Ability Tests

Instrument	Purpose	Parameters	Qualifications	Publisher	Norm Group	Scoring	Validity	Reliability
Bilingual Verbal Ability Tests (BVAT)	Assess verbal ability by using both English and the student's native language	•K-12 •30 minutes •Individual •16 languages •Assesses Woodcock Johnson oral vocabulary, picture vocabulary, and verbal analogies	No specialized training; two examiners, one who speaks English and one who speaks the student's native language, may be used.	Riverside	Samples from age five through adult in Spanish, German, Arabic, Japanese, Hindi, Russian, Creole, French, Italian, Chinese (2), Portuguese, Turkish, Polish, Vietnamese, and English	Hand- scored; software to automate scores and provide summary	Content, construct, and factor analysis	Internal .84- .95; Test- retest .8092
Cognitive Abilities Test - Form 6 (CogAT)	Measure cognitive abilities through verbal and quantitative reasoning	•K-12 •90 minutes •Group	No specialized training	Riverside	Very large sample; normed alongside lowa Tests of Basic Skills	Hand- scored, machine- scored, or publisher- scored	Extensive	Test-retest >.85
Cognitive Abilities Test - Nonverbal Battery (CoGAT Nonverbal)	Measure nonverbal reasoning and problem solving using symbols	•K-12 •30 minutes •Group	No specialized training	Riverside	Large sample; normed alongside Iowa Tests of Basic Skills; subsample of gifted/talented	Hand- scored, machine- scored, or publisher- scored	Extensive	Test-retest >.85

Table 8. Standardized Instruments Suitable for Identification of Gifted/Talented Potential: Ability Tests.

Instrument	Purpose	Parameters	Qualifications	Publisher	Norm Group	Scoring	Validity	Reliability
Comprehensive Test of Nonverbal Intelligence (CTONI)	Assess innate abilities of analogical reasoning, classification, and sequential reasoning; recommended for individuals who are limited English proficient, economically disadvantaged, or deaf.	•K-adult •45 minutes •Individual •Uses designs and pictures to assess nonverbal ability	No specialized training	Pro-Ed	Large sample reflecting 1997 ethnic/racial demographics of school districts across the US; special efforts were made to eliminate sources of cultural, gender, racial, or linguistic bias.	Hand- scored, machine- scored, or publisher- scored	Construct, concurrent, predictive, and discriminant	Internal >.80
Das-Naglieri Cognitive Assessment System (CAS)	Assess intelligence across cognitive processing dimensions of planning, attention, simultaneous, and successive (p.a.s.s.)	•K-12 •40 minutes for basic and 60 minutes for full •Group •Uses shapes and designs in a progressive matrix format	Training useful and is available through CD- ROM and books	Riverside	2,200 students aged 5.0-17.11, closely reflecting USA population	Hand- scored	Discriminant validity for gifted/ talented from other groups of learners	Full-scale reliability .96; Subtests of p.a.s.s83- .93

Table 8 (cont'd). Standardized Instruments Suitable for Identification of Gifted/Talented Potential: Ability Tests.

Instrument	Purpose	Parameters	Qualifications	Publisher	Norm Group	Scoring	Validity	Reliability
Differential Ability Scales (DAS)	Assess verbal ability, nonverbal reasoning, spatial ability; also has diagnostic and achievement subtests	•K-12 •45-65 minutes •Individual tests for general conceptual ability via both verbal and nonverbal channels	PhD in psychology and/or education with relevant assessment training and/or license	Psychological Corporation	3,475 students aged 2.6-5.11 (preschool form) and 6- 17.11 (school form) with large samples of Hispanic and African American; also samples of G/T	Hand- scored or machine- scored	Construct, concurrent, and discriminant validity; discriminant validity established with G/T	Full-scale reliability low- to-mid .90's
Gifted and Talented Evaluation Scale (GATES)	Ascertain the presence of G/T behaviors on five scales: intellectual, academic, creativity, leadership, and artistic	•K-12 •30 minutes •Individual •Based on popular definitions	No specialized training	Prufrock Press	Over 1,000 children in US and Canada; US children reflected 1990 Census	Hand- scored	Some validity studies on content	Internal consistency .90 Test-Retest .90+
Kaufman Assessment Battery (K- ABC)	Determine verbal intelligence through consciousness of cultural diversity	•PK-12 •30 minutes •Individual	PhD in psychology and/or education, with relevant assessment training and/or license	AGS	Over 3,100 students, aged 3-18; subsample of gifted/ talented students	Hand- scored or machine- scored	Extensive validity studies of content, construct, concurrent, predictive, & discriminant validity	Original version .77- .97

Table 8 (cont'd). Standardized Instruments Suitable for Identification of Gifted/Talented Potential: Ability Tests.

Instrument	Purpose	Parameters	Qualifications	Publisher	Norm Group	Scoring	Validity	Reliability
Leiter International Performance Scale- Revised (LIPS-R)	Assess nonverbal intelligence without any words spoken or written; emphasis on fairness	•PK-12 •25 minutes (short form); 3 hours (total) •Individual •Uses shapes and figures to assess "fluid" intelligence	PhD in psychology and/or education, with relevant assessment training and/or license	Stoelting	Sample of 2411, reflecting 1993 demographics in US; subsamples of G/T and ADHD	Hand- scored or machine- scored	Numerous validity studies	Internal consistency .8893
Naglieri Nonverbal Ability Test Multilevel Form (NNAT)	Determine through culture-fair, language- free means; students' nonverbal reasoning, problem- solving	•K-12 •30 minutes •Group •Uses shapes and designs in progressive matrix format	No specialized training	Harcourt	Over 100,000 US students; special groups of G/T, LD, and across several cultures	Hand- scored, machine- scored, or publisher- scored	Related to achievement and intelligence; content and construct	Internal consistency .95; Test- retest .85
Otis-Lennon School Abilities Test, 7 th edition (OLSAT-7)	Assess cognitive abilities related to learning and school potential	•K-12 •75 minutes for older students; less for younger •Group •Logical and abstract thinking by generalizing, and seeing relationships	No specialized training	Harcourt	Normed with both the Stanford-9 and Metro-8 Achievement Tests in huge studies of 200,000+ children	Hand- scored, machine- scored, or publisher- scored	Numerous validity studies	Internal consistency >.90; Test-retest >.85

Table 8 (cont'd). Standardized Instruments Suitable for Identification of Gifted/Talented Potential: Ability Tests.

Instrument	Purpose	Parameters	Qualifications	Publisher	Norm Group	Scoring	Validity	Reliability
Screening Assessment for Gifted Elementary and Middle School Students, 2 nd edition (SAGES-2)	Identify gifted students K-8 via a combined aptitude and achievement test (3 subtests)	•K-8 •Untimed, but at least 60 minutes •Group •Analogical reasoning, math/ science, social studies, and language	No specialized training	Prufrock Press	Over 5,300 students, stratified by norm and gifted groups and 1997 US demographics	Hand- scored	Extensive validity data	Reliabilities .7795
Stanford- Binet Intelligence, Form L-M	Identify unitary intelligence (g)	PK-adult Individual Time depends on ability Higher ceilings than Stanford-Binet- IV and better for finding intellectual giftedness	PhD in psychology and/or education, with relevant assessment training and/or license	Riverside	Over 5,000 subjects of all ages in 1972 renorming effort	Hand- scored	Years of validity studies of all types with impressive results; discriminant validity on giftedness	Reliabilities >.90
Structure of Intellect Test of Learning Abilities (SOI)	Identify strengths and weaknesses using Guilford's view of multiple intelligence	•PK-adult •Individual or group •1 hour (K-3); 3 hours (3-adult) •Assesses many discrete intelligences	Training in SOI, interpretation, and scoring invaluable	SOI	Over 1,000 subjects and growing; norming is on- going	Hand- scored or publisher- scored	Ongoing validity studies; strong results to date in content, construct, and discriminant	Reliabilities vary widely by subtests

Table 8 (cont'd). Standardized Instruments Suitable for Identification of Gifted/Talented Potential: Ability Tests.

Instrument	Purpose	Parameters	Qualifications	Publisher	Norm Group	Scoring	Validity	Reliability
Test of Nonverbal Intelligence- 3 rd Edition (TONI-3)	Assess nonverbal intelligence using abstract figures	•K-Adult •20 minutes •Individual •No words, numbers, or familiar pictures of language	No specialized training	Prufrock Press	Large sample stratified across US demo- graphics of mid-1990's	Hand-scored	Numerous validity studies, concentrating on content and construct	Internal consistency .90
Torrance Tests of Creative Thinking (ITCT) Figural & Verbal	Assess creativity and creative potential	•K-12 •30-45 minutes •Group or individual •Measures fluency, flexibility, originality, abstraction, resistance to premature closure •Figural, requires little English	Training in administration, scoring, and interpretation required	Scholastic Testing	Over 1,000 students from all cultures (figural) and over 1,000 from US (verbal)	Hand-scored or publisher- scored	Numerous validity studies with various results; content and construct validity strongest	Reliability .60->.80

Table 8 (cont'd). Standardized Instruments Suitable for Identification of Gifted/Talented Potential: Ability Tests.

Instrument	Purpose	Parameters	Qualifications	Publisher	Norm Group	Scoring	Validity	Reliability
Universal Nonverbal Intelligence Test (UNIT)	Assess general intelligence (g) nonverbally with unprecedented cultural fairness	•K-12 •15-45 minutes, depending on form and/or need •Memory and reasoning using symbols, objects, analogic thought, space, and design •No words used, even in directions	No specialized training	Riverside	Stratified diverse samples of 3,865 children using 1995 US demographics	Hand- scored	Extensive statistical validity studies with strong concurrent validity, moderate predictive validity, and discriminant validity for giftedness	Reliabilities .8098
Wechsler Intelligence Scale for Children, 3 rd Edition (WISC-III)	Identify unitary intelligence (g)	•1-12 •50-85 minutes •10 core subtests and 3 supplemental subtests	PhD in psychology and/or education, with relevant assessment training and/or license	Psychological Corporation	Over 2,200 children stratified by age, gender, parental education, region, and ethnicity	Hand- scored or machine- scored	Extensive validity studies, including discriminant validity on giftedness	Reliabilities >.90
Woodcock- Johnson Test of Cognitive Ability - Edition III (WJ-III)	Measure cognitive ability as a single dimension of intelligence (g)	•K-adult •10-15 minutes (brief form) to >1 hour •Seven subtests subdivide g	No specialized training	Riverside	Over 8,800 students; normed concurrent with WJ-III Achievement; culturally diverse	Machine- scored	Many validity studies	Reliabilities >.80

Table 8 (cont'd). Standardized Instruments Suitable for Identification of Gifted/Talented Potential: Ability Tests.

Achievement Tests

Instrument	Purpose	Parameters	Qualifications	Publisher	Norm Group	Scoring	Validity	Reliability
Comprehensive Scales of Student Ability (CSSA)	Assess quickly develop- mental ability through achievement	•K-12 •15 minutes •Individual •Broad overview of development •Useful with young children with potential giftedness	No specialized training	Pro-Ed	Over 1,000 children representing diverse groups	Hand- scored	Strong construct and predictive validity	Internal consistency .90
Iowa Test of Basic Skills, Form M (ITBS- M)	Provide traditional assessment of academic achievement	•K-12 in 14 levels •Group •2 hours to 4.5 hours (full) depending on level	No specialized training	Riverside	Large sample throughout US and across various diverse strata	Machine- scored or publisher- scored	Impressive validity studies of many types	Reliabilities .7598
Kaufman Test of Educational Achievement , New Edition (K-TEA-NU)	Determine student academic achievement	•1-12 •20-30 minutes (brief); 30-60 minutes (grades 1-3); 50-75 minutes (4-12) •Group or individual •Multiple choice and open- ended •All major academic areas tested	No specialized training; strict adherence to time guidelines	AGS	US sample of over 3,000 students across diversity of regions, socioeconomic status, and ethnicities	Publisher- scored	Construct, criterion- referenced, and content	Internal consistency high .80s (brief) to low .90s (full); Test-retest mid .90s (brief) to high .90s (full)

Table 11. Standardized Instruments Suitable for Identification of Gifted/Talented Potential: Achievement Tests.

Instrument	Purpose	Parameters	Qualifications	Publisher	Norm Group	Scoring	Validity	Reliability
Metropolitan Achievement Tests, 8 th Edition (Metro-8)	Determine student achievement in traditional academic subjects	•K-12 •90 minutes to 4 hours, depending on level •Group •Comprehensive test of academic subjects	No specialized training; strict adherence to time guidelines	Harcourt	Over 500,00 students across various strata	Publisher- scored	Impressive validity results on construct, content, and discriminant	Most subtests >.80; lowest subtests >.70; open-ended subtests lowest
Mini-Battery of Achievement	Ascertain quickly student academic achievement	•K-12 •30 minutes •Individual •Reading (sight, comprehension, vocabulary), writing, math, factual knowledge	No specialized training	Riverside	Over 6,000 US individuals	Software- scored	Correlation of .80 and up with major, lengthy achievement batteries	Mid .90s
Stanford Achievement Test, 9 th Edition (SAT- 9); Aprenda- 2 (SAT Spanish)	Assess academic achievement	•K-12 •Most of a week, depending on subtests used •Group •Tests all major academic skill and content areas •Both multiple choice and open-ended	No specialized training; strict adherence to time guidelines	Harcourt	US sample of over 500,000 students across many variables of socioeconomic status, region, and ethnicity	Publisher- scored	Impressive validity on construct, criterion-referenced, and content	Majority of subtests .80- .90; lowest subtests in .70's; open- ended subtests lowest

Table 9 (cont'd). Standardized Instruments Suitable for Identification of Gifted/Talented Potential: Achievement Tests.

Instrument	Purpose	Parameters	Qualifications	Publisher	Norm Group	Scoring	Validity	Reliability
Wechsler Individual Achievement Test, 2 nd Edition (WIAT-II)	Assess individual achievement and correlate it to the WISC-IV	•K-12 •Individual •30-75 minutes, depending on age •Diagnoses disabilities; also reveals high abilities	No specialized training	Psychological Corporation	Over 1,000 students across diverse groups	Hand- scored or machine- scored	Strong construct, content, and predictive validity	Reliabilities >.80
Woodcock- Johnson Test of Achievement, 3 rd Edition (WJ- III)	Efficiently measure school- related achieve- ment	•K-Adult •Group •1-2 hours •Focus on ability and achievement discrep- ancies	No specialized training	Riverside	Over 8,800 students; normed concurrent with WJ-III Achievement; culturally diverse; co- normed with WJ-III Test of Cognitive Abilities	Machine- scored	Validity .6070 compared to other achievement tests	Reliabilities mid .90s

Table 9 (cont'd). Standardized Instruments Suitable for Identification of Gifted/Talented Potential: Achievement Tests.

Checklists and Inventories

Instrument	Purpose	Parameters	Qualifications	Publisher	Norm Group	Scoring	Validity	Reliability
Gifted Evaluation Scale	Assess five areas of giftedness	•Ages 4.5-19 •Untimed •Group or individual •48 items	No specialized training	Hawthorne	Unknown	Hand-scored	Factor analysis reveals one area of giftedness; correlates with WISC-R	Internal .90; Test-retest .91
Group Inventory for Finding Interests	Screen for creative giftedness	·6-12 ·Documents teacher observation	No specialized training	Educational Assessment Service	Unknown	Hand-scored	Content and construct validity studies	Unknown
Group Inventory for Finding Talent (GIFT)	Screen for creative giftedness	•K-6 •Documents teacher observation	No specialized training	Educational Assessment Service	Unknown	Hand-scored	Content and construct validity studies	Unknown
lowa Acceleration Scale (IAS)	Determine appropriate- ness of whole- grade acceleration	•K-8 •Encompasses key issues related to a need for grade acceleration	No specialized training	Gifted Psychology Press	Diverse sample of >500 accelerated students and >500 not accelerated	Hand-scored	Excellent predictive validity	Reliabilities >.85
Kingore Observation Inventory (KOI)	To document observed behaviors related to giftedness	•K-3 •Teacher observes and tallies traits over a 6-week period	No specialized training	ALPS	Unknown	Hand-scored	Unknown	Unknown

Table 10. Standardized Instruments Suitable for Identification of Gifted/Talented Potential: Checklists and Inventories.

Instrument	Purpose	Parameters	Qualifications	Publisher	Norm Group	Scoring	Validity	Reliability
Leadership Development Program	Determine the need for leadership training for students with high leadership potential	•K-Adult •Self-reported and self- scored •Learning Skills Inventory used pre- and post- leadership activities in classroom	No specialized training	Gifted Psychology Press	Unknown	Hand-scored	Unknown	Unknown
Scales for Rating the Behavioral Characteristics of Superior Students	Document observed behaviors related to giftedness	•K-12 •Adult observes and tallies traits in five areas of giftedness	No specialized training	Creative Learning Press	Requires development of local norms	Hand-scored	Construct and content validity drawn from numerous research studies	Requires development of local norms
Student Talent and Risk Profile	Determine students who may benefit from G/T services and who may be at risk for school problems	•5-12 •45 minutes •Group or individual	No specialized training	Institute for Behavioral Research in Creativity	Large sample restricted to one state	Hand-scored	Correlation with Stanford Achievement Test	Internal .77- .91

Table 10 (cont'd). Standardized Instruments Suitable for Identification of Gifted/Talented Potential: Checklists and Inventories.

Core Content Areas (Language, Mathematics, Science, and Social Studies)

Instrument	Purpose	Parameters	Qualifications	Publisher	Norm Group	Scoring	Validity	Reliability
Orleans-Hanna Algebra Prognosis Test, 3 rd Edition (OHAP-3)	Confirm readiness to learn algebra	•Grades 7-8 •Use in out-of-level with G/T group •Foundational concepts	No specialized training	Harcourt	Almost 16,000 students in grades 7 and 8 from general mathematics and algebra	Publisher- scored	Strong validity of several types; predictive validity especially good	Internal consistency >.90; Test-retest >.90
Test of Early Mathematics Ability, 2 nd Edition (TEMA- 2)	Determine develop- mental mathe- matical ability	•PK-3 •Individual basic math concepts	No specialized training	Stoelting	Over 1,000 young children	Hand-scored	Construct, content	Internal consistency .88; Test- retest .85
Test of Early Reading Ability, 2 nd Edition (TERA-2)	Determine develop- mental reading ability in young children	•PK-3 •Individual •Basic reading skills and compre- hension	No specialized training	Stoelting	Over 1,000 young children	Hand-scored	Construct, content	Internal consistency .90; Test- retest .87
Test of Mathematical Abilities for Gifted Students (TOMAGS)	Identify mathematical talent in children	•K-6 •Untimed •Group •Reflects current NCTM curricula	No specialized training	Pro-Ed	US sample of over 500,000 students across many variables of socioeco- nomic status, region, and ethnicity	Hand-scored or publisher- scored	Construct (especially for G/T), content, criterion- referenced	Internal consistency .8192; Test-retest .8494

Table 11. Standardized Instruments Suitable for Identification of Gifted/Talented Potential: Core Content Areas (Language, Mathematics, Science, and Social Studies).

Instrument	Purpose	Parameters	Qualifications	Publisher	Norm Group	Scoring	Validity	Reliability
Test of Written Expression (TOWE)	Assess writing achievement	·Ages 6.6- 14.11 ·60 minutes+ ·76 items of writing skills, plus completion of a story stimulus	No specialized training	Pro-Ed	1,226 students in 26 states representative of the nation demograph- ically	Hand- scored	Content, construct, and criterion- referenced; good correlation with writing tests	Internal consistency >.90; Test-retest mid90's

Table 11 (cont'd). Standardized Instruments Suitable for Identification of Gifted/Talented Potential: Core Content Areas (Language, Mathematics, Science, and Social Studies