### Renzulli Scales: School Administrator Manual

#### Introduction

The Scales for Rating Behavioral Characteristics of Superior Students (Renzulli Scales) are designed to obtain teacher estimates of a student's characteristics in the areas of learning, motivation, creativity, leadership, art, music, drama, communication (precision and expression), planning, mathematics, reading, technology, and science. Students may be evaluated on as few or as many of the subscales as desired. The items are derived from the research literature dealing with characteristics of gifted and creative individuals. Each item in the scales should be considered separately and should reflect the degree to which a teacher has observed the presence or absence of each characteristic. Because the 14 dimensions of the instrument represent relatively different sets of behaviors, the scores obtained from the subscales should not be summed to yield a total score.

The ranking reports for this online version include each student's total raw score and his or her rank when compared to other students tested. Please keep in mind that these ranks are based solely on the population of students for which you have completed scales. There are no national norms and no flags pop up announcing that one child is gifted and another is not based on a national "cut off" score. Locally, you must establish your own criteria for determining which students need special services.

The *Renzulli Scales* allow school decision-makers to compare and contrast student strengths in specific areas in consideration for the services provided by a local gifted and talented program. For this reason, raw scores and rankings are an effective decision-making tool. However, in some cases, schools may wish to calculate local norms and generate standard scores and corresponding percentiles. For more information on how to establish local norms, refer to the Calculating Local Norms section of this manual (pp. 14-18).

This online edition of *Renzulli Scales* works with all desktop web browsers, although pages may look slightly different depending on the browser. The online *Renzulli Scales* do not support mobile browsers. In order for the scales to work properly, you must have "cookies" enabled.

### Overview

In the school administrator role, you will be responsible for the vast majority of record creation. We designed the *Renzulli Scales* to be simple and easy for teachers to use, so the hard work of creating the records falls to the school administrator.

You will create records for:

- Schools
- Coordinators
- Teachers
- Students

The latter two groups may be imported from a standard spreadsheet.

Next, you must assign your teachers to Coordinators.

After this, the Coordinators will assign students to teachers. The Coordinator is a building-level staff member who would know which teachers have worked closely with specific students. If you don't have a staff member(s) who will be assigned the Coordinator role, just create an Coordinator record using a second e-mail address for yourself (like a personal e-mail, rather than school address). By doing this, you can login as an Coordinator and assign teachers to students.

#### **Date Retention and Student Seats**

Student "seats" may be purchased and added to a school administrator's account at anytime in batches of 50 or 100 seats. A single student may be evaluated on any number of scales. When multiple observers rate a single student on the same scale, the observer's scores are averaged together.

A school administrator may create as many schools, Coordinators, and teachers as needed. Only student seats are limited by the number of seats purchased.

On August 1 of each year, all used student seats are "locked." The locked data may be used in reports or exported, but it may not be modified. All unused seats are carried into the new school year as available, new seats.

#### Roles

The following section offers an overview of the different roles that can be assigned to users of the *Renzulli Scales*. There are three user roles: school administrator, Coordinator, and teacher. Broadly speaking, the school administrator role would be assigned to a district- or program-level administrator. The Coordinator would be a building-level administrator; and the teacher would be an individual working directly with students.

Note on roles and user logins: Although it is possible for one individual to carry out the functions of multiple roles, each role will need a unique e-mail address to use as a login. For example, if you are acting as both an Coordinator and a teacher, you will need to use two separate e-mail addresses to log in to your accounts for both roles.

#### School Administrator

The school administrator oversees the entire rating process. This role is typically delegated to a district gifted program coordinator or a school principal. The school administrator has access to and the responsibility to add the schools, Coordinators, teachers, and students involved in the rating process. He or she has control over the Coordinator/teacher assignments and is the only user to access school- and districtwide results. The school

administrator can use these results to generate ranking reports and calculate local norms.

#### Coordinators

The Coordinators are responsible for creating and managing the teacher/ student assignments. They can decline or approve assignments, after which the assignment will be sent back to the teacher or be made available for the school administrator to review. Although Coordinators can print summaries for their assigned teachers' students, they do not have access to ranking reports or to results from other students/schools.

#### **Teachers**

Teachers have the responsibility of carrying out the actual rating process. They will use the online system to complete the scales for each student they are assigned to. Teachers will submit the completed scales to their assigned Coordinator for approval.

### **Functionality of Tabs**

#### School Admin

Use the "School Admin" tab at the top of the page to edit your profile, access the user manual, or log out.

#### **Schools**

Use this tab to view, search for, edit, add, and deactivate schools. Below is a rundown of the functions within the this tab:



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# • Column headers: Click on the column headers (Name, Address, Phone, and Status) to sort items alphabetically or numerically. Clicking on the column headers in each tab will have the same function.

- Search bar: To find a school, type its name into the search bar.
- "Show Entries":
   Change the number of items that appear on screen by using the "Show Entries" dropdown menu.

School Admin

📫 Schools

**RENZULLI SCALES** 

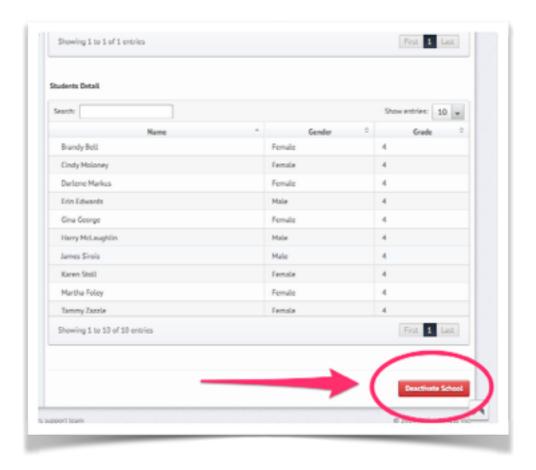
Schools

Search

Bets School Ad

- "+ New School": Click on "+ New School" to add a school. Fill out the fields in the menu that appears, then click "Submit."
- **To edit or deactivate a school:** Click on a school and then hit "Update Details" to edit its information. To deactivate it, scroll to the bottom of the page and click "Deactivate."





### Coordinators

Use this tab to view, edit, or add Coordinators. A rundown of this tab's functions is listed below:

• "+ Add": Click on "+Add" to add an Coordinator. Fill out, at minimum, the required fields marked with a red asterisk. Hit "Submit" once you've finished. Note: Coordinators will not appear as "Active" until they register with a unique login. Coordinators will receive an e-mail requesting their registration once you've

submitted their information.

 "Status": To deactivate an Coordinator, click on their "Active" status. Choose "Inactive," then hit "Submit."



#### **Teachers**

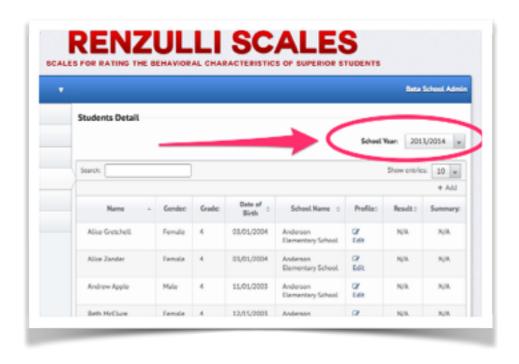
Use this tab to view, add, and deactivate teachers. A rundown of the functions within this tab is listed below:

• "+Add": Click "+Add" to add teachers. You can add teachers individually by filling out the required fields and hitting "Submit," or you can easily import contacts using an Excel spreadsheet. For instructions on importing teacher data, please see Data Import (pp. 9-11). *Note*: Teachers will not appear as "Active" until they register with unique logins. Teachers will receive an e-mail requesting their registration once you've submitted their information.

#### **Students**

Use this tab to view, search for, and add students. Use it also to generate student reports and print student summaries. A rundown of this tab's functions is listed below:

• **School year:** Adjust which school year you're viewing by using the dropdown menu at the top right of the screen.



- "+Add": Click on "+Add" to add students. You can add students individually or by filling out the required fields and hitting "Submit." Alternatively, you can import student records using an Excel spreadsheet. For instructions on importing student records, see Data Import (pp. 9-11).
- "Profile": Edit a student's profile by clicking "Edit" under the Profile column. Hit "Submit" once you've edited the information.



- **To export results:** To export a student's rating results, click "Export" under the Result column. The exported results will download automatically onto your computer as an Excel spreadsheet.
- **To print a summary:** To print a summary of a student's results, click "Print" under the Summary column.

### **Assignments**

Use this tab to view and add Coordinator/teacher assignments.

• "+Add": Click "+Add" to assign teachers to Coordinators. Choose the school and Coordinator, then choose the assigned teachers. Hit "Submit" when finished, and repeat the process until all Coordinator/teacher assignments have been made.

### Ranking Report

Use this tab to generate a ranking report for specific scales, grades, and schools. The steps for generating a report are listed below:

- Select the school year, grade, and scale for which you're generating a report by using the three dropdown menus at the top of the page.
- Choose the student age(s) and school(s) and select by clicking the right-pointing arrow. To choose more than one school or age, hold down the "command" (Mac) or the "control" key (PC), then click the double right-pointing arrows. To deselect items, repeat the process using the left-pointing arrows.
- Hit "Generate Report" at the bottom right of the page. The report will be downloaded onto your computer as an Excel spreadsheet.

### **Data Import**

As an alternative to manually adding individual teachers and students, you can easily import teacher and student records by using a Microsoft Excel spreadsheet saved as a Windows CSV file. Follow the instructions below for both student and teacher data import. (*Note:* The following instructions apply to both Mac and PC computers.)

#### **Teacher Data Import**

Important: If you are testing at more than one school, you need to create separate import spreadsheets for teachers at each school. For example, teachers at School A need to be on a separate spreadsheet from teachers at School B.

Open a new, blank Microsoft Excel spreadsheet. We recommend using Microsoft Excel because it allows Windows and Macintosh users to export the necessary Windows Comma Separated Values (.csv) file. Next, create column headers. For teacher data import, there are three required fields:

- e-mail address,
- · first name, and
- · last name.

#### Optional fields include:

- city,
- state,
- country,
- address, and
- phone number.

When creating the column headers on the spreadsheet, be sure to sequence them in the exact order listed above. If you omit an optional field, you should still include a blank column for this field. An example of how this will look on the spreadsheet is pictured below.



When you've completed inputting the teacher information, delete the row of column headers (otherwise, those headers will be imported as part of the teacher data).

Save the file as a Comma Separated file (.csv). It is a good idea to review your spreadsheet for any accidental data. Also, on occasion, Microsoft Excel will "see" data in blank cells and include unwanted fields with empty data in your CSV file, so it is a good habit to highlight blank columns to the right of your data and delete them. Then, highlight blank rows under your date and delete them.

Upload the .csv file when prompted to do so in the "+Add" function of the Teachers tab (see P. 7). This should automatically import your teacher records.

### Student Data Import

Important: If you are testing at more than one school, you need to create separate import spreadsheets for students at each school. For example, students at School A need to be on a separate spreadsheet from students at School B.

Follow the same instructions for importing teacher data, but use the following headings for the required fields:

- first name.
- last name,
- gender (male/female),
- date of birth (mm/dd/yyyy),
- grade,
- student ID#—optional,
- info—optional,
- active sample (Y or blank)—optional, and
- norming sample (Y or blank)—optional.

For student data imports, the first five fields are required and are used in reports. Their purpose is self-evident.

The "Student ID" field is optional and can be any unique number. This field is provided for schools that wish to have a school-assigned student identification number associated with each record.

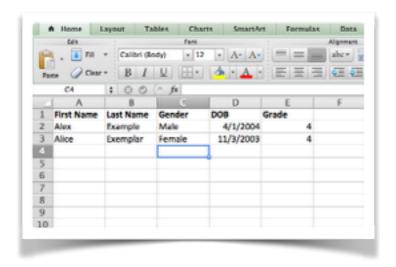
The "Info" field is optional and can contain any information. This field is entirely for your use. One way this field could be used is to assist in sorting. For example, if only some students will be assessed using the "Learning Characteristics Scale," a "LC" could be inserted in this field for only those students to make finding them and assigning the scale easier.

The last two fields are only used if you intend to dynamically calculate local norms. If you do not need local norms or if you already have the mean and standard deviation from a previously calculated representative sample, you can disregard these fields. Insert a "Y" or "y" if a student will be a part of

the "Active Sample." Likewise, insert a "Y" or "y" if a student will be a part of the "Norming Sample." Otherwise, leave these fields blank.

Below is an example of how the student information should look on the Excel spreadsheet. As with the teacher data above, it is a good idea to review your spreadsheet for any accidental data before importing the information. Also, on occasion, Microsoft Excel will "see" data in blank cells and include unwanted fields with empty data in your CSV file, so it is a good habit to highlight blank columns to the right of your data and delete them. Then, highlight blank rows under your date and delete them.

Remember to delete your header row before importing the data.



### **Recommended Workflow**

### **Teacher Training Exercises and Interrater Reliability**

To improve the reliability of teacher ratings and to help classroom teachers understand the key concepts and specific behaviors represented in the first four scales of the *Renzulli Scales*, we recommend that teachers complete the Teacher Training Exercise for the *Renzulli Scales* (located in the appendix of this manual), which was designed and field tested to facilitate discussions about specific student behaviors.

First, if participants are not familiar with the SRBCSS, provide them with copies of the actual scales and indicate that the training activities are different from the actual rating process.

Ask participants to engage in the first task, which consists of matching key concepts with the *Renzulli Scales* scale items. Teachers may do one scale at a time or do all four scales at one time. Ask the total group to compare their responses to the suggested answer key and discuss some of the variations in opinion about responses as there is no one correct answer for each item. Call attention to the items about which there is disagreement among participants and suggest that these items be given special consideration for the second task that they are to complete in small groups.

For the second task, divide participants into small groups of approximately 5–10 persons. Working individually, each participant should list the behaviors of students they believe are good exemplars of the scale items. Encourage participants to recall actual behaviors and students with whom they have worked, rather than hypothetical examples.

Participants in each group should then discuss their examples with each other and attempt to reach consensus on one or two examples that they believe are the *best* representations of each scale item. The entire group should then come back together and each subgroup should present their best examples to the total group. Encourage discussion and comparison among subgroups and, once again, emphasize the legitimacy of variations in opinion.

### **Recommended Workflow**

### Inputting Data and User Registration

- Once the school administrator account is established, add the necessary schools, Coordinators, teachers, and students.
- Coordinators and teachers can register and set up accounts when they
  receive their invitation e-mails. Once they've registered, they will appear
  as "Active" on the site.

### Making Assignments

- Once all users are registered, the school administrator can then assign teachers to certain Coordinators.
- When Coordinators know whom their assigned teachers are, they can then assign students to Coordinators.

### Rating the Students

- Once teachers know their assigned students, they can then complete and submit the rating scales.
- The Coordinators will typically look over submitted scales. Coordinators
  can reassign the scales for the teachers to redo if anything is amiss. If
  not, the scales are then recorded permanently on the website.

### **Generating Reports and Summaries**

- Once scales have been completed, submitted and approved,
   Coordinators and the school administrator can then use them to generate ranking reports and summaries.
- School administrators can generate districtwide, schoolwide, and student-specific ranking reports and summaries.
- Coordinators have access to results of only their assigned teachers/ students and can generate student-specific summaries based on the completed scales.

#### **Note about Local Norm Reports**

Please see Appendix E for guidance on developing local norms.

### APPFNDIX D

## Teacher Training Exercise For Completing the Scales For Rating The Behavioral Characteristics Of Superior Students-III (SRBCSS-III)

### LEARNING CHARACTERISTICS

- **TASK No. 1:** Individually, select the letter of a key concept that you believe most closely matches each item.
- **TASK No. 2:** In a small group, discuss specific examples of when you have observed each behavior in a student.

Key Concepts		
A. Analytical	E. Conceptual Understanding	I. Inductive
B. Knowledgeable	F. Widely Knowledgeable	J. Articulate
C. Applied Thinking	G. Reasoning Ability	K. Insightful
D. Memory	H. Abstract Thinking	

The student demonstrates	
1. advanced vocabulary for his or her age or grade level.	
2. the ability to make generalizations about events, people, and things.	
3. a large storehouse of information about a specific topic.	
4. the ability to grasp underlying principles.	
5. insight into cause and effect relationships.	
6. an understanding of complicated material through analytical reasoning ability.	
7. a large storehouse of information about a variety of topics.	
8. the ability to deal with abstractions.	
9. recall of factual information.	
10. keen and insightful observations.	
11. the ability to transfer learnings from one situation to another.	

### **CREATIVITY CHARACTERISTICS**

**TASK No. 1:** Individually, select the letter of a key concept that you believe most closely matches each item.

**TASK No. 2:** In a small group, discuss specific examples of when you have observed each behavior in a student.

Key Concepts		
A. Flexible Thinker	D. Astute	G. Original Thinker
B. Imaginative	E. Non-Conformist	H. Fluent Thinker
C. Risk Taker	F. Mentally Mischievous	I. Witty

The student demonstrates	
1. imaginative thinking ability.	
2. a sense of humor.	
3. the ability to come up with unusual, unique, or clever responses.	
4. an adventurous spirit or a willingness to take risks.	
5. the ability to generate a large number of ideas or solutions to	
problems or questions.	
6. a tendency to see humor in situations that may not appear to be	
humorous to others.	
7. the ability to adapt, improve, or modify objects or ideas.	
8. intellectual playfulness, willingness to fantasize, and manipulate	
ideas.	
9. a nonconforming attitude, does not fear being different.	

### **MOTIVATION CHARACTERISTICS**

- **TASK No. 1:** Individually, select the letter of a key concept that you believe most closely matches each item.
- **TASK No. 2:** In a small group, discuss specific examples of when you have observed each behavior in a student.

Key Concepts		
A. Goal Directed	E. Intrinsically Motivated	I. Totally Consumed
B. Unwavering Drive	F. Task Committed	J. Dogged Pursuit
C. Self Directed	G. Focused Concentration	K. Unyielding Inquisitiveness
D. Self Reliant	H. Continuously Intrigued	

The student demonstrates	
1. the ability to concentrate intently on a topic for a long period of	
time.	
2. behavior that requires little direction from teachers.	
3. sustained interest in certain topics or problems.	
4. tenacity for finding out information on topics of interest.	
5. persistent work on tasks even when setbacks occur.	
6. a preference for situations in which he or she can take personal	
responsibility for the outcomes of his or her efforts.	
7. follow-through behavior when interested in a topic or problem.	
8. intense involvement in certain topics or problems.	
9. a commitment to long term projects when interested in a topic.	
10. persistence when pursuing goals.	
11. little need for external motivation to follow through in work that	
is initially exciting.	

### LEADERSHIP CHARACTERISTICS

**TASK No. 1:** Individually, select the letter of a key concept that you believe most closely matches each item.

**TASK No. 2:** In a small group, discuss specific examples of when you have observed each behavior in a student.

Key Concepts		
A. Poised	D. Facilitator	F. Director
B. Dependable	E. Highly Regarded	G. Articulate
C. Collaborative		

The student demonstrates	
1. responsible behavior; can be counted on to follow through on activities/projects.	
2. a tendency to be respected by classmates.	
3. the ability to articulate ideas and communicate well with others.	
4. self-confidence when interacting with age peers.	
5. the ability to organize and bring structure to things, people, and situations.	
6. cooperative behavior when working with others.	
7. a tendency to direct an activity when he or she is involved with others.	

### ARTISTIC CHARACTERISTICS

- **TASK No. 1:** Individually, select the letter of a key concept that you believe most closely matches each item.
- **TASK No. 2:** In a small group, discuss specific examples of when you have observed each behavior in a student.

Key Concepts			
A. Project choice	E. Evaluates other' work	I. Innovative	
B. Observant	F. Piggy-backs artistic ideas	J. Task commitment	
C. Symmetry in work	G. Enthusiasm for producing art	K. Variation of media	
D. Constructive self-critique	H. Exploration of subject matter		

The student	
1. likes to participate in art activities; is eager to visually express ideas.	
2. incorporates a large number of elements into art work; varies the subject and content of art work.	
3. arrives at unique, unconventional solutions to artistic problems, as opposed to traditional, conventional ones.	
4. concentrates for long periods of time on art projects.	
5. willingly tries out different media; experiments with a variety of materials and techniques.	
6. tends to select art media for free activity or classroom projects.	
7. is particularly sensitive to the environment; is a keen observer—sees the unusual, what may be overlooked by others.	
8. produces balance and order in art work.	
9. is critical of his or her own work; sets high standards of quality; often reworks creation in order to refine it.	
10. shows an interest in other students' work—spends time studying and discussing their work.	
11. elaborates on ideas from other people—uses them as a "jumping-off point" as opposed to copying them.	

### **MUSICAL CHARACTERISTICS**

**TASK No. 1:** Individually, select the letter of a key concept that you believe most closely matches each item.

**TASK No. 2:** In a small group, discuss specific examples of when you have observed each behavior in a student.

Key Concepts		
A. Ear for music	D. Musical memory	F. Rhythmic sense
B. Passion	E. Sensitive to sound	G. Enthusiastic participant
C. Musicianship		

The student	
1. shows a sustained interest in music—seeks out opportunities to	
hear and create music.	
2. perceives fine differences in musical tone (pitch, loudness, timbre,	
duration).	
3. easily remembers melodies and can produce them accurately.	
4. eagerly participates in musical activities.	
5. plays a musical instrument (or indicates a strong desire to).	
6. is sensitive to the rhythm of music; responds to changes in the	
tempo of music through body movements.	
7. is aware of and can identify a variety of sounds heard at a given	
moment—is sensitive to "background" noises, to chords that	
accompany a melody, to the different sounds of singers or	
instrumentalists in a performance.	

### **DRAMATICS CHARACTERISTICS**

- **TASK No. 1:** Individually, select the letter of a key concept that you believe most closely matches each item.
- **TASK No. 2:** In a small group, discuss specific examples of when you have observed each behavior in a student.

Key Concepts		
A. Storytelling/Narration	E. Extemporaneous acting	H. Stage presence
B. Physical grace	F. Non-verbal communication	I. Playwriting
C. Evokes audience response, incites empathy	G. Identifies with characters, has empathy for characters, connects	J. Interest in performing
D. Mimicry		

The student	
1. volunteers to participate in classroom plays or skits.	
2. easily tells a story or gives an account of some experience.	
3. effectively uses gestures and facial expressions to communicate feelings.	
4. is adept at role-playing, improvising, acting out situations "on the spot."	
5. can readily identify himself or herself with the moods and motivations of others.	
6. handles body with ease and poise for his or her particular age.	
7. creates original plays or makes up plays from stories.	1
8. commands and holds the attention of a group when speaking.	
9. is able to evoke emotional responses from listeners—can get	1
people to laugh, frown, feel tense, etc.	1
10. can imitate others—is able to mimic the way people speak, walk,	İ
gesture.	1

### COMMUNICATION (PRECISION) CHARACTERISTICS

**TASK No. 1:** Individually, select the letter of a key concept that you believe most closely matches each item.

**TASK No. 2:** In a small group, discuss specific examples of when you have observed each behavior in a student.

Key Concepts		
A. Attention to audience	E. Internal thesaurus	I. Large vocabulary
B. Articulate self-expression	F. Editing for an audience	J. Explains comprehensively
C. Chooses words sparingly	G. Uses figurative language	K. Demonstrative
D. Succinct	H. Skilled at revision	

The student	
1. speaks and writes directly and to the point.	
2. modifies and adjusts expression of ideas for maximum reception.	
3. is able to revise and edit in a way which is concise, yet retains essential ideas.	
4. explains things precisely and clearly.	
5. uses descriptive words to add color, emotion, and beauty.	
6. expresses thoughts and needs clearly and concisely.	
7. can find various ways of expressing ideas so that others will understand.	
8. can describe things in a few very appropriate words.	
9. is able to express fine shades of meaning by using a large stock of synonyms.	
10. is able to express ideas in a variety of alternate ways.	
11. knows and can use many words closely related in meaning.	

### COMMUNICATION (EXPRESSIVENESS) CHARACTERISTICS

- **TASK No. 1:** Individually, select the letter of a key concept that you believe most closely matches each item.
- **TASK No. 2:** In a small group, discuss specific examples of when you have observed each behavior in a student.

Key Concepts		
A. Nonverbal communication	C. Uses figurative language	
B. Eloquence	D. Entertains through narration	

The student	
1. uses voice expressively to convey or enhance meaning.	
2. conveys information nonverbally through gestures, facial	
expressions, and "body language."	
3. is an interesting storyteller.	
4. uses colorful and imaginative figures of speech such as puns and	
analogies.	

### PLANNING CHARACTERISTICS

**TASK No. 1:** Individually, select the letter of a key concept that you believe most

closely matches each item.

In a small group, discuss specific examples of when you have observed

each behavior in a student.

TASK No. 2:

Key Concepts			
A. Creative problem solving	F. Works within project confines	K. Recognizes potential pitfalls	
B. Connects parts to whole	G. Forecasts potential outcomes	L. Leadership	
C. Makes tasks manageable	H. Detail-oriented	M. Resource allocation	
D. Time management	I. Sequencing	N. Prioritization	
E. Strategizing	J. Supports ideas with details	O. Organization	

The student	
1. determines what information or resources are necessary for accomplishing a task.	
2. grasps the relationship of individual steps to a whole process.	
3. allows time to execute all steps involved in a process.	
4. foresees consequences or effects of action.	
5. organizes his or her work well.	
6. takes into account the details necessary to accomplish a goal.	
7. is good at games of strategy where it is necessary to anticipate several moves ahead.	
8. recognizes the various alternative methods for accomplishing a goal.	
9. can pinpoint where areas of difficulty might arise in a procedure or activity.	
10. arranges steps of a project in a sensible order to time sequence.	
11. is good at breaking down an activity into step-by-step procedures.	
12. establishes priorities when organizing activities.	
13. shows awareness of limitations relating to time, space, materials, and abilities when working on group or individual projects.	
14. can provide details that contribute to the development of a plan or procedure.	
15. sees alternative ways to distribute work or assign people to accomplish a task.	

### **MATHEMATICS CHARACTERISTICS**

- **TASK No. 1**: Individually, select the letter of a key concept that you believe most closely matches each item.
- **TASK No. 2**: In a small group, discuss specific examples of when you have observed each behavior in a student.

Key Concepts			
A. Finds challenge pleasurable	E. Mental manipulation	H. Readily absorbs	
B. Finds challenge pleasurable	F. Diverges from the ordinary	I. Strives to understand	
C. Organizer	G. Variety of methods	J. Seeks solutions	
D. Numeracy			

ref 1	
The student	
1. is eager to solve challenging math problems. (A problem is	
defined as a task for which the solution is not known in advance.)	
2. organizes data and information to discover mathematical	
patterns.	
3. enjoys challenging math puzzles, games, and logic problems.	
4. understands new math concepts and processes more easily than other students.	
5. has creative (unusual and divergent) ways of solving math problems.	
6. displays a strong number sense (e.g., makes sense of large and small numbers, estimates easily and appropriately).	
7. frequently solves math problems abstractly, without the need for manipulatives or concrete materials.	
8. has an interest in analyzing the mathematical structure of a problem.	
9. when solving a math problem, can switch strategies easily, if appropriate or necessary.	
10. regularly uses a variety of representations to explain math concepts (written explanations, pictorial, graphic, equations, etc.).	

### **READING CHARACTERISTICS**

- **TASK No. 1:** Individually, select the letter of a key concept that you believe most closely matches each item.
- **TASK No. 2:** In a small group, discuss specific examples of when you have observed each behavior in a student.

Key Concepts		
A. Application	D. Independence	
B. Self regulation	E. Participates eagerly	
C. Drive and focus	F. Interest	

The student	
1. eagerly engages in reading-related activities.	
2. applies previously learned literary concepts to new reading	
experiences.	
3. focuses on reading for an extended period of time.	
4. pursues advanced reading material.	
5. demonstrates tenacity when posed with challenging reading.	
6. shows interest in reading other types of interest-based reading	
materials.	

### **TECHNOLOGY CHARACTERISTICS**

- **TASK No. 1:** Individually, select the letter of a key concept that you believe most closely matches each item.
- **TASK No. 2:** In a small group, discuss specific examples of when you have observed each behavior in a student.

Key Concepts				
A. Interest	D. Mentoring	F. Experimentation		
B. Integration	E. Expertise	G. Breadth		
C. Initiative				

The student	
1. demonstrates a wide range of technology skills.	
2. learns new software without formal training.	
3. spends free time developing technology skills.	
4. assists others with technology related problems.	
5. incorporates technology in developing creative products/ assignments/presentations.	
6. eagerly pursues opportunities to use technology.	
7. demonstrates more advanced technology skills than other students his or her age.	

### SCIENCE CHARACTERISTICS

**TASK No. 1:** Individually, select the letter of a key concept that you believe most closely matches each item.

**TASK No. 2:** In a small group, discuss specific examples of when you have observed each behavior in a student.

Key Concepts					
A. Curiosity (general or	D. Communicates data	F. Research (or hands-on			
global)	well	involvement)			
B. Choice (science in free	E. General (broad) interest	G. Interested in process or			
time)	in science topics.	method			
C. Creative thinking					

The student	
1. demonstrates curiosity about scientific processes.	
2. demonstrates creative thinking about scientific debates or issues.	
3. demonstrates enthusiasm in discussion of scientific topics.	
4. is curious about why things are as they are.	
5. reads about science-related topics in his or her free time.	
6. expresses interest in science projects or research.	
7. clearly articulates data interpretation.	

# Suggested Answer Key for the Teacher Training Exercise for Completing the Scales for Rating the Behavioral Characteristics of Superior Students-III (SRBCSS-III)

LEARNING CHARACTERISTICS							
1.	J	4.	E	7.	F	10.	K
2.	I	5.	G	8.	Н	11.	С
3.		6.		9.			
<i>5</i> .	D	0.	11	·	D		
CREATIVITY	CHARACTE	RISTI	CS				
1.	В	4.	C	7.	A		
2.	I	5.	Н	8.	F		
3.	G	6.	D	9.	E		
	_			,,			
MOTIVATIO	ON CHARAC	TERIS	STICS				
1.	G	4.	K	7.	J	10.	A
2.	C	5.	В	8.	I	11.	E
3.	Н	6.	D	9.	F		
LEADERSH	IP CHARACT	<b>ERIST</b>	TCS				
1.	В	3.	G	5.	D	7.	F
2.	E	4.	A	6.			
ARTISTIC C	HARACTERIS	STICS					
1.	G	4.	J	7.	В	10.	Е
2.	Н	5.	K	8.	С	11.	F
3.	I	6.	A	9.	D		
MUSICAL CHARACTERISTICS							
1.	В	3.	D	5.	С	7.	E
2.	A	4.	G	6.	F		
DRAMATICS CHARACTERISTICS							

5. G

6. B

1. J

2. A

3. F

10. D

7. I

8. H

9. C

### SCALES FOR RATING THE BEHAVIORAL CHARACTERISTICS OF SUPERIOR STUDENTS: TECHNICAL AND ADMINISTRATION MANUAL

### COMMUNICATION (PRECISION) CHARACTERISTICS

- 1. D
- 4. J
- 7. A 8. C
- 10. K 11. I

- 2. F 3. H
- 5. G 6. B
- 9. E

### COMMUNICATION (EXPRESSIVENESS) CHARACTERISTICS

- 1. B
- 2. A
- 3. D
- 4. C

### PLANNING CHARACTERISTICS

- 1. M
- 5. O
- 9. K
- 13. F

- 2. B 3. D
- 6. H
- 14. J 15. L

10. A

- 4. G
- 7. E 8. A
- 11. C 12. N
- MATHEMATICS CHARACTERISTICS
  - 1. J
- 4. H. 5. F
- 7. E

- 2. C
- 6. D 3. B
- 8. I
- 9. G
- READING CHARACTERISTICS

  - 1. E 3. B
- 5. C

- 2. A
- 4. D
- 6. F

### TECHNOLOGY CHARACTERISTICS

- 1. G 3. C 4. D
- 5. B 6. A
- 7. E

SCIENCE CHARACTERISTICS

2. F

2. C

- 1. G
- 3. E 4. A
- 5. B 6. F
- 7. D

### How to Develop Local Norms

Norms provide a useful frame of reference for interpreting test scores. Determining whether a candidate's score is high or low is made possible by comparing his or her score to the scores obtained by other examinees in a relevant group. This comparison can be accomplished by converting raw scores to percentile scores.

Percentile scores indicate the percentage of other candidates who scored below a given score. For example, a percentile score of 70 is well above average; it indicates the candidate scored better than 70% of candidates in the comparison group. Percentiles range from 1 to 99, with a percentile score of 50 being average.

The norm group should be as large as possible, however, if you do not want to have teachers rate extra large numbers of students with the SRBCSS Teacher rating forms, you can establish norms by selecting a random sample of representative students at each grade level. A random sample can easily be established by selecting every third or fifth (or any other desirable proportion) of student on a class list. The minimum number of examinees depends upon the number of percentile points that are to be computed (e.g., percentiles 1–99, deciles, quintiles). As a general rule, the norm sample should contain several hundred subjects, although satisfactory results may be obtained with as few as 100 subjects.

#### CALCULATING LOCAL PERCENTILE RANK NORMS

- 1. List the possible scores in descending order (Column 1). (You may group the scores into intervals if you wish.)
- 2. Tally the number of students attaining each score (Column 2).
- 3. Sum the number of students attaining each score (Column 3).
- 4. Add the frequencies consecutively, starting at the bottom of the column with the lowest score. Place each consecutive sum in the cumulative frequency column (Column 4) (e.g., 0 + 1 = 1, . . ., 2 + 1 = 3, 3 + 2 = 5, etc.). These cumulative frequencies are the number of students at and below each particular score.
- 5. Calculate the percentile rank of each score (Column 5). Below is an example for a score of 27.
  - a. Calculate one-half of the frequency of the score  $(1/2 \times 5 = 2.5)$ .
  - b. Add the result in (a) to the cumulative frequency just below the score (e.g., 2.5 + 11 = 13.5).

### SCALES FOR RATING THE BEHAVIORAL CHARACTERISTICS OF SUPERIOR STUDENTS: TECHNICAL AND ADMINISTRATION MANUAL

- c. Divide the result in (b) by the total number of scores  $(13.5 \div 25 = .54)$ .
- d. Multiply the result in (c) by  $100 (.54 \times 100 = 54)$ .

			Cumulative	Precentile Rank 1/2(# of persons with the score) + # of persons below the score
Raw	Tally	Frequency	Frequency	total number of persons
36	/	1	25	$98 = \frac{1/2(1) + 24}{25} \times 100$
35		0	24	96
34		0	24	96
33		0	24	$96 = \frac{1/2(0) + 24}{25} \times 100$
32	/	1	24	$94 = \frac{1/2(1) + 23}{25} \times 100$
31	/	1	23	$90 = \frac{1/2(1) + 22}{25} \times 100$
30		0	22	$88 = \frac{1/2(0) + 22}{25} \times 100$
29	//	2	22	$84 = \frac{1/2(2) + 20}{25} \times 100$
28	////	4	20	$72 = \frac{1/2(4) + 16}{25} \times 100$
27	/////	5	16	$54 = \frac{1/2(5) + 11}{25} \times 100$
26	/////	6	11	$32 = \frac{1/2(6) + 5}{25} \times 100$
25	//	2	5	$16 = \frac{1/2(2) + 3}{25} \times 100$
24	/	1	3	$10 = \frac{1/2(1) = 2}{25} \times 100$
23		0	2	8
22		0	2	$8 = \frac{1/2(0) + 2}{25} \times 100$

Raw	Tally	Frequency	Cumulative Frequency	Precentile Rank 1/2(# of persons with the score) + # of persons below the score total number of persons
21	/	1	2	$6 = \frac{1/2(1) + 1}{25} \times 100$
19		0	1	4
18		0	1	4
17		0	1	4
16		0	1	4
15		0	1	$4 = \frac{1/2(0) + 1}{25} \times 100$
14	/	1	1	$2 = \frac{1/2(1) + 0}{25} \times 100$

N = 25

Source: Nitko, A. J. (1996). Educational assessment of students (2nd ed.). New York: Merrill/Prentice Hall.