## Gifted Education Factsheet (Revised 11/2014): Identification Requirements for Students who are Gifted

This list is intended for comparison purposes only. It is the responsibility of the gifted coordinator to verify any information used in making decisions about students in the district; mistakes on this list do not hold the user harmless.

For more information about this or any other issue related to gifted education, contact: gifted@education.ohio.gov or 877-644-6338
I. Superior Cognitive Ability
a. Intelligence Tests
b. Achievement Tests
II. Specific Academic Ability
a. Achievement Tests
b. Above-Grade Level Scores
III. Creative Thinking Ability
a. Intelligence Test Component
b. Checklist Component
c. Test of Creative Ability Component
IV. Visual and Performing Arts Ability
a. Performance Component
b. Checklist Component

## I. Superior Cognitive Ability

The Ohio Revised Code 3324.01-. 07 and Ohio Administrative Code 3301-51-15 define the requirements to identify gifted students in the area of Superior Cognitive Ability as follows:

A child shall be identified as exhibiting "superior cognitive ability" if the child did either of the following within the preceding twentyfour months:

Scored two standard deviations above the mean, minus the standard error of measurement, on an approved individual standardized intelligence test administered by a licensed or certified school psychologist or licensed psychologist; OR accomplished any one of the following:

- Scored at least two standard deviations above the mean, minus the standard error of measurement, on an approved standardized group intelligence test;
- Performed at or above the ninety-fifth percentile on an approved individual or group standardized basic or composite battery of a nationally normed achievement test or;
- Attained an approved score on one or more above grade-level standardized, nationally normed approved tests.

| a. Intelligence Tests | Mean | SD | SEM | Score for <br> Gifted ID |
| :--- | :---: | :---: | :---: | :---: |
| Cognitive Abilities Test (CogAT), Form 7 VQN Composite | 100 | 16 | Gr. K-1 $=5.0$ <br> Gr. 2-12 $=4.0$ | Gr. K-1 $=127$ <br> Gr. 2-12 $=128$ |
| Cognitive Abilities Test (CogAT), Form 7 QN Composite (ELL <br> Grades 3-12 only) | 100 | 16 | Gr. 3-12 = 4.0 | Gr. 3-12 = 128 |
| Cognitive Abilities Test (CogAT), Form 7 Nonverbal Battery only | 100 | 16 | Gr. K $=7$ <br> Gr. $1=6$ <br> Gr. $2=5$ <br> Gr. 3-12 $=6$ | Gr. K $=125$ <br> Gr. $1=126$ <br> Gr. $2=127$ <br> Gr. 3-12 = 126 |
| Das-Naglieri Cognitive Assessment Systems (CAS) |  | 100 | 15 | 4.0 |


| Kaufman Assessment Battery for Children, 2nd Ed. (KABC-II) | 100 | 15 | MPI Scoring <br> Gr. $\mathrm{K}-2=3.0$ <br> Gr. 3-12 $=4.0$ | MPI Scoring <br> Gr. K-2=127 <br> Gr. 3-12 =126 |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | FCI Scoring <br> Gr. K-12 $=3.0$ | FCI Scoring Gr. K-12 $=127$ |
| Leiter International Performance Scale-Revised (Leiter-R) | 100 | 15 | $\begin{gathered} \hline \text { Age } 2-10=5.0 \\ \text { Age } 11-20= \\ 4.0 \\ \hline \end{gathered}$ | Age 2-10 = 125 <br> Age 11-20 = 126 |
| Naglieri Nonverbal Ability Test- $1^{\text {st }}$ or $2^{\text {nd }}$ Edition Group Administration | 100 | 15 | 6.0 | 124 |
| Naglieri Nonverbal Ability Test - $1^{\text {st }}$ or $2^{\text {nd }}$ Edition Individual Administration | 100 | 15 | Gr. K-6 = 5 <br> Gr. 7-12 = 4 | Gr. K-6 = 125 <br> Gr. 7-12 = 126 |
| Otis Lennon School Ability Test- $8^{\text {th }}$ or $7^{\text {th }}$ Edition | 100 | 16 | 6.0 | 126 |
| Pruebas de habilidad cognitiva - Revisada | 100 | 15 | 2.0 | 128 |
| Stanford-Binet Intelligence Scales- 5th Edition | 100 | 15 | 3.0 | 127 |
| Test of Cognitive Skills, Second Edition (TCS/2) | 100 | 16 | 5 | 127 |
| Universal Nonverbal Intelligence Test (UNIT) Standard \& Extended Battery | 100 | 15 | 4.0 | 126 |
| Wechsler Intelligence Scale for Children $-4^{\text {th }}$ Edition, Spanish (WISC-IV Spanish) | 100 | 15 | 3.0 | 127 |
| Wechsler Intelligence Scale for Children, ${ }^{\text {th }}$ Edition (WISC-IV) | 100 | 15 | 3.0 | 127 |
| Wechsler Nonverbal Scale of Ability | 100 | 15 | 5.0 | 125 |
| Wechsler Preschool \& Primary Scale of Intelligence- $3^{\text {rd }}$ Edition | 100 | 15 | 3.0 | 127 |
| Woodcock-Johnson III (WJIII), Tests of Cognitive Abilities (including NU edition) | 100 | 15 | 3.0 | 127 |


| b. Achievement Tests | Score for Gifted ID |
| :--- | :---: |
| Iowa Assessments, Form E, Complete Battery | $95^{\text {th }}$ percentile |
| Iowa Tests of Basic Skills (ITBS), Form A, Complete Battery | $95^{\text {th }}$ percentile |
| Iowa Tests of Basic Skills (ITBS), Form C, Complete Battery | $95^{\text {th }}$ percentile |
| Iowa Tests of Educational Development (ITED), Form A, Complete Battery | $95^{\text {th }}$ percentile |
| Stanford Achievement Test, 10 $0^{\text {th }}$ Edition, Complete Battery | $95^{\text {th }}$ percentile |
| Tests of Achievement and Proficiency (TAP), Form K/L/M, Complete Battery | $95^{\text {th }}$ percentile |
| Wechsler Individual Achievement Test (WIAT), 3 ${ }^{\text {rd }}$ Edition | $95^{\text {th }}$ percentile |

## II. Specific Academic Ability

The Ohio Revised Code 3324.01-. 07 and Ohio Administrative Code 3301-51-15 define the requirements to identify gifted students in the area of Specific Academic Ability as follows:

A child shall be identified as exhibiting "specific academic ability" superior to that of children of similar age in a specific academic ability field, if, within the preceding twenty-four months the child performs at or above the ninety-fifth percentile at the national level on an approved individual or group standardized achievement test of specific academic ability in that field. A child may be identified as gifted in more than one specific academic ability field.
a. Achievement Tests

| Achievement Tests | Score for Gifted ID |
| :--- | :---: |
| ACT Assessment Program (AAP) | $95^{\text {th }}$ percentile |
| Aprenda: La prueba de logros en Espanol - 3rd Edicion | $95^{\text {th }}$ percentile |


| Basic Achievement Skills Inventory - Comprehensive Version | 95 ${ }^{\text {th }}$ percentile |
| :---: | :---: |
| Bateria III Woodcock Munoz-NU Preubas de aprovechamiento | $95^{\text {th }}$ percentile |
| Comprehensive Testing Program 4 (CTP4) | $95^{\text {th }}$ percentile |
| EXPLORE | $95^{\text {th }}$ percentile |
| Iowa Assessments, Form E, Complete Battery | $95^{\text {th }}$ percentile |
| Iowa Assessments, Form E, Core Battery (Reading and Math only) | $95^{\text {th }}$ percentile |
| Iowa Tests of Basic Skills (ITBS) Form A, Core Battery | $95^{\text {th }}$ percentile |
| Iowa Tests of Basic Skills (ITBS), Form A, Complete Battery | $95^{\text {th }}$ percentile |
| Iowa Tests of Basic Skills (ITBS), Form C, Complete Battery | $95^{\text {th }}$ percentile |
| Iowa Tests of Basic Skills (ITBS), Form C, Core Battery | $95^{\text {th }}$ percentile |
| Iowa Tests of Educational Development (ITED) Complete Battery Form C | $95^{\text {th }}$ percentile |
| Iowa Tests of Educational Development (ITED), Form A, Complete Battery | $95^{\text {th }}$ percentile |
| Iowa Tests of Educational Development (ITED), Form A, Core Battery | $95^{\text {th }}$ percentile |
| Iowa Tests of Educational Development (ITED), Form C, Core Battery | $95^{\text {th }}$ percentile |
| Kaufman Test of Educational Achievement, $2^{\text {nd }}$ Ed., (KTEA-II) | $95^{\text {th }}$ percentile |
| Logramos | $95^{\text {th }}$ percentile |
| Measure of Academic Progress (MAP) - Common Core State Standards Alignment, Survey with Goals, Reading and Math only | $95^{\text {th }}$ percentile |
| Measure of Academic Progress (MAP) - Ohio Academic Standards Alignment, Survey with Goals, Reading and Math only | $95^{\text {th }}$ percentile |
| Measure of Academic Progress (MAP) for Primary Grades - Common Core State Standards Alignment, complete Reading and Math only | $95^{\text {th }}$ percentile |
| Measure of Academic Progress (MAP) for Primary Grades - Ohio Academic Standards Alignment, complete Reading and Math only | $95^{\text {th }}$ percentile |
| PLAN | $95^{\text {th }}$ percentile |
| Preliminary SAT/National Merit Scholarship Qualifying Test (PSAT/NMSQT) | $95^{\text {th }}$ percentile |
| SAT I Reasoning Test | $95^{\text {th }}$ percentile |
| Stanford Achievement Test - 10 ${ }^{\text {th }}$ Edition - Basic | $95^{\text {th }}$ percentile |
| Stanford Achievement Test- $10^{\text {th }}$ Edition- Complete | $95^{\text {th }}$ percentile |
| Terra Nova, The Second Edition CAT (California Achievement Test 6), Basic Battery, Basic Multiple Battery | $95^{\text {th }}$ percentile |
| Terra Nova, The Second Edition CAT (California Achievement Test 6), Complete Battery, Multiple Assessments | $95^{\text {th }}$ percentile |
| TerraNova Third Edition, Common Core | $95^{\text {th }}$ percentile |
| TerraNova Third Edition, Complete Battery | $95^{\text {th }}$ percentile |
| TerraNova, Third Edition, Multiple Assessments | $95^{\text {th }}$ percentile |
| Tests of Achievement and Proficiency (TAP), Form K/L/M, Complete Battery | $95^{\text {th }}$ percentile |
| Wechsler Individual Achievement Test (WIAT) - $3^{\text {rd }}$ Edition | $95^{\text {th }}$ percentile |
| Woodcock Johnson III NU Tests of Achievement, Form C, Brief Battery | $95^{\text {th }}$ percentile |
| Woodcock-Johnson III, Tests of Achievement - NU (Form A or B) | $95^{\text {th }}$ percentile |

## b. Above-Grade Level Scores

## ABOVE-GRADE LEVEL CUTOFF SCORE TABLES

The cutoff scores listed below are derived from data from the Midwest Talent Search, which allows large numbers of highly capable students to take tests designed for older students at an early age. The cutoff scores set are at or above the mean scores of students participating in the talent search. Because virtually all students participating in the Midwest Talent Search score at or above the 95th
percentile on grade level standardized achievement tests, the cutoff scores listed set a standard at least equivalent to (and likely much higher than) the 95th percentile on other approved achievement tests given at the normal grade level.

## ACT Test

| Area of Gifted Identification | Grade 6 | Grade 7 | Grade 8 | Grade 9 |
| :--- | :--- | :--- | :--- | :--- |
| Reading/Writing | 17 (English Subscore) | 19 (English Subscore) | 21 (English Subscore) | 24 (English Subscore) |
| Reading/Writing | 17 (Reading Subscore) | 19 (Reading Subscore) | 21 (Reading Subscore) | 25 (Reading Subscore) |
| Mathematics | 17 (Math Subscore) | 18 (Math Subscore) | 20 (Math Subscore) | 24 (Math Subscore) |
| Science | 17 (Science Subscore) | 19 (Science Subscore) | 21 (Science Subscore) | 24 (Science Subscore) |

Scholastic Aptitude Test (SAT)

| Area of Gifted Identification | Grade 6 | Grade 7 | Grade 8 |
| :--- | :--- | :--- | :--- |
| Reading | 410 (Critical Reading Subscore) | 450 (Critical Reading Subscore) | 490 (Critical Reading Subscore) |
| Writing | 400 (Writing Subscore) | 440 (Writing Subscore) | 480 (Writing Subscore) |
| Mathematics | 430 (Math Subscore) | 470 (Math Subscore) | 510 (Math Subscore) |

## EXPLORE TEST

| Area of Gifted Identification | Grade 3 | Grade 4 | Grade 5 | Grade 6 |
| :--- | :--- | :--- | :--- | :--- |
| Reading/Writing | 13 (English Subscore) | 15 (English Subscore) | 16 (English Subscore) | 18 (English Subscore) |
| Reading/Writing | 12 (Reading Subscore) | 14 (Reading Subscore) | 15 (Reading Subscore) | 16 (Reading Subscore) |
| Mathematics | 12 (Math Subscore) | 14 (Math Subscore) | 15 (Math Subscore) | 17 (Math Subscore) |
| Science | 15 (Science Subscore) | 16 (Science Subscore) | 17 (Science Subscore) | 18 (Science Subscore) |

## III. Creative Thinking Ability

The Ohio Revised Code 3324.01-.07 and the Operating Standards for Identifying and Serving Gifted Students (Ohio Administrative Code 3301-51-15) specify that:
"A child shall be identified as exhibiting "creative thinking ability" superior to children of a similar age, if within the previous twenty-four months, the child scored one standard deviation above the mean, minus the standard error of measurement, on an approved individual or group intelligence test and also did either of the following:
(a) Attained a sufficient score, as established by the department of education, on an approved individual or group test of creative ability; or
(b) Exhibited sufficient performance, as established by the department of education, on an approved checklist by a trained individual of creative behaviors."

Identification for Creative Thinking Ability involves a two-pronged process because the student is evaluated for cognitive abilities and for creative characteristics. Evaluations of this kind can occur in conjunction with the referral/screening process for Superior Cognitive Abilities. Students who have scores above the Creative Thinking Ability cut-off of 1 Standard Deviation (SD) minus the Standard Error Measurement (SEM) should be further evaluated using a creativity checklist as described in Step 2 below. Students considered creative may be evaluated first with the creativity checklist and then their cognitive abilities may be considered.

## a. Intelligence Test Component

| Intelligence Test | Mean | SD | SEM | ID Cut-off |
| :--- | :---: | :---: | :---: | :---: |
| Cognitive Abilities Test (CogAT), Form 7 VQN Composite | 100 | 16 | Gr. K-1 $=5.0$ <br> Gr. 2-12 $=4.0$ | Gr. K-1 $=111$ <br> Gr. 2-12 $=112$ |
| Cognitive Abilities Test (CogAT), Form 7 QN Composite (ELL <br> Grades 3-12 only) | 100 | 16 | Gr. 3-12 $=4.0$ | Gr. 3-12 $=112$ |
| Cognitive Abilities Test (CogAT), Form 7 Nonverbal Battery only | 100 | 16 | Gr. K $=7$ <br> Gr. $1=6$ | Gr. K $=109$ <br> Gr. $1=110$ |


|  |  |  | $\begin{gathered} \text { Gr. } 2=5 \\ \text { Gr. } 3-12=6 \end{gathered}$ | $\begin{array}{r} \text { Gr. } 2=111 \\ \text { Gr. } 3-12=110 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: |
| Das-Naglieri Cognitive Assessment Systems (CAS) | 100 | 15 | 4.0 | 111 |
| Differential Ability Scales - $1^{\text {st }}$ or $2^{\text {nd }}$ Edition | 100 | 15 | 4.0 | 111 |
| InView - A Measure of Cognitive Abilities | 100 | 16 | 4.0 | 112 |
| Kaufman Assessment Battery for Children, 2nd Ed. (KABC-II) | 100 | 15 | $\begin{gathered} \text { MPI Scoring } \\ \text { Gr. K-2 }=3.0 \\ \text { Gr. } 3-12=4.0 \\ \hline \end{gathered}$ | MPI Scoring Gr. K-2=112 Gr. 3-12 =111 |
|  |  |  | FCI Scoring Gr. K-12 $=3.0$ | FCI Scoring <br> Gr. K-12 =112 |
| Leiter International Performance Scale-Revised (Leiter-R) | 100 | 15 | $\begin{gathered} \text { Age } 2-10=5.0 \\ \text { Age } 11-20= \\ 4.0 \end{gathered}$ | Age 2-10 = 110 <br> Age 11-20 = 111 |
| Naglieri Nonverbal Ability Test- $1^{\text {st }}$ or $2^{\text {nd }}$ Edition Group Administration | 100 | 15 | 6.0 | 109 |
| Naglieri Nonverbal Ability Test $-1^{\text {st }}$ or $2^{\text {nd }}$ Edition Individual Administration | 100 | 15 | Gr. K-6 = 5 <br> Gr. $7-12=4$ | Gr. K-6 = 110 <br> Gr. $7-12=111$ |
| Otis Lennon School Ability Test- $8^{\text {th }}$ or $7^{\text {th }}$ Edition | 100 | 16 | 6.0 | 110 |
| Pruebas de Habilidad Cognitiva - Revisada | 100 | 15 | 2.0 | 113 |
| Stanford-Binet Intelligence Scales- 5th Edition | 100 | 15 | 3.0 | 112 |
| Test of Cognitive Skills, Second Edition (TCS/2) | 100 | 16 | 5 | 111 |
| Universal Nonverbal Intelligence Test (UNIT) Standard \& Extended Battery | 100 | 15 | 4.0 | 111 |
| Wechsler Intelligence Scale for Children , $4^{\text {th }}$ Edition, Spanish (WISC-IV Spanish) | 100 | 15 | 3.0 | 112 |
| Wechsler Intelligence Scale for Children, $4^{\text {th }}$ Edition (WISC-IV) | 100 | 15 | 3.0 | 112 |
| Wechsler Nonverbal Scale of Ability | 100 | 15 | 5.0 | 110 |
| Wechsler Preschool \& Primary Scale of Intelligence, $3^{\text {rd }}$ Edition | 100 | 15 | 3.0 | 112 |
| Woodcock-Johnson III (WJIII), Tests of Cognitive Abilities (including NU edition) | 100 | 15 | 3.0 | 112 |

## b. Creative Thinking Checklist Component

| Scale | Screening Score | Identification Score |
| :--- | :---: | :---: |
| Gifted and Talented Evaluation Scales (GATES) <br> (Creative Thinking Section IV) | $65-82$ | 83 and above |
| Gifted Rating Scales (GRS) (Creativity Scale) | $60-65$ | 66 and above |
| Scales for Rating the Behavior Characteristics of <br> Superior Students (SRBCSS) (Part II Creativity) | $48-50$ | 51 and above |
| Universal Multidimensional Abilities Scales <br> (UMAS) | $59-61$ | 62 and above |

## c. Tests of Creative Ability Component

| Tests of Creative Ability | Screening Score | Identification Score |
| :--- | :---: | :---: |
| Torrance Tests of Creative Thinking Figural and <br> Verbal Forms A \& B (use the Creativity Index on <br> either the figural or verbal portion.) |  | $95^{\text {th }}$ percentile |

Screening and identification in the area of creative thinking must be provided when students are referred regardless of whether or not there are specific services in the district for students identified in this area. Students identified as gifted in creative thinking will benefit from the exposure to a curriculum that is differentiated and includes higher order and creative thinking activities. Having information about the creative thinking abilities of gifted students will help the teacher to better plan instruction that meets the needs
of students who are gifted in all areas. Districts are encouraged to identify students in this area and to consider the continuum of services available in the district to appropriately meet their needs.

## IV. Visual and Performing Arts

The Ohio Revised Code 3324.01-.07 and the Operating Standards for Identifying and Serving Gifted Students (Ohio Administrative Code 3301-51-15) specify that:

A child shall be identified as exhibiting "visual or performing arts ability" superior to that of children of similar age if the child has done both of the following:
(a) Demonstrated to a trained individual through a display of work, an audition, or other performance or exhibition, superior ability in a visual or performing arts area; and
(b) Exhibited to a trained individual sufficient performance, as established by the department of education, on an approved checklist of behaviors related to a specific arts area.
a. Performance Component

| VISUAL | Screening Score | Identification Score |
| :--- | :---: | :---: |
| Art Advanced Placement Scoring Guidelines (Grades <br> $9-12$ only) | 4 | 5 |
| Clark's Drawing Ability Test (Grades 3-12 only) | $6-8$ | $9-10$ |
| Ohio Department of Education Rubric | $16-20$ | $21-24$ |


| DRAMA | Screening Score | Identification Score |
| :--- | :---: | :---: |
| Theatre Arts Talent Assessment Process (TTAP) | See publisher’s instructions | See publisher’s instructions |
| Ohio Department of Education Rubric | $16-19$ | $20-24$ |


| MUSIC | Screening Score | Identification Score |
| :--- | :---: | :---: |
| Music Talent Assessment Process (MTAP) | See publisher's instructions | See publisher’s instructions |
| Ohio Department of Education Rubric | $14-17$ | $18-21$ |


| DANCE | Screening Score | Identification Score |
| :--- | :---: | :---: |
| Dance Talent Assessment Process (DTAP) | See publisher's instructions | See publisher's instructions |
| Ohio Department of Education Rubric | $20-25$ | $26-30$ |

## b. Checklist Component

| Scale - VISUAL | Screening Score | Identification Score |
| :--- | :---: | :---: |
| Gifted and Talented Evaluation Scales (GATES) <br> (Section V) | $57-77$ | 78 and above |
| Gifted Rating Scales (GRS) | $60-65$ | 66 and above |
| Scales for Rating the Behavior Characteristics of <br> Superior Students (SRBCSS) (Part V) | $59-60$ | 61 and above |


| Scale - DRAMA | Screening Score | Identification Score |
| :--- | :---: | :---: |
| Gifted and Talented Evaluation Scales (GATES) <br> (Section V) | $57-77$ | 78 and above |
| Gifted Rating Scales (GRS) (Creativity Scale) | $60-65$ | 66 and above |


| Scales for Rating the Behavior Characteristics of <br> Superior Students (SRBCSS) (PartVII) | $54-56$ | 57 and above |
| :--- | :---: | :---: |


| Scale - MUSIC | Screening Score | Identification Score |
| :--- | :---: | :---: |
| Gifted and Talented Evaluation Scales (GATES) <br> (Section V) | $57-77$ | 78 and above |
| Gifted Rating Scales (GRS) (Creativity Scale) | $60-65$ | 66 and above |
| Scales for Rating the Behavior Characteristics of <br> Superior Students (SRBCSS) (Part VI) | $37-38$ | 39 and above |


| Scale - DANCE | Screening Score | Identification Score |
| :--- | :---: | :---: |
| Gifted and Talented Evaluation Scales (GATES) <br> (Section V) | $57-77$ | 78 and above |
| Gifted Rating Scales (GRS) (Creativity Scale) | $60-65$ | 66 and above |

## Calculating Identification Scores

It is the district's responsibility, when purchasing testing materials, to include in the order a copy of the technical or examiner's manual. The technical manual will contain information on the administration, scoring and interpretation of the specific test for which it is written. In addition to learning information about evaluator qualification and how to administer the test, Gifted Coordinators will use the technical manual to determine cut-off scores, accommodations or modifications with special populations and the specific psychometric qualities of the instrument that makes it appropriate for use with all gifted students, including those who come from diverse cultural backgrounds, are economically disadvantaged, who have a learning disability or for whom English is a second language. For the purposes of this factsheet, the discussion will be confined to the recommended practices on calculating the mean, standard deviation and standard error of measurement needed to create a cut-off score for identification.

The mean and standard deviation scores are defined by the test publisher based on the data collected during the validation of the instrument. Scores used for gifted screening and identification must come from standardized, norm referenced instruments. The very nature of the standardization process requires the scores to be derived according to the normal curve. Raw scores are converted to standard scores which are also defined in terms of their distance from the mean, or standard deviation (SD). There are two types of scores that are calculated from the raw scores. The first level of score is the subtest score which is generally calculated using z-scores that have a range of $1-19$, mean of 10 and SD of $\pm 3$. This tells us how well the individual scored in a specific area of the test. The subtest scores are then combined into index scores which result in deviation IQ scores with a mean of 100 and a test specific SD of 15 or 16. On a test with a mean of 100 and SD of 15 , you would begin calculating a cutoff score at 130 but on a test with a SD of 16 it would be 132. The next consideration is that calculation is the standard error of measurement (SEM).

Calculating a "true" test score is difficult and the obtained score on any test should be considered an estimate of ability. To increase confidence in the obtained scores, it is recommended that said scores take into account the estimate of expected error called the standard error of measurement. The SEM is calculated using a formula that includes the standard deviation and reliability coefficient of the instrument. Therefore, large SEMs indicate a less precise measurement, and a small SEM indicates a more accurate measure because the error is reduced. Many instruments will indicate different SEM by age or grade level, and these should be considered when making a determination of the reliability of that instrument for a specific age or grade level. To aid in the calculation of schoolwide cut-off scores, it is recommended to use an average score when available. In addition, some test publishers have calculated separate SEM for exceptional or clinical populations. These should be used ONLY when gifted students are included in the definition of these populations provided by the publisher.

To determine the SEM for an instrument, apply an additive rounding system. This method defines a whole number as including any fraction of the previous number. For example, the number 4.2 would be rounded to the next higher number because the additional .2 indicates additional error beyond 4.0. The next round number therefore is 5.0. This is the SEM that should be subtracted from the score at 2 SD above the mean for the test to create a cut-off score for gifted identification.

