3.1 How Standardized Tests Are Used with Infants and Young Children

Types of Standardized Tests

Many types of standardized tests are available for use with infants and young children. All are psychological tests, whether they measure abilities, achievements, aptitudes, interests, values, or personality characteristics. In the following sections, we will discuss each of these types of tests.

Ability refers to the current level of knowledge or skill in a particular area. Three types of psychological tests—**intelligence tests (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/glo#P7000495870000000000000001F06)** , **achievement tests (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/glo#P7000495870000000000000001E56)** , and **aptitude tests (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/glo#P7000495870000000000000001E65)** —are categorized as ability tests because they measure facets of ability. Young children are often measured to determine the progress of their development. This type of measure may assess ability in motor, language, social, or cognitive skills. *Bayley's Scales of Infant Development, Third Edition (BSID-III)* (Bayley, **2005 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p70004958700000000000000000b12#P70004958700000000000000000B77)**), for example, is used to diagnose delays in development. More recently, the BSID-III was designed to learn about overall development. Children with intellectual disabilities might be assessed for adaptive functioning. Instruments such as the *Vineland Adaptive Behavior Scales, Second Edition (Vineland™ II)* (Sparrow, Cicchetti, & Balla, **2005 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p70004958700000000000000000b12#P70004958700000000000000000BEC)**) are administered through parent and primary caregiver reports to determine communication, social, and daily living skills.

Achievement is the extent to which a person has acquired certain information or has mastered identified skills. An achievement test measures ability in that it evaluates the child's achievement related to specific prior instruction. The *Peabody Individual Achievement Test—Revised-Normative Update (PIAT-R/NU)* (Markwardt, **1997 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p70004958700000000000000000b12#P70004958700000000000000000BC0)**) is a measure of achievement in mathematics, reading recognition, reading comprehension, spelling, and general information.

Aptitude is the potential to learn or develop proficiency in some area, provided that certain conditions exist or training is available. An individual may have a high aptitude for music or art, for example. Like achievement tests, aptitude tests also measure learned abilities. An aptitude test measures the results of both general and incidental learning and predicts future learning.

Intelligence tests are ability tests in that they assess overall intellectual functioning. They are also aptitude tests because they assess aptitude for learning and problem solving. *The Stanford–Binet Intelligence Scales (SB5), Fifth Edition* (Roid, **2003 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p70004958700000000000000000b12#P70004958700000000000000000BE6)**) is an example of an intelligence scale that also measures individual aptitude.

Personality tests measure a person's tendency to behave in a particular way. Such tests are used to diagnose children's emotional strengths and needs. Because an inventory is used to assess personality characteristics, the test is quite lengthy, usually containing several hundred items in a true–false format. Test items are answered by the parent or child or by both together and are analyzed to determine whether the child has certain personality traits.

Teachers use standardized test results to design instruction for individual needs.

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Interest inventories are used to determine a person's interest in a certain area or vocation and are not used with very young children. A school-age child may be given a reading interest inventory to provide the teacher with information that will serve as a guide when helping the child select reading material.

Tests for Infants

Various psychological tests have been constructed for infants and young children. Examples that have been discussed previously are the *Neonatal Behavioral Assessment Scale (NBAS), Third Edition* (Brazelton & Nugent, 1995) and the *Communication and Symbolic Behavior Scales Developmental Profile (CSBS DP)* (Prizant & Wetherby, **2002 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p70004958700000000000000000000b12#P70004958700000000000000000000BE4)**). They are examples of tests that have been normed. Such tests are challenging because of the child's developmental limitations. Babies are particularly difficult to evaluate because of their short attention span. Their periods of alertness are brief, and they have their own schedules of opportune moments for testing. In addition, developmental changes occur rapidly, making test results unreliable for more than a short time. Generally, because of these limitations, the validity and reliability of infant scales are questionable. The tests are difficult to administer and interpret. Nevertheless, they are useful in evaluating the status of newborns and infants (Campbell et al., **1995 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p70004958700000000000000000000b12#P70004958700000000000000000000B8F)** ; Hack et al., **2005 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p70004958700000000000000000000b12#P70004958700000000000000000007096)** ; Wodrich, **1997 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p70004958700000000000000000000b12#P70004958700000000000000000000C01)**). To better understand the types of infant and toddler measures, the following section is organized into neonatal status, infant and toddler development, and diagnostic tests.

Neonatal Status

The status of a newborn can be determined using various measures. The *Apgar Scale* (Apgar, **1975 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p70004958700000000000000000000b12#P70004958700000000000000000000B71)**), administered 1 minute and 5 minutes after birth, assesses the health of the newborn by evaluating the heart rate, respiratory effort, muscle tone, body color, and reflex irritability. Each characteristic is scored on a scale of 0 to 2 for a maximum score of 10 points. A score of 7 to 10 indicates the infant is in good condition; a score of 5 may indicate developmental difficulties. A score of 3 or below is very serious and indicates an emergency concerning the infant's survival. The *Brazelton Neonatal Behavioral Assessment Scale,* another neonatal test (Als et al., **1979 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p70004958700000000000000000000b12#P70004958700000000000000000000B6A)**), measures temperamental differences, nervous system functions, and the capacity of the neonate to interact. Its purpose is to locate mild neurological dysfunctions and variations in temperament. A newer scale, the *Neonatal Behavioral Assessment Scale, Fourth Edition (NBAS)* (Brazelton & Nugent, **2011 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p70004958700000000000000000000b12#P70004958700000000000000000000B9F)**), is used with newborns from the first day of life through the end of the first month. In this test, the infant's competence is measured through behavioral items. In addition to identifying the infant's performance, if administered with the parents present, it can be used to help parents understand their infant's signals and skills. This knowledge of child development generally and their baby's competence specifically can facilitate improvement in parenting skills (Widerstrom, Mowder, & Sandall, **1991 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p70004958700000000000000000000b12#P70004958700000000000000000000BFD)**). An adaptation of the NBAS to assess preterm infants came through the design of the *Assessment of Preterm Infants' Behavior (APIB)* (Als, Butler, Kosta, & McAnulty, **2005 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p70004958700000000000000000000b12#P70004958700000000000000000000B66)**). It includes many of the items in the NBAS, but refined them to be able to observe the preterm infant's functioning. *The Ounce Scale* (Meisels et al., 2008) is another developmental scale suitable for parents, child-care personnel, and Early Head Start teachers to administer. Used with children from birth to 3.6 years old, *The Ounce Scale* is organized around six developmental domains and helps parents observe developmental milestones.

Watch this **video** to learn about how the APGAR is administered and what it means. (**www.youtube.com/watch?v=zY87wohJl9I (http://www.youtube.com/watch?v=zY87wohJl9I)**)

Infant and toddler development

Infant development scales go beyond measuring neonatal status to focusing on development from 1 month to 2 years. The *Gesell Developmental Schedules* (Ball, **1977**

(http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p7000495870000000000000000000b12#P70004958700000000000000000000B73)
) were the first scales devised to measure infant development. Gesell designed them to detect infants who were delayed in development and might need special services. More recently, the *Bayley Scales of Infant Development, Third Edition (BSID-III)* (Bayley, **2005**

(http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p7000495870000000000000000000b12#P70004958700000000000000000000B77)
) were designed to learn about infants' overall development, while the *Communication and Symbolic Behavior Scales Developmental Profile (CSBS DP™)* (Prizant & Wetherby, **2002**

(http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p7000495870000000000000000000b12#P70004958700000000000000000000BE4)
) are used to assess communicative and symbolic development, including symbolic play and constructive play. The *Mullen Scales of Early Learning* (Mullen, **1995**

(http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p7000495870000000000000000000b12#P70004958700000000000000000000BD4)
) measure cognitive functioning in infants, toddlers, and young children from birth to 68 months. The assessment measures intellectual development through the child's response to prepared activities. The Gesell and Bayley instruments are challenging to administer because of their length; however, because they are used to diagnose children with special needs, it is important to examine developmental milestones thoroughly.

The *Devereux Early Childhood Assessment for Infants and Toddlers (DECA-I/T)* (Powell, MacKrain, & LeBuffe, **2007**

(http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p7000495870000000000000000000b12#P70004958700000000000000000000BE2)
) is an assessment designed to support the social and emotional development of infants and toddlers. There are two forms, the Infant Form for children 1–18 months old, and the Toddler Form for children 18–36 months old.

The *Denver II* (Frankenburg et al., **1992**

(http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p7000495870000000000000000000b12#P70004958700000000000000000000B9B)
) is a simple screening instrument designed to identify children who are likely to have significant delays and need early identification and intervention, while the *Adaptive Behavior Assessment System, Second Edition (ABAS-2)* (Harrison & Oakland, **2003**

(http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p7000495870000000000000000000b12#P70004958700000000000000000000BA9)
) assesses the strengths and weaknesses in adaptive skills. The *Early Coping Inventory (ECI)* (Zeitlin et al., **1988**

(http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p7000495870000000000000000000b12#P70004958700000000000000000000C05)
) assesses how well infants and toddlers 4–36 months of age react and cope with different situations; in addition, the *Infant/Toddler Symptom Checklist: A Screening Tool for Parents* (DeGangi et al., **1995**

(http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p7000495870000000000000000000b12#P70004958700000000000000000000B97)
) screens infants and toddlers who show disturbances in sleep, feeding, and self-calming. Used with children from 7 to 30 months old, it can be administered by a parent or caregiver.

Diagnostic Tests

There are diagnostic tests for infants to identify developmental or physical disorders. As with developmental and screening tests for infants and toddlers, it is very difficult to accurately acquire the needed information. The strategies for measuring lung function, for example, can be considered to be intrusive for infants (Panitch, **2004**

(http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p7000495870000000000000000000b12#P70004958700000000000000000000BDE)
). Likewise, babies who have experienced a life-threatening event (ALTE) present challenges in what tests should be used, how to interpret the results, and how well the tests or assessment procedures will contribute to the many factors that can cause ALTE (Brand et al., **2005**

(http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p7000495870000000000000000000b12#P70004958700000000000000000000B81)
). Observational measures to assess children with spinal cord injury can result in lack of agreement among the observers (Calhoun et al., **2009**

(http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p7000495870000000000000000000b12#P70004958700000000000000000000B8D)
). Regardless, specialists in infant screening and diagnosis continue to research methods that provide the desired testing with minimal invasive methods and more dependable results. **Figure 3-1**

(http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p7000495870000000000000000000088e#P700049587000000000000000000008B9)
describes neonatal and infant tests.

FIGURE 3-1 Neonatal and infant tests

NAME	LEVEL	TYPE	PURPOSE
Apgar Scale	Neonate	Birth status	Assess health of the newborn infant
Brazelton Neonatal Behavioral Assessment Scale	Neonate	Neonatal status	Locate mild neurological dysfunctions and variations in temperament
Neonatal Behavioral Assessment Scale (NBAS), Fourth Edition	First month		Identify the Infant's ability to modulate its behavioral systems in response to external stimuli
Adaptive Behavior Assessment System, Second Edition (ABAS-2)	Infant and preschool	Adaptive skills	Assess strengths and weaknesses in adaptive skills
Assessment of Preterm Infant Behavior (APIB)	Preterm infants	Preterm development	Identify current status and intervention targets
Bayley Scales of Infant Development (BSID-III)	Infant	Intelligence	Diagnose developmental delays in infants
Devereux Early Childhood Assessment for Infants and Toddlers (DECA-I/T)	Infant and toddler	Development	Supports social and emotioinal development
Denver II	1 month to 6 years	Developmental screening	Identify developmental delays
Communication and Symbolic Behavior Scales Developmental Profile (CSBS DP)	Infants, toddlers, preschoolers	Language development	Assess communication and symbolic development
Mullen Scales of Early Learning	Birth to 68 months	Intellectual development	Assess cognitive functioning
The Ounce Scale	Birth to 3.6 years	Six developmental domains	Helps parents observe developmental milestones

Tests for Preschool Children

Professionals have designed a variety of tests to evaluate development and to detect developmental problems during the preschool years. Just as the testing of infants and toddlers presents challenges to test administrators because of the children's developmental circumstances, the evaluation of preschool children under age 6 must also be conducted with their developmental characteristics in mind. Instruments that assess characteristics used to identify developmental delays or to diagnose sources of disabilities that affect the child's potential for learning are administered to one child at a time. Test items are concrete tasks or activities that match the child's ability to respond; nevertheless, validity and reliability are affected by such factors as the child's limited attention span. As children enter the preschool years, more instruments are available for examining development and identifying potential developmental delays. To better understand the various types of measures, preschool tests are organized into screening, diagnostic, language, and achievement tests.

Screening Tests

Screening tests are administered to detect indicators that a child might have a developmental problem that needs to be further investigated. Screening tests can be contrasted with assessments that examine development in more depth and help determine strengths and possible difficulties, as well as to determine what strategies need to be taken to address the child's needs.

The *Denver II* (Frankenburg et al., **1992**
(http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p700049587000000000000000000b12#P70004958700000000000000000000B9B)

) was discussed earlier as a screening tool that can be used with infants and older children. It is administered by a professional such as a pediatrician or educator. In contrast, the *Ages and Stages Questionnaires, Third Edition (ASQ-3™)* (Squires & Bricker, **2009 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p70004958700000000000000000b12#P70004958700000000000000000BEE)**) uses parental reporting. The parent can complete the questionnaire or participate in an interview with a professional. It is administered for children ages 1 month to 66 months.

The *AGS Early Screening Profiles* can be administered from ages 2 years to 6 years 11 months. They include parent–teacher questionnaires as well as profiles in cognitive language, motor, and social development. The *Developmental Indicators for the Assessment of Learning™, Fourth Edition (DIAL™-4)* (Mardell & Goldenberg, **2011 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p70004958700000000000000000b12#P70004958700000000000000000B9F)**) is also used to flag potential developmental delays. Administered to children ages 2 years 6 months to 5 years 11 months, it includes direct observation and tasks presented to the child. The *Early Screening Inventory—Revised (ESI-R),* 2008 edition (Meisels et al., **2008 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p70004958700000000000000000b12#P700049587000000000000000070AB)**) has two forms: the ESI-P for ages 3 to 4.4 years, and the ESI-K for ages 4.5 to 6 years. It is used to screen developmental domains and uses cutoff scores to determine whether the child needs to be referred for further evaluation. A parental questionnaire is used to provide supplementary information. The *Brigance Early Childhood Screens III* (Brigance, **2013 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p70004958700000000000000000b12#P70004958700000000000000000B87)**) include three screening tools to examine development in the domains of physical development, language, academic/cognitive, self-help, and social-emotional. The three tools are: an *Infant & Toddler Screen* for children 0–35 months; an *Early Preschool, Preschool Screen* for children 3–5 years old; and a *K & 1 Screen* for children in kindergarten and first grade. Finally, the *FirstSTEp™: Screening Test for Evaluating Preschoolers* (Miller, **1993 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p70004958700000000000000000b12#P70004958700000000000000000BD0)**) has 12 subtests grouped into cognitive, communicative, and motor categories. There is also an optional social-emotional scale and adaptive behavior checklist. *First Step* has three levels: Level 1 is administered to children from ages 2 years 9 months to 3 years 8 months; Level II is for children 3 years 9 months to 4 years 8 months; and Level III is administered to children 4 years 9 months to 6 years 2 months. A new Gesell Institute instrument, the *Gesell Developmental Observation—Revised* (**2011 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p70004958700000000000000000b12#P70004958700000000000000000B9F)**), is used with 2½- to 6-year-old children. It measures child growth, academic achievement, and social and emotional development.

Baker School for Early Learning

Baker School is a community school that targets services for toddlers and preschool children from a nearby public housing development. The children in the housing development represent a variety of ethnic groups and languages. Some are from families that recently emigrated from another country. Teachers in the program need input from parents on their child's current stage of development prior to entering the program. Parents can fill out the *Ages and Stages Questionnaire* with information about their child. The form includes questions about behaviors, speaking abilities, and physical skills, as well as other indicators of development. Because the teachers are sensitive to possible language and literacy limitations, they are available if the parents need help filling in the information. In many cases they read the questions to the parents and record their responses on the test form.

The screening tests just discussed cover various domains of development. The screening tools discussed next focus solely on social-emotional development. These screening instruments look at social behaviors and require sensitive and careful collaboration between the home and school because children's behaviors are affected by environmental differences. While this type of screening is difficult to do accurately, social-emotional competence is very important and should be monitored (Meisels & Atkins-Burnett, **2005 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p70004958700000000000000000b12#P70004958700000000000000000BCA)**).

The *Early Screening Project (ESP)* (Walker, Severson, & Feil, **1995 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p70004958700000000000000000b12#P70004958700000000000000000BF7)**) is administered to children ages 3 to 6 years and is administered in three stages. Children are ranked in social interaction, adaptive behavior, maladaption behaviors, aggressive behaviors, and reactions to critical events. A parent questionnaire looks at how the child plays with other children, how the child interacts with caregivers, and social problems such as difficulties with self-esteem or social avoidance. An instrument that uses parent ratings is the *PKBS–2: Preschool and Kindergarten Behavior Scales, Second Edition* (Merrell, **2003 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p70004958700000000000000000b12#P70004958700000000000000000BC6)**). Administered to children ages 3 to 6 years, it examines positive and problem behaviors. (**Figure 3-2 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p70004958700000000000000000088e#P70004958700000000000000000903)** provides examples of items on screening tests.)

Diagnostic Tests

After a child has been screened and there are indicators that further evaluation is needed, tests for diagnostic assessment can be administered. Adaptive behavior instruments attempt to measure how well the young child has mastered everyday living tasks such as toileting and feeding. *Vineland Adaptive Behavior Scales, 2nd Edition (Vineland™-II)* (Sparrow, Cicchetti, & Balla, **2005 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p70004958700000000000000000b12#P70004958700000000000000000BEC)**) assesses the everyday behaviors of the child that indicate level of development. The scale determines areas of strengths and needs in

communication, daily living, socialization, and motor skills. Another instrument, the *ABS-S:2™ Adaptive Behavior Scale–School 2nd Edition™* (Lambert, Nihira, & Leland, **2008 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p700049587000000000000000000000b12#P7000495870000000000000000000000BB6))**, assesses adaptive behavior for children 3–16 years old in 16 domains for social competence and independence. **Figure 3-3 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p7000495870000000000000000000000088e#P7000495870000000000000000000000092C)** describes categories of adaptive behaviors.

Preschool intelligence tests and adaptive behavior scales are used to diagnose children with intellectual disabilities. Although intelligence measures during the preschool years are generally unreliable because children's IQs can change enormously between early childhood and adolescence, they are used with young children to measure learning potential.

FIGURE 3-2 Examples of items on screening tests

Motor Skills

Gross Motor: Jumping, skipping, hopping, catching, walking a straight line
Fine Motor: Building with cubes, cutting, copying forms, writing name and copying
words, drawing shapes

Cognitive Development

Pointing to body parts
Rote counting
Counting objects
Sorting and classifying pictures
Identifying and naming colors and shapes
Answering simple questions about concepts

Language Development

Identifying correct item in an array of pictures
Answering personal questions
Identifying objects and pictures
Placing object using positional words (*under, over, in,* etc.)

FIGURE 3-3 Some categories assessed in adaptive behaviors

Independent Living Categories	**Social Behavior Categories**
Physical development	Social engagement
Language development	Conformity
Independent functioning	Trustworthiness
	Disturbing interpersonal behavior
	Hyperactive behavior
	Self-abusive behavior
	Stereotyped behavior

The *Stanford–Binet Intelligence Scales (SB5), Fifth Edition* (Roid, **2003 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p700049587000000000000000000000b12#P7000495870000000000000000000000BE6))**, the original IQ test, was designed to assess general thinking or problem-solving ability. It is valuable in answering questions about developmental delay and retardation. Another instrument, the *Wechsler Preschool and Primary Scale of Intelligence™, Third Edition (WPPSI™-III)* (Wechsler, **2002 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p700049587000000000000000000000b12#P7000495870000000000000000000000070C5))**, is useful in identifying signs of uneven development for children ages 2 years 6 months to 7 years 3 months.

Other instruments address all domains of development. The *Kaufman Assessment Battery for Children, Second Edition (KABC™-II)* (Kaufman & Kaufman, 2004), *Battelle Developmental Inventory™, Second Edition (BDI-2™)* (Newborg, **2004 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p700049587000000000000000000000b12#P7000495870000000000000000000000BD8))**, and *Bracken Basic Concept Scale, Third Edition: Receptive (BBCS-3:R)* (Bracken, 2006) have comprehensive assessments of development. Additionally, the *Brigance Inventory of Early Development III (IED III)* (Brigance, **2013 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p700049587000000000000000000000b12#P7000495870000000000000000000000B87)**

) is an assessment used with children from birth through developmental age 7 years. There are two versions of the *IED III,* which is criterion-referenced, and the *IED III-Standardized,* which is norm-referenced.

The *Devereux Early Childhood Assessment Preschool Program, Second Edition (DECA P-2)* (Le Buffe & Naglieri, **2012 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p7000495870000000000000000000b12#P7000495870000000000000000000709E)**) is a strengths-based assessment system designed to promote resilience and positive social/emotional development for children ages 3–5 years. It can be administered through classroom observations. It has items that examine positive and negative behaviors such as attention problems, aggression, depression, and emotional control.

Language Tests

The category of language tests for preschool children is very important because many children are at risk for school readiness because they have language deficits or their first language is not English. While some language tests for at-risk children are in English, others are available in both English and Spanish, and occasionally other languages. The *Preschool Language Scale, Fourth Edition (PLS-4)* (Zimmerman, Steiner, & Pond, **2007 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p7000495870000000000000000000b12#P7000495870000000000000000000C07)**) and *Peabody Picture Vocabulary Test, Fourth Edition (PPVT-4)* (Dunn & Dunn, 2007) provide information on a child's language ability, which can help determine whether a child will benefit from a language enrichment program.

With the expanding numbers of English Language Learners (ELL) who are living in many states, language assessment tests are growing in importance. Children who have limited English proficiency may be served in a bilingual program or ELL program. The *Pre-LAS, Pre-IPT,* and *Woodcock-Muñoz Language Survey* (discussed next) are available in English and Spanish editions. There are also forms of these tests for school-age children.

The *preLAS Observational Assessment™* measures oral language proficiency for 3-year-olds and the *preLAS* (CTB/McGraw-Hill, **2000 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p7000495870000000000000000000b12#P7000495870000000000000000000B95)**) measures language proficiency and literacy skills for children in kindergarten through first grade. It is also used to make language placement decisions, monitor progress over time, and identify learner needs. The *IDEA Proficiency Tests (Pre-IPT), Fourth Edition* (Ballard & Tighe, **2006 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p7000495870000000000000000000b12#P7000495870000000000000000000B75)**) are designed to evaluate language, reading, and writing skills in Spanish and English for children in pre-K to 12th grade. The *Pre-IPT* is administered to 3- to 5-year-olds and can be used to determine when children are ready to be released from ELL programs. The *Woodcock-Muñoz Language Survey®—Revised Normative Update (WMLS®-R NU)* (Schrank et al., **2010 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p7000495870000000000000000000b12#P700049587000000000000000000070BA)**) can be administered to children as young as age 2. **Figure 3-4 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p7000495870000000000000000000088e#P700049587000000000000000000094F)** lists different categories of preschool tests.

There are distinct phases of second language acquisition, as illustrated in this **video.** How might a child's test results be affected during each stage of second language acquisition? (**www.youtube.com/watch?v=Eoca1Ou_6TE (http://www.youtube.com/watch?v=Eoca1Ou_6TE)**)

Tests for School-Age Children

For the child old enough to attend preschool and elementary school, many tests are available for use by teachers, school psychologists, program evaluators, and other personnel with responsibilities for students and the early childhood curriculum. In addition to preschool programs for children with disabilities, many states conduct programs for 4-year-old and kindergarten children as well. Descriptions of some of these assessments were included in the previous section on preschool tests. Likewise, some of the assessments in this section include prekindergarten and kindergarten children. Although individual tests are available for some purposes in school-age programs, group testing is also used. Group tests require the child to use paper and pencil; therefore, test results may be affected by the child's ability to respond in this manner. Test validity and reliability may be affected by the child's ability both to respond in a group setting and to use a pencil to find and mark responses on the test. As students move into the primary grades, these factors become less important. The tests discussed in this section do not include the many tests designed by individual states to meet the grade testing requirements of NCLB. Instead, they address tests for understanding strengths and possible delays in language, cognitive, and motor development as children move into the primary grades.

FIGURE 3-4 Categories and characteristics of preschool tests

NAME	LEVEL	TYPE	PURPOSE
Screening Tests			
Ages and Stages Questionnaires, Third Edition (ASQ-3™)	4–60 months	Developmental screening	Measure cognitive, language, motor, and social development
AGS Early Screening Profiles	2–6 years	Developmental screening	Measure cognitive, language, motor, self-help, social acculturation, and health development
Developmental Indicators for the Assessment of Learning™, Fourth Edition (DIAL™-4)	2–6 years	Developmental screening	Assess motor, language, and cognitive development
Early Screening Inventory—Revised (ESI-R)	3–6 years	Developmental screening	Assess developmental domains with cutoff scores for referrals
First Step Screening Test for Evaluating Preschoolers	2 years 9 months to 6 years 2 months	Developmental screening	Assess five developmental domains to identify preschoolers at risk for developmental delay
Social Emotional Screening			
Devereux Early Childhood Assessment Preschool Program, Second Edition (DECA-P2)	2–5 years	Social-emotional screening	Examine positive and negative social-emotional behaviors
Early Screening Project (ESP)	3–6 years	Social-emotional screening	Rank children in social interaction, adaptive behavior, maladaptive behaviors, and aggressive behaviors
PKBS–2: Preschool and Kindergarten Behavior Scales, Second Edition	3–6 years	Social-emotional screening	Examine positive and problem behaviors through parent ratings
Brigance Early Childhood Screens III	Birth to 5 years	Social-emotional screening	Examine positive and negative behaviors
Diagnostic Tests			
Vineland Adaptive Behavior Scales, Second Edition (Vineland™ II)	3–16 years	Adaptive behavior	Measure weaknesses and strengths in everyday-living tasks
ABS-S:2™ Adaptive Behavior Scale—School 2nd Edition™	3–16 years	Adaptive behavior	Assess adaptive behavior in terms of personal independence and development; can be compared to norms for children developing normally, with retardation, and with severe retardation

Stanford–Binet Intelligence Scales (SB5), Fifth Edition	2 years to adult	Global intelligence	Detect delays and intellectual disabilities

Diagnostic Tests

Wechsler Preschool and Primary Scale of Intelligence™ —Third Edition (WPPSI™-III)	4–6 years	Intelligence	Identify signs of uneven development, detect overall delay
Kaufman Assessment Battery for Children, Second Edition (KABC™-II)		Comprehensive developmental assessment	Assess developmental delay and plan for instruction
Battelle Developmental Inventory™, Second Edition (BDI-2™)	Birth to 8 years	Comprehensive developmental assessment	Identify child's strengths and weaknesses and plan for intervention or instruction
Bracken Basic Concept Scale, Third Edition: Receptive (BBCS-3:R)	2 years 5 months to 7 years 11 months	Basic concept development	Quickly identify or comprehensively diagnose basic concept development

Language Tests

Preschool Language Scale, Fourth Edition (PLS-4)	Birth to 6 years 11 months	Language	Measure receptive and expressive language
Peabody Picture Vocabulary Test, Fourth Edition (PPVT-4)	2 years 5 months to 18 years	Vocabulary	Measure receptive vocabulary for Standard American English
Pre-Language Assessment Survey (pre-LAS) (English and Spanish)	4–6 years	Language	Measure oral language proficiency and assess learner needs
IDEA Proficiency Tests (Pre-IPT), Fourth Edition	3–5 years	Language	Identify children for placement in LED programs
Woodcock-Muñoz Language Survey®—Revised Normative Update (WMLS®-R NU)	2 years to adult	Language	Measure language proficiency in English or Spanish; determine eligibility for bilingual programs or readiness for English instruction

Many public school programs are designed for children at high risk for disabilities. A number of programs are available, including bilingual and English language programs for children whose first language is not English, intervention programs for children with a physical or intellectual disability, and preschool programs for children from low-income homes who lack the early childhood experiences that predict successful learning. These programs may include a screening instrument to determine which children are eligible for special services. The *Wechsler Intelligence Scale for Children®, Fourth Edition (WISC®-IV)* (Wechsler, **2003 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p7000495870000000000000000000b12#P7000495870000000000000000000BF9)**) and the *Bender Visual-Motor Gestalt Test, Second Edition (Bender-Gestalt-II)* (Bender, **2003 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p7000495870000000000000000000b12#P7000495870000000000000000000B7B)**) may be administered to a preschool or school-age child by a school psychologist or school diagnostician to determine whether the child needs educational services for children with disabilities. Poor performance on the *Bender-Gestalt-II* by a school-age child indicates the need for further study of the child. The *Beery-Buktenica Developmental Test of Visual-Motor Integration, Sixth Edition (BEERY™ VMI)* (Beery, Buktenica, & Beery, **2010 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p7000495870000000000000000000b12#P7000495870000000000000000000070BA)**) is a similar test.

St. Pius Preschool

Areas of southwest Arkansas are experiencing an influx of people from Mexico and Central America who work at a large local paper factory. Many of these families in one community attend St. Pius Catholic Church, and parishioners have seen the need to provide English classes and other services for the parents as they adjust to a new country and language. As the parents found work, church members also recognized a need for child care. They decided to include a concentrated English language development program when they added a child-care center to their outreach activities.

As they began the program, the parishioners realized they needed to find a test that would indicate the children's progress in learning English as well as provide a language assessment to send to local Head Start, preschool, and kindergarten programs when the children were transitioning out of the St. Pius school. They learned about the *Pre-Language Assessment Survey (Pre-LAS)* from public school colleagues. After learning how to use the instrument, they were ready to start implementing the test to better help their very young students learn English.

Achievement tests are useful when making decisions about instruction. If a child is exhibiting learning difficulties, a psychologist might administer the *Peabody Individual Achievement Test—Revised Normative Update (PIAT-R/NU)* (Markwardt, **1997 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p700049587000000000000000000b12#P700049587000000000000000000BC0)**) or the *Wide Range Achievement Test 4 (WRAT 4)* (Wilkinson & Robertson, **2006 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p700049587000000000000000000b12#P700049587000000000000000000BFF)**) to gain information about children's math, reading, and spelling skills. The teacher might administer the *Boehm Test of Basic Concepts, Third Edition (Boehm-3)* (Boehm, **2000 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p700049587000000000000000000b12#P7000495870000000000000000007085)**) to young children to determine their need for instruction in basic concepts or to assess successful learning of concepts previously taught.

Primary-grade teachers may also need specific information about a child having difficulties in the classroom. Diagnostic tests such as the *Spache Diagnostic Reading Scales* (Spache, **1981 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p700049587000000000000000000b12#P700049587000000000000000000BEA)**) can be administered by classroom teachers to pinpoint skills in which students need additional instruction. The *Preschool Child Observation Record, Second Edition (COR)* developed by the HighScope Educational Research Foundation (High/scope Educatonal Research Foundation, **2010 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p700049587000000000000000000b12#P70004958700000000000000000070BA)**) can be used in preschool through fifth grade in six developmental domains, including social development. The *Infant & Toddler Child Observation Record* (High/Scope Educational Research Foundation, **2003 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p700049587000000000000000000b12#P700049587000000000000000000BAB)**) measures developmental domains and correlates with the *Preschool COR.* **Figure 3-5 (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p700049587000000000000000000088e#P700049587000000000000000000009D6)** (on the next page) includes examples of initiative items relating to adults, other children, and social problem solving. The checklists can also be used in Head Start programs and child-care centers and with children who speak English as a second language.

FIGURE 3-5 Examples from the Preschool Child Observation Record

I. Initiative

A. Making choices and plans

1. Child indicates a choice by pointing or some other action.
2. Child expresses a choice in one or two words.
3. Child expresses a choice with a short sentence.
4. Child makes a plan with one or two details.
5. Child makes a plan with three or more details.

B. Solving problems with materials

1. Child expresses frustration when encountering a problem.
2. Child identifies a problem with materials and asks for help.
3. Child tries one way to solve a problem with materials.
4. Child tries two ways to solve a problem with materials.
5. Child tries three or more ways to solve a problem with materials.

C. Initiating play

1. Child engages in exploratory play.
2. Child makes something with materials.
3. Child engages in pretend play.
4. During play with other children, child adds an idea that modifies the play.
5. Child joins with other children in playing a game with rules.

D. Taking care of personal needs

1. Child observes as others do a self-care activity.
2. Child accomplishes some parts of a self-care activity.
3. Child accomplishes all parts of a self-care activity.
4. Child identifies the need for a tool and uses it independently to accomplish a personal goal.
5. Child helps another child in a self-care activity or program routine.

II. Social Relations

E. Relating to adults

1. Child participates in a conversation initiated by a familiar adult.
2. Child participates in a conversation initiated by an unfamiliar adult.
3. Child initiates an interaction with an adult.
4. Child sustains an interaction with an adult.
5. Child involves an adult in an activity and sustains the involvement.

F. Relating to other children

1. Child responds when another child initiates an interaction with materials.
2. Child initiates an interaction with another child.
3. Child sustains an interaction with another child.
4. Child invites another child to play.
5. Child shows loyalty to another child.

G. Resolving interpersonal conflict

1. In a conflict with another child, child responds with yelling or physical action.
2. Child requests adult help in resolving a conflict with another child.
3. Child identifies the problem in a conflict with another child.
4. With adult help, child offers a solution to a conflict.
5. Child negotiates the resolution of a conflict with another child.

H. Understanding and expressing feelings

1. Child expresses an emotion.
2. Child comforts another child.
3. Child talks about an emotion.
4. Child represents an emotion through pretend play or art.
5. Child identifies an emotion and gives a reason for it.

Group achievement tests are used to evaluate individual achievement, group achievement, and program effectiveness. All of the new tests developed by individual states to provide accountability for student achievement are group achievement tests. A school district may administer achievement tests every year to determine each student's progress, as well as to gain diagnostic information on the child's need for future instruction. The same test results can be used at the district level to give information on student's progress between and within schools and to determine the effectiveness of the district's instructional program.

Instructional effectiveness may also be evaluated at the state or national level. A state agency may administer statewide achievement tests to work toward establishing a standard of instructional effectiveness in all schools within the state. Test results can identify school districts that both exceed and fall below the set standard. Indicators of poor instructional areas in many school districts pinpoint weaknesses in the state's

instructional program and facilitate specific types of improvement. As was discussed in **Chapter 01** (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/ch01#ch01) , the No Child Left Behind Act, passed in 2001, required all states to develop and administer tests to measure achievement in public schools. More recently, the Common Core of State Standards was developed in an effort to measure achievement in all states (NAEYC, **2012** (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p7000495870000000000000000000b12#P70004958700000000000000000000BDA)). National assessments are made periodically to pinpoint strengths and weaknesses in the educational progress of U.S. children in different subject areas. These findings are frequently compared with achievement results of students in other countries. **Figure 3-6** (http://content.thuzelearning.com/books/Wortham.8017.17.1/sections/p7000495870000000000000000000088e#P70004958700000000000000000000A1C) lists tests for school-age children.

Though standardized achievement tests help educators and parents better understand the strengths and needs of school-age children, it is important to remember how they affect children's self-esteem. In this **video** a student reflects on his experience with tests and calls attention to his interests and characteristics that may not be measured on standardized tests. (**https://www.youtube.com/watch?v=nA-y0Txmw8Y** (https://www.youtube.com/watch?v=nA-y0Txmw8Y))

FIGURE 3-6 School-age tests

NAME	LEVEL	TYPE	PURPOSE
Bilingual Syntax Measure II	Kindergarten to grade 2	Language	Determine language dominance
The Wechsler Intelligence Scale for Children®, Fourth Edition (WISC®-IV)	6½–16½ years	Intelligence	Diagnose mental retardation and learning disability; includes verbal and performance subscales
Bender Visual Motor Gestalt Test, Second Edition (Bender-Gestalt-II)	4–10 years	Visual-motor functioning	Assess perceptual skills and hand–eye coordination; identify learning disabilities
Test of Visual-Motor Integration	4–17 years	Visual-motor functioning	Assess visual-motor ability
Peabody Individual Achievement Test—Revised Normative Update (PIAT-R/NU)	Kindergarten to grade 12	Individual achievement	Assess achievement in mathematics, reading, spelling, and general information
Boehm Test of Basic Concepts, Third Edition (Boehm-3)	Kindergarten to grade 2	Cognitive ability	Screen for beginning school concepts
Brigance Comprehensive Inventory of Basic Skills II	Pre-kindergarten to grade 9	Academic achievement	Assess academic skills and diagnose learning difficulties in language, math, and reading
Spache Diagnostic Reading Skills	Grades 1 to 8 reading levels	Diagnostic reading test	Locate reading problems and plan remedial instruction
Child Observation Record, Second Edition (COR)	Pre-kindergarten to grade 5	Comprehensive developmental assessment	Provide appropriate assessment using developmental checklist

In this section, we discussed how standardized tests are used. Although the tests described include various types with different purposes, the process used for their development is essentially the same. The next part of the chapter will focus on how standardized tests are designed; that is, the steps followed in the development of all standardized tests.