant modification may be necessary in the wording of the items and criteria to make items appropriate for a child who is 6 years of age and older.

The AEPS Test has been used successfully with children who have a wide range of diagnoses or conditions, including Down syndrome, cerebral palsy, autism spectrum disorder, seizure disorders, sensory impairments, and general developmental delays. The test has been used successfully with children who are environmentally at risk (e.g., those with adolescent parents, those in foster care). The AEPS Test has also been used successfully with typically developing children in identifying center-based/classroom goals and monitoring children's performance over time as a key part of program evaluation activities.

ADVANTAGES OF THE AEPS TEST

Personnel working with infants, toddlers, and young children who are at risk for or who have disabilities are often frustrated when they use traditional instruments to assess children's development and to measure child progress. Frequently, outcomes from standardized measures are not reflective of a child's actual abilities and do not aid the selection of appropriate intervention goals/objectives. The progress made by children with disabilities may be slow and gradual, and the increments between items on traditional assessment instruments may not reflect small changes in behavior. Traditional standardized assessments can penalize children with communication, sensory, or motor disabilities by allowing only a single correct response to narrowly framed items. To counter these and other problems in assessing children who are at risk for or who have disabilities, the AEPS Test diverges from other available instruments in a number of ways and presents several advantages:

- The AEPS Test measures functional skills and abilities thought to be essential for young children to function independently and cope with environmental demands. The focus on functional skills and abilities ensures that each test item is potentially an appropriate intervention target.

- The AEPS Test is comprehensive in nature. The content of the AEPS Test covers the major developmental areas of Fine Motor, Gross Motor, Adaptive, Cognitive, Social-Communication, and Social, making it valuable both as an initial assessment tool and in monitoring children's subsequent progress.
- The primary and preferred method of obtaining assessment/evaluation information is through observing the child in familiar and usual environments. This feature of the AEPS Test provides the team with critical information about what responses the child uses in a functional manner and when and how they are used.
- Administration of the AEPS Test is flexible and allows the user to adapt or modify either the presentation format of items or the stated criteria to maximize the child's functional performance; for example, teams are encouraged to use sign language with children with hearing impairments and to allow children with motor impairments to use prosthetics to complete items such as self-feeding. Flexibility in the presentation and in the child's response are acceptable because test results are used primarily to generate appropriate intervention targets for individual children and monitor subsequent progress, not for comparing a child with a normed standard of performance.
- The items on the AEPS Test are written to reflect conceptual or broad response classes rather than the singular, specific responses usually found on standardized tests; for example, an item asks about reaching and grasping rather than the ability to insert pegs in a pegboard.
- The AEPS Test has associated curricula (*AEPS Curriculum for Birth to Three Years* and *AEPS Curriculum for Three to Six Years*). Results from the AEPS Test can be used to locate and select intervention content using the associated curricula.
- A parallel family assessment/evaluation form (Family Report) for both levels is available for caregivers to assess their child and to help promote involvement in the IFSP/IEP and intervention process. In addition, the IFSP/IEP Goal and Objective Examples assists the family in preparing for IFSP/IEP meetings. Asking caregivers to complete an assessment form regarding their child's development clearly conveys that the professional staff considers caregiver knowledge an important contribution to the assessment, goal development, intervention, and evaluation processes.
- An associated set of written IFSP/IEP goal/objective examples for each AEPS Test level are available in Appendix B. These can be used as guides, models, or examples for developing meaningful IFSP/IEP goals/objectives and intervention plans for individual children.

These advantages make the AEPS Test an appealing choice for teams interested in obtaining comprehensive information on children's behavioral repertoires and implementing an approach that links assessment, goal development, intervention, and evaluation.

CAVEATS FOR USING THE AEPS TEST

Several characteristics of the AEPS Test are addressed in anticipation of questions that may arise about administration and interpretation of information gained from the AEPS Test.

1. The AEPS Test was not designed as a normed-based measure but rather as a CBM, which is a type of criterion-referenced measure. The content of CBMs is focused on important functional skills, whereas the content of norm-based tests is focused on skills generally selected because they discriminate between different age groups. Norm-based tests are appropriate to use for comparative purposes (e.g., determining eligibility for services), whereas CBMs are appropriate to use for selecting intervention content. Goals/objectives, as well as intervention content, should be selected by comparing the child's current repertoire against the next appropriate developmental targets; age norms provide little functional information that can be used to determine intervention content. In addition, for children with significant discrepancies between their chronological age and developmental level—which is often true for many children who are at risk and who have disabilities—using age norms to select intervention content is, at best, questionable. Many interventionists, however, would like to use AEPS Test results to corroborate information gathered from standardized, norm-referenced tests to determine a child's eligibility for services. Consequently, in this second edition, tables containing cutoff scores for establishing eligibility for services have been included. The cutoff scores for the Birth to Three and Three to Six levels of the AEPS Test are not age norms and should only be used to assist in corroborating decisions regarding a child's eligibility for services. Use of the AEPS Test results to corroborate eligibility decisions is described in Appendix F of this volume. The procedures used to create the cutoff tables also is explained.

2. Gathering data using the AEPS Test requires an initial time investment. Users of the AEPS Test have found the administration time to vary as a function of 1) familiarity with the test (e.g., the more familiar the assessor is with the AEPS Test, the more quickly assessments can be completed), 2) familiarity with the child (e.g., familiarity with the child's behavioral repertoire speeds administration), and 3) the child's level of functioning (e.g., children with more advanced behavioral repertoires may take longer to assess). Such variations make it difficult to state precise administration time for the AEPS Test. Interventionists familiar with the test and children report that initial assessments require several hours to score the AEPS Test in its entirety, whereas subsequent assessments usually take one quarter of that time. Assessment/evaluation, however, should not be viewed as a discrete activity that can be completed in a predetermined period of time but as a continuous process that occurs across time and situations and allows for a comprehensive developmental profile of a child to be created. Comprehensive, detailed assessments are fundamental to the development of appropriate IFSPs/IEPs and to the quality of subsequent intervention. If IFSPs/IEPs are not based on comprehensive, accurate assessment data, then they will be of questionable value and relevance to children and families.

3. Users of the AEPS Test should be familiar with the content and organization of the instrument. The AEPS Test is not a simple checklist that can be examined briefly prior to its use. The assessor should have read each item and studied its associated criteria and notes. In addition, the user should be familiar with the various data recording forms. Use of the AEPS Test without sufficient preparation may yield inaccurate and misleading results. Hastily completed assessments or evaluations that do not include information about a child's performance across time, activities, materials, people, and settings will yield results that are incomplete and often inaccurate.

4. Individual interventionists can complete the AEPS Test; however, the accuracy and quality of the outcomes will be greatly enhanced if specialists (e.g., communication specialists, occupational therapists, physical therapists) and caregivers participate in the assessment process. It is particularly important to involve a motor specialist if the child has a motor disability, a sensory specialist if the child has a sensory disability (e.g., hearing or visual impairment), and a communication specialist if the child has a communication delay or disorder. Caregivers can provide information about children's skills in the home or other community settings that may not be observed by interventionists or specialists.

CONTENT AND ORGANIZATION OF THE AEPS TEST

Using the AEPS Test allows teams to generate a comprehensive profile of children's behavior in familiar environments. To collect comprehensive information on developmental status, six broad curricular or developmental areas are included: Fine Motor, Gross Motor, Adaptive, Cognitive, Social-Communication, and Social. Each developmental area encompasses a particular set of skills, behaviors, or information that is traditionally seen as related developmental content. Categorization of behavior into areas sometimes results in the somewhat arbitrary placement of skills into one area rather than another (e.g., emergent writing is in the Fine Motor Area rather than the Cognitive Area).

Each developmental area is divided into strands. Table 2 provides an overview of the six areas for both AEPS Test levels along with associated strands. Strands consist of related groups of behaviors organized under a common category; for example, behaviors relating to large muscle movements used in play are grouped in the Play Skills strand of the Gross Motor Area. Each strand contains a series of test items called *goals and objectives*. These items can be used to write IFSPs/IEPs. The objectives represent components of the goals or more discrete skills (i.e., building blocks to the goals) and enable the user to accurately pinpoint a child's developmental level within a specific skill sequence. AEPS Test items within a given strand are sequenced to facilitate the assessment of a child's ability to perform a particular behavior within a developmental sequence of skills.

Whenever possible, strands and goals have been arranged from easier or developmentally earlier skills to more difficult or developmentally more advanced skills. The objectives associated with each goal are arranged in a reverse sequence—that is, generally the most difficult items occur first and the less difficult items follow sequentially. The strands, goals, and objectives were

Table 2. Overview of the areas and strands for the two levels of the AEPS Test

Areas	Birth to Three Strands	Three to Six Strands
Fine Motor	A. Reach, Grasp, and Release B. Functional Use of Fine Motor Skills	A. Bilateral Motor Coordination B. Emergent Writing
Gross Motor	A. Movement and Locomotion in Supine and Prone Position B. Balance in Sitting C. Balance and Mobility D. Play Skills	A. Balance and Mobility B. Play Skills
Adaptive	A. Feeding B. Personal Hygiene C. Undressing	A. Mealtime B. Personal Hygiene C. Dressing and Undressing
Cognitive	A. Sensory Stimuli B. Object Permanence C. Causality D. Imitation E. Problem Solving F. Interaction with Objects G. Early Concepts	A. Concepts B. Categorizing C. Sequencing D. Recalling Events E. Problem Solving F. Play G. Premath H. Phonological Awareness and Emergent Reading
Social-Communication	A. Prelinguistic Communicative Interactions B. Transition to Words C. Comprehension of Words and Sentences D. Production of Social-Communicative Signals, Words, and Sentences	A. Social-Communicative Interactions B. Production of Words, Phrases, and Sentences
Social	A. Interaction with Familiar Adults B. Interaction with Environment C. Interaction with Peers	A. Interaction with Others B. Participation C. Interaction with Environment D. Knowledge of Self and Others

arranged to facilitate test administration; for example, if a child performs a more advanced objective within a sequence of objectives, then the assessment of earlier objectives within the sequence is generally unnecessary. The arrangement also provides a framework for understanding children's behavioral repertoires (i.e., which skills they have mastered, which are emerging, and which will they likely acquire next). There are instances, however, in which associated objectives are of equal difficulty and do not represent a developmental sequence from easier to more difficult. Furthermore, there are instances when a child's behavioral repertoire appears to be uneven (i.e., the child performs a variety of splinter skills). In these cases, assessment of a broader range of items is in order.

The contents of the AEPS Test for Three to Six Years are less hierarchical than that of the Birth to Three Years, reflecting an increase in the influence of individual experience and environmental factors on the preschool child's development. As children approach school age, they show increasing individuality and variability as they learn new skills.

The hierarchical nature of strands, goals, and objectives is shown in Figure 11. The identification system associated with the strands (e.g., A, B, C), goals (e.g., 1, 2, 3), and objectives (e.g., 1.1, 1.2, 1.3) reflects this sequential arrangement and can assist the test user in locating and referring to items. The

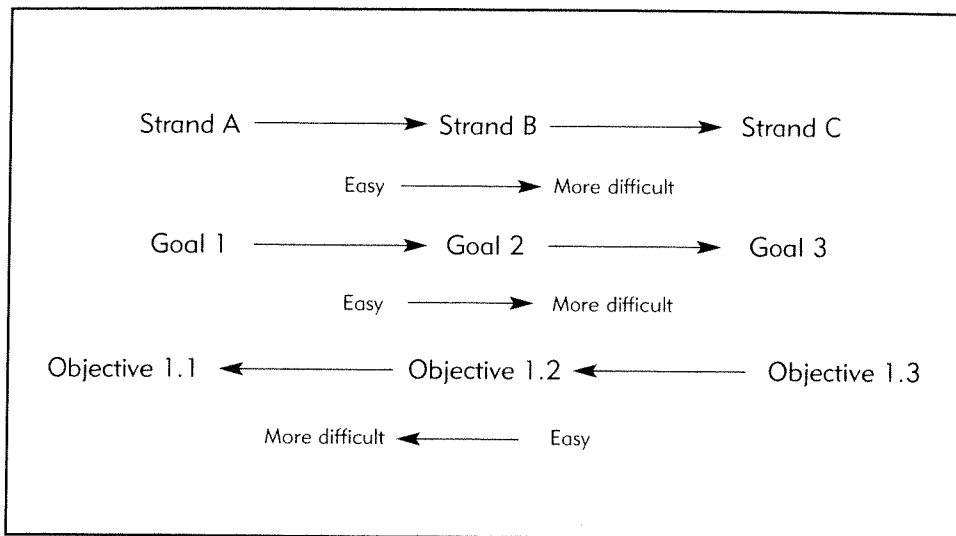


Figure 11. Hierarchical arrangement of strands, goals, and objectives on the AEPS Test.

organizational structure of the strands, goals, and objectives is presented in Figure 12. Users are encouraged to become familiar with the administration guidelines prior to using the AEPS Test. Test administrations that do not follow the guidelines are likely to be inefficient and may yield inaccurate child performance outcomes. Administration procedures are discussed next.

ADMINISTRATION PROCEDURES

Order of Test Administration

The user can choose to assess one area at a time or assess across areas as items are observed. The latter procedure is more efficient but requires greater familiarity with the AEPS Test. Users may obtain more accurate results by observing and recording information by area for the first few times that the AEPS Test is administered. The user should begin with the first item and observe whether the child meets stated criteria before moving to the next item.

As familiarity with the AEPS Test increases, the user can shift to assessing children across areas; for example, clusters of skills can often be observed during the occurrence of daily activities in the classroom or at home. During large-group time in the classroom, the user may be able to observe cognitive skills (e.g., understanding of concepts, recalling events), gross motor skills (e.g., running, jumping), social skills (e.g., following established rules), and social-communication skills (e.g., using of words and phrases to describe past events). During mealtime at home, the user may be able to observe fine motor skills (e.g., manipulating objects), adaptive skills (e.g., using a knife to spread food, assisting in clearing the table), cognitive skills (e.g., grouping objects on the basis of function), and social skills (e.g., seeking adult permission, meeting physical needs of hunger and thirst). Finally, the more experienced user may

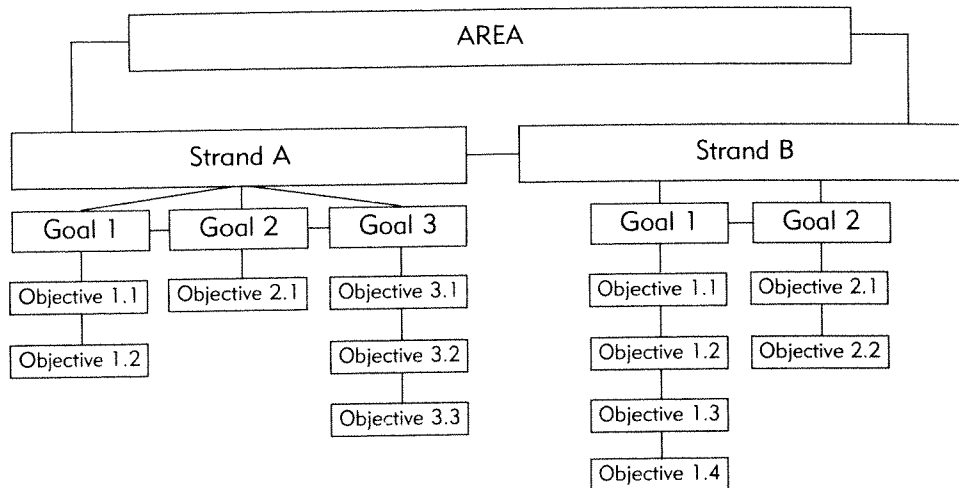


Figure 12. Organizational structure of items on the AEPS Test.

be able to assess several children simultaneously; for example, when three children are engaged in an outside activity, the user may be able to observe and record the social interactions, communication, and play skills of all three children. The AEPS Test provides assessment activities that permit assessment/evaluation of groups of children simultaneously. Procedures for using these activities are described in Volume 2. Appendix A of Volume 2 contains sample Assessment Activities for both AEPS Test levels.

Collecting Assessment and Evaluation Information

The AEPS Test includes three methods of collecting assessment and evaluation information: observation, direct test, and report. Observation is the preferred method. Observation allows the user to view the topography, or form, of the behavior; when and how frequently the behavior is performed; and the environmental factors that may influence the child's performance (e.g., antecedents, consequences). Although observation is the preferred method of data collection, when a user does not have an opportunity to observe a behavior during play or a routine activity, a situation may be created to directly elicit the behavior (i.e., direct test). The third method of obtaining assessment and evaluation is through the use of report. Sources of reported information may be the parents, caregivers, therapists, child care providers, classroom assistants, or written documentation (e.g., evaluation reports, medical reports).

Recording and Scoring Child Performance

The AEPS Test has data recording forms to assist users in assessing initial child performance and recording subsequent change over time. The forms

Table 3. AEPS data recording forms, locations, primary user(s), and purpose(s) for each form

Form	Location	Primary user(s)	Purpose(s)
Child Observation Data Recording Form • I: Birth to Three Years • II: Three to Six Years	Vol. 1 Appendix C Vol. 1 Appendix C	Professional staff	Tracks individual child performance across four time periods
Social-Communication Observation Form Social-Communication Summary Form	Vol. 1 Appendix C Vol. 1 Appendix C	Communication specialist	Summarizes child's communication skills to complete portions of the Social-Communication Area of the Child Observation Data Recording Form
Family Report • I: Birth to Three Years • II: Three to Six Years	Vol. 1 Appendix D Vol. 1 Appendix D	Caregiver and professional staff	Allows caregivers to track their child's performance across four time periods Allows professional staff to obtain information from caregivers and in other settings
Child Progress Record • I: Birth to Three Years • II: Three to Six Years	Vol. 1 Appendix E Vol. 1 Appendix E	Caregiver and professional staff	Provides visual summary of child's progress on acquisition of goals and objectives
Child Observation Data Recording Form with Criteria • I: Birth to Three Years • II: Three to Six Years		Professional staff	Tracks individual child performance across four time periods Forms contain item criteria
Assessment Activities • I: Birth to Three Years • II: Three to Six Years	Vol. 2 Appendix A Vol. 2 Appendix A	Professional staff	Permits assessment of multiple children's performance simultaneously using planned activities

Note: All of these forms, except the Assessment Activities, can be purchased in a packet or on a CD-Rom from Paul H. Brookes Publishing Co. The CD-Rom includes a Child Observation Data Recording Form with Criteria for Birth to Three Years and Three to Six Years.

were designed for different purposes (e.g., monitoring individual child change, monitoring change in groups of children) and for different users (e.g., professional staff, caregivers). Table 3 provides an overview of the six data recording forms and accompanying assessment activities, where they are located, the primary users, and the purpose of each form. All six forms are described next.

Child Observation Data Recording Form

This is the primary form used to record the child's initial performance on the AEPS Test and subsequent performances across test administrations (up to four test periods). This form was designed for use in conjunction with AEPS Test by professional staff and includes each of the six areas for both AEPS Test levels. Space is provided on the cover sheet that accompanies the recording form to indicate the child's name, his or her date of birth, the family's name and address, and the name of the person(s) completing the form. Directions for completing the data recording form are also provided. An example of the recording form for the Gross Motor Area, AEPS Test Three to Six Years is shown in Figure 13. Copies of the Child Observation Data Recording Form for both levels of the AEPS Test are contained in Appendix C of this volume. An explanation of the numbered items on the data recording form shown in Figure 13 follows.

1
GROSS MOTOR AREA

2 S = Scoring key **3** N = Notes

2 = Consistently meets criterion 1 = Inconsistently meets criterion 0 = Does not meet criterion	A = Assistance provided B = Behavior interfered D = Direct test M = Modification/adaptation Q = Quality of performance R = Report
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4 Name: _____

5 Test period: _____

Test date: _____

Examiner: _____

		8	IFSP/ IEP	S	N	S	N	S	N	S	N
6 A. Balance and Mobility											
7 1. Runs avoiding obstacles (p. 136)											
1.1 Runs											
2. Alternates feet walking up and down stairs (p. 136)											
2.1 Walks up and down stairs											
9 B. Play Skills											
1. Jumps forward (p. 137)											
1.1 Jumps in place											
1.2 Jumps from platform											
1.3 Balances on one foot											
2. Bounces, catches, kicks, and throws ball (p. 137)											
2.1 Bounces ball											
2.2 Catches ball											
2.3 Kicks ball											
2.4 Throws ball											
3. Skips (p. 138)											
3.1 Hops											
4. Rides and steers two-wheel bicycle (p. 138)											
4.1 Pedals and steers two-wheel bicycle with training wheels											

An Area Raw Score can be computed by adding all of the 2 and 1 scores entered in the S column for specific test period. To compute the Area Percent Score: divide the Area Raw Score by the Area Raw Score Possible, then multiply by 100.

	10	Test date	_____	_____	_____	_____
RESULTS		Area Raw Score	_____	_____	_____	_____
		Area Raw Score Possible	34	34	34	34
		Area Percent Score	_____	_____	_____	_____

EXAMINER: _____ **11** DATE: _____

COMMENTS: _____

Figure 13. An example of a Child Observation Data Recording Form II for the Gross Motor Area, Three to Six Years. The page numbers listed after each goal indicate where that particular goal can be found in Volume 2.

1. The developmental area is listed at the top of the Child Observation Data Recording Form.
2. Scoring options used to assess items are listed under the Scoring Key. Numbers are placed in the scoring boxes directly under the S on the data recording form.
3. Scoring note options that further describe a child's performance are listed under Notes. Letters can be placed in the scoring boxes directly under the N on the data recording form.
4. The child's name or initials is recorded on each page.
5. Testing information including the test period (e.g., 1, 2, 3, 4), the date of assessment (i.e., month, year), and the examiner's initials are also recorded on each page.
6. The strands for each area are shaded and appear alphabetically (i.e., A, B, C).
7. The assessment items in abbreviated form are listed below each strand. In addition, the corresponding page number for each goal from Volume 2 is provided for quick references to item criteria and examples.
8. The IFSP/IEP column provides a place to check when an AEPS Test item (goal and/or objective) has been targeted for intervention.
9. Performance data and notes are recorded in the next eight columns (two columns per testing period). Performance data (i.e., 2, 1, 0) are recorded in the box under the S on the form and notes (i.e., A, B, D, M, Q, R) are recorded in the space under the N on the form.
10. AEPS Test results (i.e., Area Raw Score, Area Percent Score) are recorded at the end of each area at the bottom of the form.
11. Additional comments can be written at the end of each area for each test period to provide critical information regarding the circumstances under which a child performed a particular skill.

Scoring the Child Observation Data Recording Form Items on the AEPS Test are scored with a 2, 1, or 0. When the child consistently meets the criterion as specified in Volume 2, the item is scored 2. Scoring the item with a 2 indicates that the child performs the item independently; that the behavior is a functional part of the child's repertoire; and that the child uses the skill across time, materials, settings, and people. When the child inconsistently meets the criterion, the item is scored 1. Scoring the item with a 1 indicates that the child performs the item with assistance, that the child does not perform all components of the item or does not meet all aspects of the specified criterion (i.e., the behavior is emerging), or that the child performs the item only under specific situations or conditions (i.e., with certain people, in certain settings). When a child does not meet the criterion, the item is scored a 0. Scoring the item with a 0 indicates that the child does not yet perform the item when given repeated opportunities, assistance, or when modifications and adaptations are made, or that the child was not observed performing the item because it is not expected based on knowledge of development (e.g., the

Table 4. Example of how an AEPS Test item would be scored when comparing a child's performance with stated AEPS Test criteria

AEPS Test item and criterion	Score	Child's performance
Goal: Alternates feet walking up and down stairs	2	Child independently and consistently walks up and down a variety of stairs alternating feet
Criterion: Child walks up and down stairs, alternating feet without holding handrail or wall.	1	Child walks up stairs at home but does not walk up stairs at school or Grandma's house OR
	1	Child walks up stairs independently but needs to have help when coming down stairs OR
	1	Child does not alternate feet going up or down stairs
	0	Child does not walk up or down stairs with or without assistance

Gross Motor Area, Strand A, Goal 2 from the AEPS Test: Three to Six Years.

child's chronological age is 6 months and he or she would not be expected to perform such items as categorizing similar objects, copying simple shapes, or walking up and down stairs). It is important to ensure that the child has had sufficient opportunities to demonstrate the behavior (i.e., three or more occasions when the behavior could be used) and that modifications and assistance have been provided before scoring an item as 0.

To determine whether the child's response should be scored 2, 1, or 0, specific criteria are provided for each AEPS Test item (i.e., for each goal/objective). It is essential to compare children's performance with each item's criterion before recording a score. Table 4 provides an example of how an item would be scored when comparing a child's performance with stated criteria. If the user must directly test the item, then the child must demonstrate the behavior on at least two out of three trials to receive a score of 2 and one out of three trials to receive a score of 1. Table 5 presents a summary of scoring differences when information is collected through direct test procedures versus observation.

It should be emphasized that arranging antecedent conditions to help elicit responses from children does not necessarily constitute direct testing; for example, placing silverware within a child's reach to assess eating skills is not direct testing. Having available and accessible objects of different colors, sizes, and configurations to assess a child's early concept understanding would not be considered direct testing. Rather, *direct testing* refers to conducting specific trial-by-trial procedures generally apart from routine or play activities in which specific and direct antecedents are given; for example, the child is repeatedly shown a set of pictures and asked to name them.

Adding Notes to the Child Observation Data Recording Form In addition to the three-option scoring codes, notes are provided to allow users to record other important information about a child's performance on AEPS Test items; for example, a child may use adaptive equipment such as a communication board to perform an item of labeling objects and events. Because the child can demonstrate the concept of labeling independently and consistently, the item is scored 2, but it is also scored with a note (i.e., M = modification/

Table 5. Scoring guidelines for observation and direct test procedures

Score	Description of performance
Observation	
2 = Consistently meets criterion	<p>Child consistently performs the item as specified in the criterion.</p> <p>Child performs the item independently.</p> <p>Behavior is a functional part of the child's repertoire.</p> <p>Child uses the skill across time, materials, settings, and people.</p>
1 = Inconsistently meets criterion	<p>Child does not consistently perform the item as specified in the criterion.</p> <p>Child performs the item with assistance.</p> <p>Child does not perform all components of the item or does not meet all aspects of the specified criterion (i.e., the behavior is emerging).</p> <p>Child performs the item only under specific situations or conditions (i.e., with certain people or in certain settings).</p>
0 = Does not meet criterion	<p>Child does not yet perform the item as specified in the criterion when given repeated opportunities or assistance or when modifications and adaptations are made.</p> <p>Child was not observed performing the item because it is not expected based on knowledge of development (e.g., the child's chronological age is 6 months and he or she would not be expected to perform such items as categorizing similar objects, copying simple shapes, or walking up and down stairs).</p>
Direct test	
2 = Consistently meets criterion	<p>Child performs the item as specified in the criterion on at least two out of three trials.</p> <p>Child performs the item independently on two out of three trials.</p> <p>Child uses the skill on two out of three trials across time, materials, settings, and people.</p>
1 = Inconsistently meets criterion	<p>Child performs the item as specified in the criterion on one out of three trials.</p> <p>Child performs the item with assistance on one out of three trials.</p> <p>Child performs only portions of the item or certain aspects of the specified criterion on one out of three trials.</p> <p>Child performs the item under one situation or one set of conditions.</p>
0 = Does not meet criterion	<p>Child does not yet perform the item as specified in the criterion on zero out of three trials when assistance is provided or when modifications and adaptations are made.</p> <p>Child was not observed performing the item because it is not expected based on knowledge of development (e.g., the child's chronological age is 6 months and he or she would not be expected to perform such items as categorizing similar objects, copying simple shapes, or walking up and down stairs); thus, no trials are given.</p>

adaptation in this case). Notes alert teams to important information that should be considered when interpreting AEPS Test information, designing subsequent intervention plans, and conducting future evaluations. Modifications of items for children with disabilities is encouraged; however, when such modifications occur, they should be noted. A description of the six notes and associated scoring guidelines is contained in Table 6.

Table 6. Notes, definitions, and scoring guidelines

Note	Definitions and scoring guidelines
A	<p>Assistance provided</p> <p>When a child is provided with some form of <i>assistance</i>, an A should be noted in the space next to the performance score box. If assistance is provided, then the only scores allowed are 1 and 0 because a score of 2 indicates full independent performance. Assistance includes any direct verbal or physical prompt, cue, or model that assists the child in initiating or performing the desired behavior. A general direction given to the child to initiate the behavior is not considered assistance. For example, the directive, "Put on your coat" is not considered assistance, but physically holding out the coat and helping the child insert his or her arms is assistance for the AEPS Test item Puts on Front-Opening Garment.</p>
B	<p>Behavior interfered</p> <p>At times, a child's <i>behavior</i> may interfere with the demonstration of the desired skill. In such cases, the item may be scored 1 or 0 with a B noted next to the performance score. This note indicates that the child may have the skill, but disruptive or noncompliant behavior interfered with its demonstration.</p>
D	<p>Direct test</p> <p>When the examiner <i>directly elicits</i> a behavior, a D is noted next to the performance score and the guidelines for determining the score presented in Table 5 should be followed.</p>
M	<p>Modification/adaptation</p> <p>At times, an examiner may need to <i>modify</i> the stated criteria (e.g., rate or mode of response) or <i>adapt</i> the environment/materials (e.g., adaptive equipment is necessary) to assess children with sensory or motor disabilities. When <i>modifications</i> are made in gathering child performance information, an M is noted next to the performance score and a 2, 1, or 0 is used.</p>
Q	<p>Quality of performance</p> <p>At times, a child is able to perform a skill independently, but the team feels the <i>quality of the performance</i> hinders the ability to meet criteria. At other times, a child is able to meet or partially meet the stated criteria, but the team wishes to continue strengthening the quality of performance. When the quality of the performance is in question, teams are encouraged to use a Q in the notes accompanied by a score of 2 or 1.</p>
R	<p>Report</p> <p>When an item is assessed by <i>report</i>, an R is noted next to the performance score. Report is used under one of three conditions:</p> <ul style="list-style-type: none"> • When assessment information is collected by another person or documented source (e.g., written evaluation), the item is scored 2, 1, or 0, and an R is noted. • When the item is judged inappropriate because it assesses a primitive or developmentally easier response (e.g., sucking on a nipple when the child is able to drink from a cup), the item is scored 2 and an R is noted. • When the item is judged inappropriate because it is too advanced or beyond the child's developmental level (e.g., walking when the child is unable to stand), the item is scored 0 and an R is noted.

Social-Communication Forms

The Social-Communication Area of the AEPS requires special attention be paid to how children communicate with others and that additional information be collected primarily through language samples and language observations. In particular, comprehensive information on children's communication is needed to score Strands B and D of Birth to Three Years and Strand B of Three to Six Years. Two forms were created to assist professional staff in scoring these strands of the Social-Communication Area: Social-Communication Observation Form (SCOF) and Social-Communication Summary Form (SCSF). How to gather information about children's communication and how to use these forms is described in the following sections. These forms are found directly following the Social-Communication Area of the Child Observation

Data Recording Form for Birth to Three Years and Three to Six Years in Appendix C of this volume.

The purpose of collecting and recording a sample of a child's communicative behavior is to determine how the child typically communicates, both verbally and nonverbally. Language sampling and *observation* techniques allow the assessment of a child's comprehension and production of words and sentences, communicative functions and intentions, and interactions with the social environment. Following are guidelines for collecting samples of communicative behavior. Be sure that the observation is typical or representative of the way that the child usually communicates.

1. **Become familiar with the child.** Get to know the child before you record a sample of communicative behavior. Children usually do not communicate at the same frequency or in the same way with strangers as they do with familiar people. It is not always possible to establish rapport with a child in an hour or even in a day or two. Allow several days, if necessary, before recording a communication sample, and allow time for the child to warm up at the beginning of an *observation* session before you begin to record the child's communicative behavior. The extra time invested will yield more accurate and useful information for programming.
2. **Collect several communicative samples.** Collect three or four short samples (e.g., 10–20 minutes) of the child's communicative behavior over several days in several settings, rather than one long sample in a single setting. The frequency of communicative responses may differ greatly for children at different times and under different conditions. Even several recording sessions may not yield an adequate sample of behavior for those children who use language infrequently. Make an effort to collect at least 50 separate communicative utterances (e.g., 50 vocalizations, 50 gestures, 50 single words, 50 word combinations) for a single child. If two of the total number of samples recorded are collected in similar settings (e.g., two free-play activities with the same materials and same children present), then the sample should appear similar in frequency of words and phrases used and in the forms used by the child. If the two samples are not similar, then collect a third sample in the same setting to determine which of the samples is more representative of the way that the child usually communicates in that setting. Samples collected in different settings may differ in frequency of word and phrase use and in form use and may accurately reflect the child's typical performance in each respective setting; for example, most children communicate differently with adults than with peers. Hence, a child might use shorter, less complex language with a younger sibling in one setting than with a parent in another setting, yet both samples of behavior are accurate and representative. The task is to determine how the child communicates in a variety of settings typical for the child.
3. **Select routine and familiar settings and materials.** Settings used for sampling communicative behavior should be familiar to the child (e.g., a free-play activity in the classroom, a parent-child or sibling-child dyad versus a structured activity with one adult and one child in a therapy room). Ma-

materials and activities should be centered around play with age-appropriate toys or around usually occurring activities (e.g., eating, dressing). Adult-directed classroom activities will probably not yield an accurate picture of how well the child usually communicates. Some materials that may encourage social-communicative interactions include dish sets, dress-up clothes, water and sand, and toy buildings with people and vehicles.

4. **Techniques for interacting with children.** While taking the sample, you may interact with the child or you may observe the child's interactions with another adult or peer. In addition to verbatim recording at the time of the interaction, audiotaping and videotaping may be useful for the collection and analysis of the child's communicative behavior. Children who use rudimentary gestures may be videotaped so that the context of their communicative behaviors can be observed, the meanings of the gestures inferred, and the patterns of interactions between the child and the environment discerned. Verbatim recording can be employed for children who use a formalized system such as American Sign Language or a communication board. Each word that the child signs or points to should be written down just as if the child used the word verbally.

Allow the child to direct the activity and interactions. You may find it helpful at the beginning of the sampling to engage in play alongside the child while you describe your actions, the actions of your toys, and occasionally the actions of the child in a monologue fashion. Frequent, prolonged pauses will allow the child opportunities to request objects or actions, participate in your activity, or talk about the activity. Avoid questions that require only a yes/no or single-word response, a manual gesture, or a head shake (e.g., adult asks, "Doggie outside?" and the child nods head affirmatively; adult asks, "Where is the doggie?" and the child says, "Outside"). Listen to what the child says, and base your responses on the content of the child's verbal and gestural behavior.

A Note on Bilingual Language Learners Young children from bilingual homes or who are learning English as a second language should always be assessed for comprehension in both languages and, if possible, in multiple settings. Children may use the family's native language predominantly at home and English at a center-based program, even if they have more sophisticated skills in the native language. An accurate measure of comprehension, therefore, includes presenting AEPS Test items in any language to which the child is regularly exposed.

To assist in the collection and summary of social-communicative data, an observation and a summary form are provided for both levels of the AEPS. Directions for using these forms are described next.

Birth to Three Years Social-Communication Observation Form The SCOF for Birth to Three Years was designed to assist in the collection of data on children's prelanguage and language responses that can be used to complete Strands B and D of the Social-Communication Area of the Child Observation Data Recording Form. The SCOF is composed of two sections: I—Transition to Words and II—Production of Social-Communicative Signals, Words, and Sen-

tences. A copy of the SCOF can be found in Appendix C of this volume following the Social-Communication Area of the Child Observation Data Recording Form.

Section I: Transition to Words (Strand B) Use this section of the SCOF to record the child's gestures and vocalizations that are not words or word approximations. Record each occurrence of the child's gestures and vocalizations by entering a hash mark (/) in the appropriate box on the recording form. Use the column designated "Interpretable," "Partially Interpretable," or "Not Interpretable," depending on whether the general meaning of the child's gesture and/or vocalization is understandable. If the gesture or vocalization is interpretable or partially interpretable, then make a hash mark in the appropriate box under "Communicative Function" on the recording form, depending on how the child used the gesture or vocalization to communicate (e.g., gain attention, refer to an object, greet). If the communicative function of a vocalization or gesture is not apparent, then do not score the box under "Communicative Function." For specific examples of communicative functions, refer to the Social-Communication Area, Strand B, Goal 1 through Objective 1.4 of the AEPS Test.

Interpretable Signals: If the child's communicative intention is apparent to the other participant in the communicative interaction, then the communication should be noted as an Interpretable Signal. For example,

- Child reaches for juice when asked, "Do you want juice?" and adult hands juice to child (Interpretable Gesture, Responds to Questions).
- Child makes a negative noise and turns away when offered food (Interpretable Vocalization/Gesture, Protests/Refuses).

Partially Interpretable Signals: If the child's communicative intention is not completely understood by the other participant in the communicative interaction, then the communication should be noted as a Partially Interpretable Signal. For example,

- Child points to a shelf with many toys on it but does not point to one specific toy (Partially Interpretable Gesture, Refers to Objects/People).
- Child looks at adult and vocalizes using a rising pitch that sounds question-like, but the adult does not understand what the child wants (Partially Interpretable Vocalization, function is not scored).

Not Interpretable Signals: If the child's vocalizations and gestures are not understood by an observer or a participant in an interaction with contextual cues, then the communication should be noted as a Non Interpretable Signal. For example,

- Child approaches adult and vocalizes, but the adult does not understand the meaning of the child's vocalization (Not Interpretable Vocalization, function is not scored).

- Child makes eye contact with adult and bangs on table (Not Interpretable Gesture, function is not scored).

Section II: Production of Social-Communicative Signals, Words, and Sentences (Strand D) Use this section of the SCOF to record verbatim the child's understandable word approximations and word combinations and the context in which they occur. Information that should be recorded in the context column of the SCOF includes brief descriptions of objects and events that occur immediately before, during, or immediately following the child's verbalization. Information recorded should be comprehensive enough to allow interpretation of the child's words and sentences, but it should not be so detailed that it interferes with the accurate recording of the child's responses. If portions of the child's phrases or sentences are not understandable, then use a line in place of the word or words that you do not understand (e.g., child says, "Me go _," or "_doggy").

A section is included on the SCOF to record the communicative function of the signal used by the child (i.e., initiation, response to a comment, response to a question, imitation). An additional column is included for recording child responses that are inappropriate (e.g., responses that do not relate to the topic or situation or are repetitive or perseverative). A checkmark should be recorded in the appropriate column at the time that the child's response is recorded. As soon as possible after recording the child's communicative behavior, review the sample of recorded words and word combinations on the SCOF and score the SCSF.

A note on bilingual language learners: Young children acquiring more than one language simultaneously learn vocabulary without distinguishing between languages. The number of words in a child's vocabulary, therefore, should be counted as the total number of words or word approximations that the child is using in both languages. This principle holds for toddlers learning English as a second language, as well as for children from bilingual or multilingual homes. Typically developing children do not reliably and consistently sort languages into separate systems until they acquire cognitive skills of categorization and classification, usually after their third birthday.

Birth to Three Social-Communication Summary Form The purpose of the SCSF is to provide a summary of the child's social-communicative behavior from the sample of prelanguage and language responses that were collected and recorded on the SCOF. The sample of behavior recorded on the SCOF should be reviewed and the SCSF completed as soon as possible after the child's communicative behavior is collected. Directions for scoring the SCSF are described next. The summarized information contained on the SCSF can be used to complete Strands B and D of the Social-Communication Area of the Child Observation Data Recording Form. The SCSF can be found in Appendix C of this volume.

Section I: Transition to Words (Strand B) Transfer the data from the SCOF to the summary form using the following directions:

1. Total the number of hash marks from each separate box under the section labeled "Communicative Signal" on the SCOF, and enter the totals in the

appropriate boxes labeled Interpretable Gestures, Partially Interpretable Gestures, and Not Interpretable Gestures on the SCSF.

2. Add the total number of gestures from each category (Interpretable, Partially Interpretable, Not Interpretable), and enter that total in the space labeled "Total Gestures."
3. Enter the total number of Interpretable Gestures from the observation form in the boxes labeled "Interpretable Gestures" on the SCSF.
4. Divide the total number of Interpretable Gestures by the total number of Gestures. Multiply that number by 100 to determine the percentage of the child's gestures that are understood by others.
5. Repeat Steps 1–4 for Vocalizations and Vocalizations/Gestures.
6. Use the information from the boxes in the section labeled Communicative Function on the SCOF to score individual items on the Social-Communication Area of the Child Observation Data Recording Form. Each category (Gains Attention, Responds to Questions, Refers to Objects/People, Greet, and Protests/Refuses) directly corresponds to an item in Strand B, Goal 1 through Objective 1.4.

Section II: Production of Social-Communicative Signals, Words, and Sentences (Strand D) Record the frequency with which specific types of word approximations, words, and word combinations occur by entering a hash mark in the appropriate space on the SCSF. Some word combinations will be scored in more than one space (e.g., a two-word descriptive utterance also will be scored in the space for single descriptive words and single object and/or event labels). For example:

- If the child says, "My shoe," then enter one mark in the space labeled Objective 2.2 "Two-word possession" (my), one mark in the space labeled Objective 1.3 "Pronouns" (my), and one mark in the space labeled Objective 1.4 "Object/event labels" (shoe).
- If the child says, "Go car," then enter one mark in the space labeled Objective 2.1 "Action-object" (go car), one mark in the space labeled Objective 1.2 "Action words" (go), and one mark in the space labeled Objective 1.4 "Object/event labels" (car).

For additional examples of individual items, see Strand D, Goals 1, 2, and 3 and associated objectives. Each labeled space on the SCSF directly corresponds to an item on the AEPS Test. Use the frequencies recorded on the SCSF to score all goals/objectives in Strands B and D on the Social-Communication Area of the Child Observation Data Recording Form I: Birth to Three Years.

Three to Six Years Social-Communication Observation Form Specific directions for recording social-communicative behavior using the SCOF are described in the following sections. Directions correspond to items on the Social-Communication section of the Child Observation Data Recording Form for Strand B of the AEPS Test for Three to Six Years.

Use the SCOF to record verbatim the child's word approximations and word combinations and the context in which they occurred. The child's name and a brief description of the activities in which the language sample was collected should be indicated at the top of the SCOF. The amount of time that each language sample took should also be recorded. It may also be helpful to indicate on the form when the activity changed; for example, if utterances 1–11 were recorded during snack time (15-minute activity) and then utterances 12–22 were recorded during circle time (10-minute activity). Then, an asterisk could be placed at numbers 12 and 23 to indicate a change in activity. This information may be useful when interpreting the results.

When using the SCOF, record verbatim in longhand all child communications. For spoken responses, begin a new line each time the child begins a new utterance. A new utterance occurs when the child addresses a new person, when the child pauses for at least 2 seconds, or when the child uses intonation that signals the end of an utterance. If you cannot understand a word that the child says, then use the letter "u" in place of the unintelligible word. Information recorded in the column under the heading Context includes brief descriptions of objects and events that occur immediately before, during, or immediately after the child's communication. Information recorded should permit accurate interpretation of the child's words and sentences but it should not be so detailed that it interferes with the accurate recording of the child's communication. Under the Functions heading are columns that provide space to note the way that the child's communication was used in relation to others. The headings include Initiation, to indicate that the child initiated an appropriate topic; Response to Comment, to indicate that the child responded to another's comment with a related comment; Response to Question, to indicate that the child responded to a question with a related answer; Imitation, to indicate that the child repeated another person's words or sentences; and Unrelated, to indicate that the child's response appeared to be unrelated to the activity or conversational context.

If time permits after you record each utterance, and if the function of the utterance is clear, then place a checkmark in the appropriate columns to the right of the recorded utterance, indicating the function that the child's utterance served. If the frequency of the child's utterances makes it difficult to check and record the type and the actual utterance, then it is more important to concentrate on recording the actual utterance word for word. Many times a lull in the conversation later in the session will allow you to return to categorize the child's utterances. If you are not sure about the function and/or meaning of a child's utterance, then leave the column blank.

Three to Six Years Social-Communication Summary Form After recording a child's language on the SCOF, the language samples may be analyzed so that the AEPS Test items in Strand B can be compared with specific criteria and scored.

The SCSF is completed by reviewing each utterance for its categorization; for example, if the child's first utterance was, "I'm going outside," then hash marks would be placed next to Item 4.1: Uses subject pronouns (for the word "I" in "I'm"); next to 1.2: Uses copula verb "to be" (for the "am" part of "I'm"); next to 1.6: Uses present progressive "ing" (for the verb "going"); and

next to 5.3: Uses adverbs (for the word “outside”). The number of tally marks per objective does not translate directly to a score (i.e., 0, 1, 2). The number of tally marks should be compared with the specific item criterion listed on the item page in Volume 2. As the complexity of the child’s language increases, it may become difficult to categorize some words; for example, the word “outside” can be a noun, adjective, adverb, or preposition depending on its use. Resources such as a dictionary or basic English grammar text can be of help in categorizing language. If there is a speech-language pathologist on the child’s team, then this portion of the AEPS should be analyzed in conjunction with him or her.

After an adequate number of utterances (at least 50 separate utterances) have been categorized on the SCSF, the information can be used to score Strand B of the Social-Communication Area of the Child Observation Data Recording Form. The AEPS Test should be consulted and individual item criteria should be compared with data from the SCSF when determining an item’s score.

Family Report

The Family Report was developed to obtain information from parents and other caregivers about their children’s skills and abilities across major areas of development. The Family Report is divided into two sections. Section 1 is designed to help gather information from families regarding their daily routines and the child’s participation in family activities. Section 2 of the Family Report has items that parallel AEPS Test items. As shown in Table 7, items in Section 2 of the Family Report are simply reworded statements that correspond directly to each goal (and in some cases, each objective) from the corresponding AEPS Test level. The Family Report provides spaces to enter data across four test intervals and a space for caregivers to enter priority goals for their child. Caregivers are asked to score each item on Section 2 of the Family Report by selecting one of three responses that most accurately describes their child’s current level of functioning: “yes,” “sometimes,” and “not yet.” Professional staff can translate caregiver’s scores to 2, 1, and 0 if they prefer. If caregivers are unable to observe an item, then a question mark can be inserted in the box. Caregivers should be informed that they should not expect their child to perform all of the skills listed on the form and be encouraged to observe their child in situations that are likely to elicit each skill before scoring items they are not sure about. Discussion of how to use the Family Report; the importance of including caregivers in the initial assessing and subsequent monitoring of their child’s progress; and how to actively involve families in the assessment, goal development, intervention, and evaluation process are contained in Chapter 5 of this volume. Copies of the Family Report for both levels of the AEPS are contained in Appendix D of this volume.

Child Progress Record

The Child Progress Record was developed to monitor individual children’s progress over time. The simplicity of the form makes it appropriate for use by caregivers or professional staff. Each AEPS Test age level has a Child Progress Record. Figure 14 contains a portion of Strand A from the Fine Motor Area of

Table 7. Examples of AEPS Test items and corresponding Family Report items from the AEPS Test: Three to Six Years

	AEPS Test items	Family Report items
Area	Social	Social
Strand	A: Interaction with Others	
Item	Goal 1: Interacts with others as play partners	1. Does your child play with other children? (A1)
Strand	D: Knowledge of Self and Others	
Item	Goal 1: Communicates personal likes and dislikes	9. Does your child tell you what he or she likes and does not like? For example, your child says, "I love chocolate cake," or "I don't like to play football." (D1)

the Child Progress Record I: Birth to Three Years. As children meet the stated criteria for a goal (ovals) or objective (arrows), progress can be indicated by striking or shading through the particular skill. Teams often signify a child's specific performance by shading arrows and ovals completely when scored 2, partially or with stripes when scored 1, and leaving ovals and arrows blank when scored 0. Teams may also use an asterisk to signify which skills are targeted for intervention or may use different colors to signify different levels of performance. The Child Progress Record provides caregivers with a visual record of the child's accomplishments, current targets, and future goals/objectives.

The Child Progress Record can be updated quarterly in conjunction with subsequent administrations of the AEPS Test. For children with severe disabilities, teams may wish to add items to the Child Progress Record by scaling back the objectives to smaller, more discrete targets. Copies of the Child Progress Record for both levels of the AEPS are contained in Appendix E of this volume.

Child Observation Data Recording Form with Criteria

The Child Observation Data Recording Form with Criteria serves the same purpose as the Child Observation Data Recording Form described previously.

FINE MOTOR AREA

Strand A: Reach, Grasp, and Release

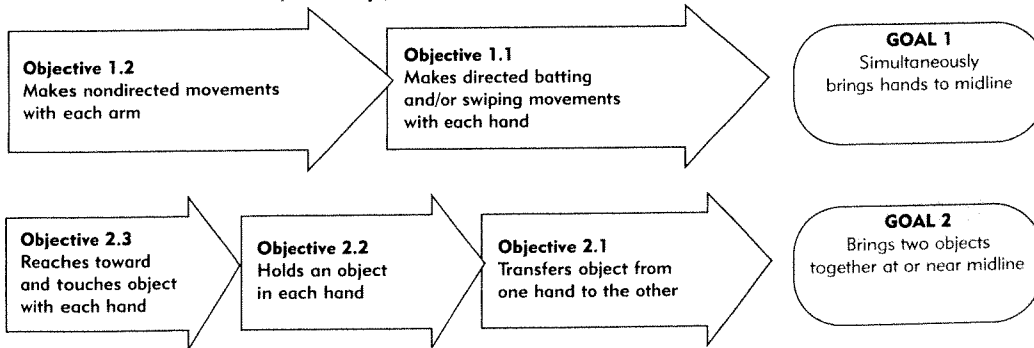


Figure 14. A portion of the Fine Motor Area of the Child Progress Record I: Birth to Three Years.

It is for use by professional staff but can be made available to interested caregivers. All AEPS Test items have associated criteria in abbreviated form. The Child Observation Data Recording Form with Criteria differs from the Child Observation Data Recording Form in that the criteria for each item is included on the data form itself for easy reference. However, items are scored in the same manner (i.e., by using 2, 1, 0 for scores and A, B, D, M, Q, or R for notes). Although this form requires considerably more paper, it releases personnel from frequent referral to Volume 2 and helps to ensure that children's performance is compared with the stated criterion each time. This form is available on CD-Rom and can be purchased separately from the publisher.

Assessment Activities

A set of Assessment Activities were developed to assist professional staff when information is needed across multiple developmental areas and for multiple children. Assessment Activities have been developed for use with both levels of the AEPS Test and are described in Appendix A of Volume 2. Each activity is composed of a set of events designed to elicit an array of skills (i.e., AEPS Test items) from groups of children; for example, a sandbox activity may provide the team the opportunity to assess a variety of fine motor skills (e.g., grasping and releasing), social skills (e.g., sharing toys), communication skills (e.g., asking for an object), gross motor skills (e.g., walking to the sand box), cognitive skills (e.g., finding a buried toy), and adaptive skills (e.g., washing hands after leaving the sand box) across three to five children. Each assessment activity lists the AEPS Test items by area and strand that can be observed during the activity in the order that they are likely to be observed if the script is followed. Groups of children can be assessed during a period of several days by organizing assessment stations. A different activity can be conducted at each station and small groups of children can rotate from station to station throughout the day. The activities conducted at each station should be designed to ensure that target goals/objectives occur frequently. It is important to remember that modification in plans and format will be likely if the individual needs of children are to be met.

Administration Guidelines

The AEPS Test has six developmental areas, each composed of a series of test items designated as goals and their associated objectives. Although no specific sequence for administration is mandated, several guidelines should be considered when administering the AEPS Test. Additional strategies for data collection are described in Chapter 4 of Volume 2.

Guideline 1: All goals should be assessed and scored. Users are not required to assess and score all areas of the AEPS Test, but when a deficit area(s) has been identified the user should gather information and score all associated goals; for example, if information about a child's development is needed from the Fine Motor and Adaptive Area, then all goals from the two areas should be assessed and scored.

A strategy for reducing administration time is to review items in areas of interest and eliminate the need to assess goals that are clearly below and above

a child's development level. These items may be scored without observing or directly testing the items; for example, if a child is observed walking and running, then there is no need to observe or directly test the child's ability to perform earlier developmental items such as rolling over or pulling to a stand. Likewise, if a child is just beginning to hold up his or her head, then there is no need to assess his or her ability to kick a ball. Instead, the user may score the item that is below the child's current developmental level (or that they mastered previously) a 2 in the score (S) column and an R in the scoring notes (N) column. Items that are significantly above the child's developmental level can be scored a 0 in the score (S) column and an R in the scoring notes (N) column. Because the behavioral repertoires of children with disabilities are often uneven, it may be advisable to gather information (e.g., conduct observations and conversations with others) on all goals that appear to be above the child's present level of functioning.

Guideline 2: If a goal is scored as 0 or 1, then all associated objectives should be assessed and scored. If the child does not perform a goal (indicated by a score of 0) or if the child inconsistently performs the goal as stated in the criterion (indicated by a score of 1), then it is necessary to determine the level at which the child is able to consistently and independently perform associated objectives; for example, if the child is not yet able to dress and undress (an AEPS Test goal from the Adaptive Area), then it is necessary to determine where in the sequence of related skills the child is able to consistently perform (indicated by a score of 2). Failure to assess the objectives under a goal that has been scored 0 or 1 does not give the child credit for mastering small increments of skills, nor does it provide a comprehensive picture of the child's strengths. As with goals that are clearly below or above a child's developmental level, users can score objectives as 0 or 2 by report as long as this is indicated in the scoring note column with an R.

Guideline 3: The three-point scoring options (2, 1, 0) should be used with all items scored. AEPS Test items that were assessed (i.e., information collected through observation, direct test, and report) should be scored using the three-point scoring options (i.e., 2, 1, 0). Using a consistent coding system enhances interpretation of findings across interventionists and programs. A consistent coding system also enhances a team's ability to interpret changes in a child's development over time.

Guideline 4: When items are directly tested or information is obtained through report, corresponding scoring notes should be so indicated on the Child Observation Data Recording Form. Most items should be assessed through observation and may not, therefore, have any accompanying note. In order to discriminate among those items assessed through observation and those through direct test or report, the user should add either D or R when appropriate, under the N column on the Child Observation Data Recording Form. The use of two or more scoring notes may be appropriate at times.

Assessment and Evaluation Procedural Modifications

Standardized tests require that items be presented following a specified format and that responses also meet specific criteria. The AEPS Test was designed to

be used with children who are at risk for or who have disabilities, many of whom will not be able to respond to a standard presentation or produce a typical response. Rather than penalize children who are unable to respond as do children who are typically developing, the AEPS Test encourages modifications or adaptations to items that will increase the likelihood that the child will be successful. It is more important that the child communicates than it is for the child to communicate in a specific manner. It is more important that the child develops mobility skills than he or she learns to move following a set pattern that may be unattainable. In particular, children with sensory and motor disabilities may require modifications to successfully perform test items.

The AEPS Test allows teams to modify the materials, child's position, or administration procedures for all items. Teams are encouraged to use adaptive equipment (e.g., a built-up spoon), adaptive positions (e.g., positioned over a wedge), or special procedures (e.g., providing photographs for a child with autism to use when making choices of what to eat and drink for snack). It is important for the user to accurately record the types of modifications that are used in order for future evaluations to be valid. Without indicating the types of adaptations that occurred, accurately monitoring child progress is not possible. When modifications are made, the user should place the note M in the N column next to the performance score and indicate the modification used in the Comments section at the end of each Area.

Teams will find that they are able to use the AEPS Test in determining strengths and emerging skills even for children with severe disabilities. Interventionists have the option of using the AEPS Test objectives as goals and developing new, simpler objectives to meet the adjusted goals. Alternatively, teams working with children who are chronologically 3–6 years old may find it necessary to use items from the AEPS Test for Birth to Three Years in determining a child's current level of functioning. Finally, for children whose chronological age exceeds 6 years, items should be carefully evaluated to ensure their appropriateness.

A useful and accurate child assessment and evaluation will be obtained by employing a team of professionals whenever possible. It is particularly important to consult and involve a specialist when children have motor or sensory impairments. Specialists are mandatory when assessing and evaluating children with severe and multiple disabilities.

General test modification guidelines are provided for three types of disabilities: visual impairments, hearing impairments, and motor impairments.

Visual Impairments

- When working with children with limited functional vision, the examiner should present each stimulus item within the child's field of vision (the visual field will need to be established for each child). It may be necessary to move objects close to the child; however, a large object placed too close may fill the child's entire visual field and obscure distinguishing features.
- The examiner should attend to the background-foreground contrast when evaluating a child with a visual impairment; for example, if working at a table with a dark surface, then lighter color objects should be used.

- Objects that provide more than one type of sensory feedback to the child, such as sound- or light-producing objects and tactilely interesting materials should be used. Objects that have high visual contrast (e.g., black, white, red, fluorescent orange) may be useful to maximize the child's residual vision.
- A child who cannot see certain materials should be made aware of all materials through physical contact with the objects. Guiding a child's hand over objects to be grasped, for example, may assist the child's performance of the task. The child may not be aware of the desired behavior because there has been no prior visual experience with the object or task. Physical manipulation of the child through the movements will provide a model of the desired behavior and may give needed kinesthetic feedback to perform the task.

Hearing Impairments

- Positioning the child is critical for optimal use of sensory information. The examiner should ensure that the child is facing the speaker and is in a proper position to see lips, gestures, or signs.
- If the child wears a hearing aid, then the examiner should make certain that the aid is operating at the optimal level.
- The examiner must know the communication system of the child and be able to respond appropriately (e.g., understand and use sign language).

Motor Impairments

- The child with a motor impairment may have difficulty sequencing motor behaviors and may reverse steps in a sequence; for example, when requested to imitate a series of motor behaviors, the child may have difficulty either producing all of the actions or correctly sequencing the actions. The examiner may need to assist the child (through cues or prompts) to remember what behavior is next in the sequence.
- The use of adaptive equipment or alterations in the types of objects used may be beneficial for the child. A physical or occupational therapist should be consulted when selecting adaptive equipment.
- When attempting to complete a task, if the child's movements appear awkward, unstable, or uncoordinated, then the child may benefit from positioning equipment (e.g., specialized chair, wedges, pillows).
- The child's environment may require alteration to facilitate movement and allow the child to function more independently (e.g., stairs replaced by ramps, hand railing placed by toilets).

Criterion Modifications

Modifications in stated criteria are also allowed and encouraged. In other words, to best represent a child's performance and individual needs, teams may

modify the standard criteria for acceptable child performance (e.g., change the rate or manner of response). The criteria for Gross Motor Area, Strand C, Goal 1, Walks avoiding obstacles, states "When walking unsupported, child moves to avoid obstacles (e.g., toys, furniture, people)." The criteria may be changed to "When using a wheelchair, child moves to avoid obstacles," allowing a child with a motor disability to demonstrate mobility and locomotion. The goal, Uses 50 single words can be changed to Uses 50 single signs for a child who uses sign language as his or her primary mode of communication.

Summarizing Assessment Information

Using the information obtained from the AEPS Test to develop an appropriate IFSP/IEP for a child is an important activity to be accomplished prior to beginning intervention. The development of IFSPs/IEPs from AEPS Test information is described in Chapter 4; however, before developing an IFSP/IEP, a child's performance should be summarized following the administration of the AEPS Test. The AEPS Test permits summarization of results numerically, by narrative, and visually. Each summary strategy is discussed next.

Numerical Summary

The most commonly computed score is a raw score for each of the six areas. To obtain an Area Raw Score, all of the items on which the child received a 2 and a 1 are summed and recorded at the end of each area on the Child Observation Data Recording Form. Interventionists may also want to calculate a child's Total Raw Score. A Total Raw Score is computed by counting all of the items scored with 2s and 1s **across** all six developmental areas; for example, if a child received a total of 330 when all of the scores of 2 and 1 are added across areas, then the child's Total Raw Score is 330. Table 8 indicates the number of items for each area, the Area Raw Scores possible, and the area Total Raw Scores possible for both the AEPS Test for Birth to Three Years and Three to Six Years.

In some instances, personnel may find it useful to convert raw scores to percent scores for areas and/or for total raw scores. To convert area raw scores to area percent scores, divide the area raw score by the total area raw score possible. To convert the total raw score to a total percent score, divide the total raw score by the total overall score possible. It should be emphasized that raw and percent scores are not age equivalents, nor do they reflect any type of standardized score.

It is important that children's performances on the AEPS Test be summarized so child progress can be monitored over time. Children should be making steady progress toward targeted goals/objectives, which, in turn, should be reflected in the number of items given a score of 2 across test periods. The AEPS Test should be administered quarterly so that assessment/evaluation information can be summarized and plotted three to four times per year.

Table 8. Number of items per area, total number of items, Area Raw Scores possible, and Total Raw Scores possible on the AEPS Test, Birth to Three Years and Three to Six Years

Area	Number of Items		Area Raw Scores Possible	
	Birth to Three Years	Three to Six Years	Birth to Three Years	Three to Six Years
Fine Motor	33	15	66	30
Gross Motor	55	17	110	34
Adaptive	32	35	64	70
Cognitive	58	54	116	108
Social-Communication	46	49	92	98
Social	25	47	50	94
Total Number of Items	249	217	—	—
Total Raw Scores Possible	—	—	498	434

Narrative Summary

A narrative summary can be written by examining a child's performance on the AEPS Test. The child's performance in each area can be summarized by identifying items that the child performs independently and consistently (i.e., received a score of 2) and items that are emerging (i.e., received a score of 1). The purpose of a narrative summary is to paint a picture of the child's strengths and interests by describing the child's functional skills using examples from the team's observations of the child.

Traditionally, test results are summarized from a deficit model, whereas a narrative summary written from the AEPS Test emphasizes the child's strengths, interests, and emerging skills. The summary should assist teams in better understanding the child's behavioral repertoire and in selecting goals/objectives for the IFSP/IEP. A positively written summary of the child's skills does not ignore the areas in which the child may need intervention; rather, it provides the team with an accurate picture of the child's current skill level and highlights those skills that are emerging and will be the target of intervention efforts. When constructing a narrative summary from AEPS Test results, teams are reminded to

- Use objective language
- Record emerging and functional skills
- Use examples to describe and personalize
- Use nontechnical language
- Include information and comments from all team members
- Describe the relationship between behaviors and events and avoid describing isolated events

Visual Summary

A third way to summarize AEPS Test information is visually. Area or Total Percent Scores for each test period can be plotted on a graph to monitor a child's

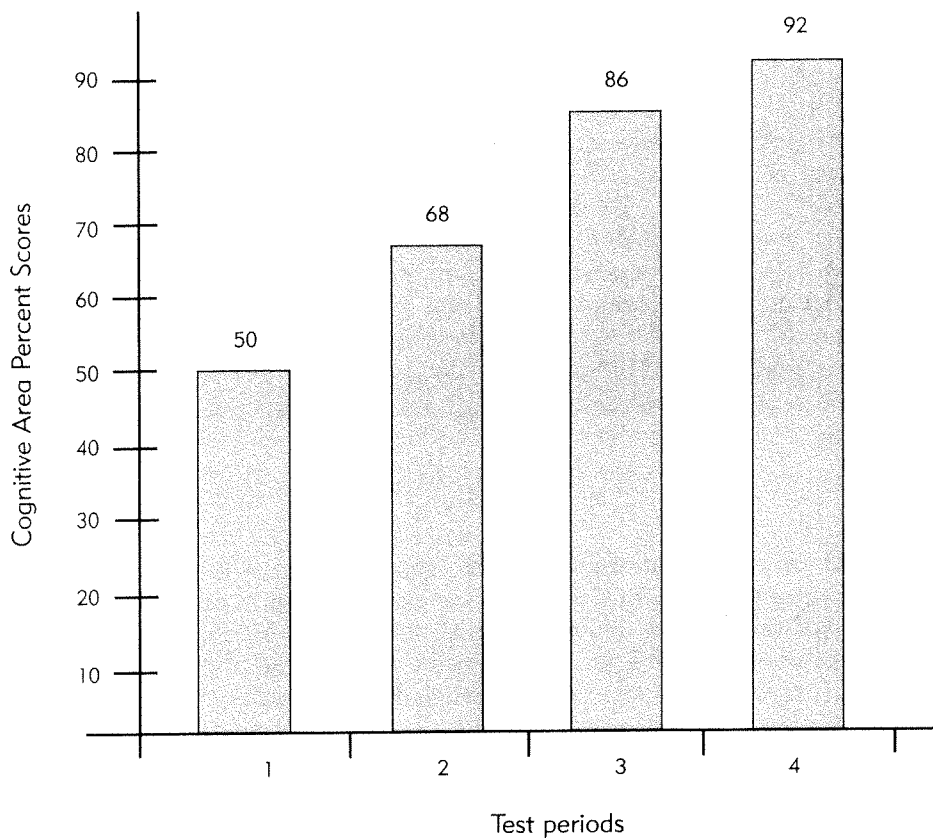


Figure 15. AEPS Test Cognitive Area Percent Scores for one child plotted across four test periods.

performance over time. An example of how a graph can be used to summarize a child's performance using Cognitive Area Percent Scores across four test periods is contained in Figure 15. Children's performance on the AEPS Test can also be visually summarized using the Child Progress Record (Appendix E of this volume).

SUMMARY

The information in this chapter is designed to assist teams in understanding the general features of the AEPS Test that distinguish it from other available instruments. The overall content, organization, and administration procedures of the AEPS Test were described to assist in use of the AEPS Test. The AEPS Test is governed by a set of general principles that should be followed; however, these principles provide only broad guidelines within which users are encouraged to individualize for children, particularly those with sensory or motor impairments.

Collection of educational and intervention-relevant assessment/evaluation data is critical to developing functional IFSPs/IEPs, planning intervention, and monitoring children's developmental progress. The AEPS Test is designed to provide information to the user about children's functional behavioral repertoires. The type of data generated by the AEPS Test is particularly appropriate for designing useful IFSPs/IEPs and intervention content. In addition, results from the AEPS Test can be used to provide teams with supporting or corroborating evidence in determining the eligibility of children for services.

In the following chapters, the inclusion of families throughout the assessment/evaluation process (see Chapter 5) and a team's use of the AEPS Test (see Chapter 6) are discussed. Chapter 4 offers information on using AEPS Test results to develop IFSPs/IEPs and intervention plans.