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**Observation Manual  
for the  
Classroom Practices Record (CPR)**

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## TABLE OF CONTENTS

<b>Introduction</b>	3
Background	3
Overview of the <u>CPR</u>	3
<b>Observation Arrangements and Procedures</b>	4
Collection of Advance Materials	4
Procedures for Selecting Target Students	5
Observer's Arrival in the Classroom	6
Procedures for Special Schedules	6
<b>Description of the <u>CPR</u> Instrument</b>	7
<u>CPR</u> : Identification Information	7
<u>CPR</u> : Physical Environment Inventory	7
<u>CPR</u> : Curricular Activities, List of Codes	7
Definitions of Activity Codes	8
Definitions of Group Size Codes	9
Definitions of Group Composition Codes	10
Definitions of Descriptive Notes	10
Explanation of Miscellaneous Notes	11
<u>CPR</u> : Verbal Interactions, List of Codes	11
Explanation of Who/To Whom Columns	12
Explanation of What Column	12
Explanation of Wait Time Column	13
Explanation of Miscellaneous Notes Column	13
Example A: Interaction Sequence	14
Example B: Interaction Sequence	14
Example C: Interaction Sequence	15
<u>CPR</u> : Interview	16
<u>CPR</u> : Daily Summary	16
<b>Summary of Major Procedures/Flow Charts</b>	17
<b>Home Training Exercises: Selection of Students From Student Roster</b>	19
<b>References</b>	24
<b>Appendices</b>	25
A: <u>CPR</u> Instrument	25
B: Letter	30
C: Student Roster	33
D: Teacher Script	34
E: Sample <u>CPR</u> Instrument	35
F: Explanation of Bloom's Taxonomy	40

Westberg, K. L., Archambault, F. X., Jr., Dobyns, S. M., & Salvin, T. J. (1993). *An observational study of instructional and curricular practices used with gifted and talented students in regular classrooms* (Research Monograph 93104). University of Connecticut, The National Research Center on the Gifted and Talented. <https://nrcgt.uconn.edu/wp-content/uploads/sites/953/2015/04/rm93104.pdf>

## **Introduction**

### **Background**

The Classroom Practices Study has been undertaken by The National Research Center on the Gifted and Talented (NRC/GT) to examine the instructional practices used with gifted and talented students in regular classrooms. Descriptive information about these practices is being obtained through a national survey of 7000 third and fourth grade teachers and observations in approximately 50 classrooms.

The Classroom Practices Record (CPR), the instrument used for the observation portion of the study, is designed to document the differentiated instruction that gifted and talented students receive through modifications in curricular activities, materials, and verbal interactions between teachers and students. This instrument was adapted from the Classroom Observation Instrument (Giesen & Sirotnik, 1979) used by Goodlad (1984) in his “Study of Schooling in the United States” and the Classroom Activity Record developed by Evertson and Burry (1989). This manual describes the procedures for using the Classroom Practices Record when conducting classroom observations.

### **Overview of the CPR**

The Classroom Practices Record (CPR) contains six sections: Identification Information, Physical Environment Inventory, Curricular Activities, Verbal Interactions, Teacher Interview Record, and Daily Summary (See Appendix A for a copy of the CPR instrument).

The first section, Identification Information, provides a record of the school, the teacher, and target students observed. Target Student #1 refers to an identified gifted and talented student or superior ability student. Target Student #2 refers to an average ability student selected for observation. The CPR is designed to provide descriptive information on two students only, not the entire class.

The second section, Physical Environment Inventory, records the availability and types of learning/interest centers, the seating pattern, and the location of the two target students in the classroom.

The third section, Curricular Activities, solicits information about the types of curricular activities that occur throughout the school day. Grouping practices and evidence of curricular differentiation experienced by Target Student #1, the target gifted or superior ability student, are recorded in this section.

The fourth section, Verbal Interactions, is used in conjunction with the Curricular Activities section and is completed whenever a verbal interaction transpires between the teacher and target students (or vice versa).

The fifth section, Teacher Interview Schedule, contains topics that the observer discusses with the classroom teacher to clarify or elaborate on information recorded in the Curricular Activities section.

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The sixth section, Daily Summary, provides a summary record of the differentiation observed in the classroom.

## **Observation Arrangements and Procedures**

### **Collection of Advance Materials**

Observations for the Classroom Practices Study are conducted in regular third and fourth grade classrooms throughout the country. An observer spends two, nonconsecutive days recording observations in each classroom. After arrangements have been made with a particular school and classroom teacher for the dates of the two observation days, the observer sends a letter (Appendix B) to the teacher that stresses the importance of observing typical days in the classroom and, also, requests him or her to complete three forms: (1) the student roster(s), (2) a diagram of the seating arrangement in the classroom, and (3) the daily schedule. The letter emphasizes that the teacher is not being evaluated and should not consciously change his or her behavior because an observer is present in the classroom. The letter also reminds the teacher that the observer intends to use a tape recorder in the classroom to aid in reviewing verbal interaction sequences that are lengthy and, therefore, difficult to code in the Verbal Interactions section of the CPR. The letter explains further that the observer's notes will not be shared with the teacher or the teacher's supervisor(s) and assures the teacher that all information will be kept confidential.

Student rosters (Appendix C) are completed by the classroom teacher and mailed to the observer before the first observation day. A completed student roster provides the observer with a list of all students' first names, as well as students' gender, ethnicity, participation in a free or reduced lunch program, placement in special programs, ability level, and composite percentile score on a standardized achievement test. It may be necessary to obtain additional student rosters if the following two situations occur in the school. First, if students in the class are grouped by ability for different subjects and the classroom teacher receives students from other classrooms, the teacher completes a student roster for each of the classes he or she teaches. For example, if the classroom teacher is responsible for teaching reading to students who are not all members of his or her homeroom class, the teacher provides the observer with a student roster for the reading "class." The second situation is as follows: if the classroom teacher's average and above-average ability students receive instruction from another teacher(s) for one of the major subjects, the classroom teacher asks the other teacher to complete a roster on that group in the event that the observer decides to follow these students. The classroom teacher is asked to do this, but is not told that the observer will, in fact, most likely follow the gifted and talented or superior ability students.

In addition to completing and returning the student roster(s) in advance of the observation, the teacher sketches and returns a diagram that indicates where each student sits in the classroom for each subject. The classroom teacher also completes a daily schedule for the observer. The schedule helps the observer determine the number and location of subjects taught during the day, as well as the number of teachers who work with the homeroom students.

### Procedures for Selecting Target Students

One of the goals of the classroom practices study is to observe underserved, bright students in the regular classroom. Because of this, it is important to select target students that are representative of the following groups: multicultural, economically disadvantaged, limited English proficient, and handicapped students. The procedures for selecting target students are described below.

Before the students arrive in the classroom, the observer selects two target students from the student roster. The classroom teacher does not know the specific students or the number of students being observed. The observer selects one identified gifted and talented or superior student (Target Student #1 on the CPR) and one average student (Target Student #2 on the CPR). The observer determines where these students sit in the classroom from the seating chart prepared by the teacher. To ensure that a diverse group of students are represented in the study, the observer should select target students according to the following steps:

1. The observer compiles a list of potential Target Student #1's by selecting students identified for the school's gifted education program. If no gifted program exists, the observer lists both (1) the students who received ability ratings with a numeral 5 or 4, and (2) the students who received a composite score at or above the 90th percentile on an achievement test. For purposes of this study, students on either of these lists will be defined as gifted and talented or superior ability students.
2. From the above list, the observer selects all students as potential Target Student #1's who qualify for the free or reduced school lunch program.
3. If one or more students are selected at Step 2, the observer randomly selects from among them, a non-Caucasian student as Target Student #1. If only one non-Caucasian student satisfies the criteria in Step 1 and Step 2, that student is designated as Target Student #1.
4. If no students are selected to this point, the observer selects as Target Student #1 a non-Caucasian student who does not qualify for free or reduced lunch.
5. If no students are selected by Step 3 and 4 above, the observer selects a Caucasian student designated at Step 1 as Target Student #1.
6. The observer selects, also, a back-up student for Target Student #1 (using the above steps) in the event that the first student is absent on the day of the observation.
7. Then, the observer selects an average ability student, Target Student #2, who received an ability rating with a Numeral 3 on the roster. If possible, this student is the same gender and race as Target Student #1 to reduce potential biases that may have an impact on the research results.

On the second observation day at each site, the observer follows the steps listed above to select two different students as Target Student #1 and Target Student #2. However, if non-Caucasian students were selected on the first day, the observer skips Steps 3 and 4 above and selects Caucasian students on the second day.

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### Observer's Arrival in the Classroom

The observer arranges to be in the classroom approximately one-half hour before students arrive in the morning to review with the teacher the purpose of the observation (observe a typical day in a classroom) and become familiar with the classroom and the teacher's schedule. The observer also provides the teacher with a written script for introducing the visitor (observer) to the students (Appendix D). Classroom teachers may paraphrase the script but should explain to students that the visitor wants to see a regular day in this school and is not evaluating the teacher or students.

If the teacher with whom the arrangements have been made is absent on the morning of the scheduled observation, the observer goes to the alternate teacher's classroom. The alternate teacher is not a substitute teacher; rather, it is the teacher who agreed to allow the observation to take place in his or her classroom on short notice in the event the teacher scheduled for the observation is ill.

To record information on the CPR throughout the day, the observer arranges to sit in the classroom in an out-of-the way location because he or she is not participating in classroom activities or assisting the teacher. By doing this, students are less likely to react to the presence of the observer in the classroom. The observer may find it necessary, at times, to move around the room to look over a student's shoulder to see the type of work a student is doing.

During the time before students arrive, the observer sets up the tape recorder with the counter facing the observer. The observer should be equipped with fresh batteries and five hours of cassette tapes. The setting on the counter must be set at 000 at the beginning of each side of a tape. Each cassette tape should be labeled with the observer's name and the date of the observation.

### Procedures for Special Schedules

If students receive instruction in language arts (reading, language, spelling, and penmanship), mathematics, social studies, and science from the homeroom teacher, the observer remains in the homeroom teacher's classroom during these instructional periods. However, if students are ability grouped for different subjects or switch classrooms within the grade level or across grade levels, the observer follows the special procedures listed below:

1. If the entire homeroom class goes to another teacher for instruction in one of the above subjects, the observer accompanies the class. For example, if all students in the classroom receive instruction from a science teacher, the observation takes place in the science teacher's classroom and the observer continues to record observations on the selected target students.
2. If Target Student #1, the target gifted and talented or superior ability student, leaves the classroom and other gifted and talented or superior students remain in the classroom, the observer substitutes one of these remaining gifted and talented or superior ability students for observation (of same gender and ethnicity, if possible) during the time when the previously selected Target Student #1 is absent from the classroom.

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3. If Target Student #1 leaves the classroom with a group of other gifted and talented students and substitution is not possible, the observer accompanies that group of students to the class they attend. For example, all of the gifted and talented or superior students may go to another room for a reading class or a math class. The only exception to this rule is if the gifted and talented students go to a gifted education resource room. If this occurs, the observer remains in the homeroom and records observations on the average student only.
4. If the average student, Target Student #2, leaves the classroom, the observer substitutes, if possible, another average student for the observation.

If substitutions for Target Student #1 or Target Student #2 are made during the observation day, the observer records this in the Miscellaneous Notes column on the Curricular Activities section of the CPR.

### **Description of the CPR Instrument**

#### **CPR: Identification Information**

The observer records the identification information found on the first section of the CPR.

#### **CPR: Physical Environment Inventory**

The observer indicates the number of and the topics addressed by the learning centers or interest development centers in the classroom. Learning centers often contain task cards or lists of activities to be completed by students. For example, a center containing drill and practice materials on punctuation would be considered a learning center. Interest development centers contain materials and/or activities designed to motivate students to learn more about a topic. For example, a center containing books and materials on the achievements of women throughout history would be considered an interest development center. Students' penmanship papers, students' creative writing papers, or a poster of flags around the world stapled to a bulletin board do not constitute learning or interest development centers.

#### **CPR: Curricular Activities, List of Codes**

The Curricular Activities section is the major focus of the CPR. This is the section where observations of curricular differentiation experienced by the target gifted and talented or superior ability student are recorded.

The observer records information about the academic subject, instructional activities, grouping practices, and differentiation experienced by Target Student #1 in the columns on page 2 of the CPR. Four separate Curricular Activities pages are recorded during language arts (reading, language, spelling, penmanship), mathematics, social studies, and science instruction. The codes for this form are listed below.

**Beginning Time:** Note the time when each activity begins

**Ending Time:** Note the time when each activity ends

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**Activity Codes**, i.e., Target Student #1 is involved in:

- (1) audio visual
- (2) demonstration
- (3) discussion
- (4) explain/lecture
- (5) games
- (6) non-academic activity
- (7) oral reading
- (8) project work
- (9) review/recitation
- (10) silent reading
- (11) simulation/role playing
- (12) testing
- (13) verbal practice or performance
- (14) written assignments

**Group Size Codes**, i.e., Target Student #1 is working

- (1) individually, (2) in a group of 2-6 students, (3) in a group of 7 or more students,
- (4) with the total class

**Group Composition Codes:** (Ht) heterogeneous ability grouping, (Hm) homogeneous ability grouping

**Descriptive Notes:** Codes and explanations when Target Student #1 is involved in curricular experiences different than those experienced by Target Student #2.

- (1) Target Student #1 is involved in advanced content instruction/materials
- (2) Target Student #1 is involved in advanced process instruction/materials
- (3) Target Student #1 is working on an advanced product or project
- (4) Target Student #1 is working on an independent study project based on assigned topic
- (5) Target Student #1 is working on an independent study project based on self-selected topic
- (6) Other indications of differentiation experienced by Target Student #1.

**Misc. Notes:** Any notes to which the observer may wish to refer later when conducting the teacher interview and/or writing the summary report are recorded in this column. See sample CPR in the Appendix E.

Definitions of Activity Codes. There are fourteen categories of classroom activities. Whenever an activity begins, the beginning time is indicated in the Beginning Time column. The appropriate code for the activity is noted in the Activity Code column. When the activity changes, the Ending Time is recorded and the new Beginning Time and new activity code are recorded. Activity categories are described below.

Activity Code No.	Definitions
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1. **Audio visual.** Students are watching a film, filmstrip, slide show, video, or they are listening to a recording. This is a passive activity, as opposed to an interaction with a visual medium, such as a computer or video disk. If students are working at a computer and are involved in a game, written assignment, or computer simulation, the activity should be recorded as a game, written assignment, or simulation.
2. **Demonstration.** An individual or group of individuals is showing how something works or is done. For example, in mathematics, a teacher may demonstrate how to



- construct polyhedrons or in language arts, how to conduct an interview. Students, instead of a teacher, may be demonstrating to other students how something is done.
3. **Discussion.** Students themselves or the teacher and students together are involved in an extended verbal exchange of ideas or opinions that may be a planned or an impromptu activity. For example, a discussion may be about places in the home where triangular shapes are found or about a local or global problem, such as protecting the rain forest.
  4. **Explain/Lecture.** Teacher is presenting a lecture or explaining academic content to students. This may also include some questioning or comments from students, but the main function of this activity is informing students, introducing new material, or explaining new material to students.
  5. **Games.** Students are involved in cooperative or competitive games, such as board games, chalkboard races, spell-downs, . . .
  6. **Non-academic Activity.** Students are involved in physical activity or conversation that is unrelated to classroom concerns or are not involved in an academic activity. Students are waiting for assistance, directions, instruction, or access to materials and equipment. Students' "show and tell" or "sharing time" is coded as this category.
  7. **Oral Reading.** Students are involved in an activity that requires oral reading of material, such as a current events publication or basal reading text.
  8. **Project Work.** Students are involved in projects, experiments, or tasks that require the construction or manipulation of materials, such as the development of dioramas, mobiles, or seed growth experiments.
  9. **Review/Recitation.** Teacher is providing oral practice of skills or review of material. This category includes questioning of students by the teacher.
  10. **Silent Reading.** Students are reading individually.
  11. **Simulation/Role Playing.** Students are involved in structured activities that attempt to teach concepts by modeling real-world situations, such as recreating the Boston Tea Party or an archaeological expedition in class. This category does not include practice or performance of a play, which would be coded under category #13.
  12. **Testing.** Students work on a test, quiz, readiness test or assessment.
  13. **Verbal Practice or Performance.** Students are involved in verbal activities, such as debate, drama practice or performance, or singing.
  14. **Written Assignments.** Students are writing papers, doing computation or are engaged in any other written work. Brief directions for the assignments or short teacher interruptions to explain or clarify directions may occur during the written assignment time and are not recorded as a separate activity.

If Target Student #2, the target average student, is involved in an activity that is different than the one experienced by Target Student #1, the observer records Target Student #2's activity in the Miscellaneous Notes column.

Definitions of Group Size Codes. With each activity change, the observer records the size of the group in which Target Student #1 is working by placing a code in the Group Size column. Numeral 1 is coded if the Target Student #1 is working individually, Numeral 2 is coded if Target Student #1 is working with a group of 2-6 students, Numeral 3 is coded for a group of 7

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or more students, and Numeral 4 refers to the total class. If Target Student #2, the target average ability student, is working in a different size group than Target Student #1, the observer indicates this in the Miscellaneous Notes column.

Definitions of Group Composition Codes. The second “group” column is used to record the composition of the group in which Target Student #1 is working. “Ht” is noted if the students are heterogeneously grouped by ability for the activity, and “Hm” is recorded if the students are homogeneously grouped by ability for the activity. The student roster helps determine the group composition, but the observer may need to clarify this at the end of the day during the teacher interview.

Definitions of Descriptive Notes. The column, Codes and Descriptive Notes of Differentiation, is used to record evidence of Target Student #1’s involvement in curricular experiences that are different than those experienced by Target Student #2. The codes are explained below.

1. **Numeral 1** is coded when the target gifted or superior ability student is working with advanced content material or is receiving advanced content-related instruction. For example, this student may be reading a higher level reading or math text or trade book, using primary or secondary source materials instead of a social studies textbook, or learning higher-level science concepts.

2. **Numeral 2** is coded when the target gifted or superior ability student is involved in advanced process instruction or materials. The instructor may be providing the student, individually or in a group, with training in critical or creative thinking processes, such as deductive reasoning or creative problem solving skills. The instructor may be teaching “learning-how-to-learn” processes, such as how to evaluate speakers’ points of view, develop data-recording matrices, or prepare tables and graphs. Numeral 2 may also be used to record when Target Student #1 is receiving instruction on advanced research skills and reference materials, such as identifying community resources or using specialized reference books. Advanced process instruction/materials also includes training in written, oral, and visual communication skills, such as applying expository writing to a new genre, practicing vocal delivery, or preparing video tape recordings.

3. **Numeral 3** is recorded when Target Student #1 is working on an advanced product or project. Products cannot be separated entirely from content or process; advanced products require advanced content and process instruction. The reverse is not necessarily true; advanced content and process instruction do not always result in an advanced product. Products can assume a variety of forms, such as research reports, presentations, dramatic productions, displays, or constructions. The nature of the products developed by the gifted or superior student(s) is a form of differentiation. For example, in mathematics the entire class may be constructing cookie houses, but the gifted or superior ability student(s) may be required to use a metric scale in the cookie house design. In social studies, the class may be developing displays for Women’s History Week, and the gifted or superior student(s) may be required to include original research reports rather than

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accounts from encyclopedias in the display. The audiences for whom the products are being developed should also be described in the Descriptive Notes column. Some products may be intended for the teacher and will be evaluated only by the teacher. Other products may be developed to have impact upon “real audiences.” For example, a student’s research paper or story may be submitted to a professional publication, or a student’s science project may be entered in a regional science fair. If it is not possible to determine the audience for whom the product is intended, this information is obtained during the teacher interview and is recorded in the Descriptive Notes column.

4. **Numerical 4** is recorded when Target Student #1 is working on an independent study project, individually or with a small group of students, on an assigned topic. For example, the teacher may ask Target Student #1 to research a sea mammal or a famous mathematician as an alternate assignment in science or mathematics class.

5. **Numerical 5** is recorded when Target Student #1 is working on an independent study project based on a self-selected topic. The student is given the opportunity to pursue an interest area by investigating topics of his or her choice such as space exploration, the lives of favorite authors, number systems, or political elections.

6. **Numerical 6** is recorded for other indications of differentiation that are not included in the previous categories. For example, the target gifted or superior student may be assigned to be the leader of a cooperative learning group.

If the observer sees no indications of curricular differentiation, the column is left blank. The observer reports the lack of differentiation in the summary report written at the end of the day.

Explanation of Miscellaneous Notes. Miscellaneous Notes on the Curricular Activities page is the column where the observer records any notes to which he or she may want to refer later when conducting the teacher interview or writing the summary report. For example, the name of the specific activity being observed or the location of a target gifted or superior student when out of the homeroom classroom is listed here.

#### CPR: Verbal Interactions, List of Codes

While recording observations of curricular activities on page 2 of the CPR, the observer also records all verbal interactions that occur between the teacher and target students (or vice versa) on page 3 of the CPR. Thus, the observer records observations on two pages of the CPR at the same time throughout the periods when reading, language arts, science, social studies, and mathematics are taught. The observer will not be able to record verbal interactions that are whispered or said quietly between the teacher and target students. If the verbal interactions between the teacher and target students occur rapidly, the observer records the counter number on the cassette tape to complete the recording of the interaction sequences at a later time. The verbal interaction codes are listed below.

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**Who or To Whom:** (T) Teaching Adult, (S#1) Target Student #1, (S#2) Target Student #2, (NT) Non-Target Student, (AL) Students At -Large

**What:**

- (KC) Knowledge/Comprehension Question
- (HOTS) Higher Order Thinking Skills Question
- (RC) Request or Command
- (ES) Explanation or Statement
- (R) Response
- (N) No Verbal Response

**Wait Time:** ( \_ ) minimum of 3 seconds pre-or post-response time

Explanation of Who/To Whom Column. Whenever the teacher interacts verbally with the target students, or vice versa, the observer records the verbal interactions between them. The person who initiates the interaction, Teaching Adult, Target Student #1, or Target Student #2, is coded in the Who column, and the person(s) to whom it is directed is coded in the To Whom column. (Note: interactions initiated by non-target students are not recorded.) For every code in the Who column, there is a corresponding code in the To Whom column.

If the teacher addresses a question, request, or explanation to the students-at-large, a “T” is coded in the Who column, an “AL” is coded in the To Whom column. If a target student responds, the target student code (S#1 or S#2) is coded in the Who column of the next line (Example C: Verbal Interaction Sequence on page 22 of this manual illustrates this coding). If, however, a non-target student responds, no coding is necessary for the response, and the observer draws a curved or squiggly line across of the verbal interaction columns. If the teacher addresses a question or request to a specific non-target student, the observer records this by coding a “T” in the Who column and an “NT” in the To Whom column; however, a squiggly line is drawn below this to indicate the non-target student’s response.

Explanation of What Column. The What column contains six codes which are categories of actions or behaviors. These codes are the verbs of the interaction sequences.

If the verbal interaction is in the form of a question, the observer records either “KC” for a Knowledge/Comprehension question or “HOTS” for a Higher Order Thinking Skills question. These categories represent levels of thinking described in Bloom’s Taxonomy of Educational Objectives (1956). The observer uses a “KC” code in the What column if a teacher asks students to recall or demonstrate understanding of previously learned material, i.e., the knowledge or comprehension level of the taxonomy. The observer places a “HOTS” code in the What column if a teacher (or it could be a student) asks a higher order thinking skills question, i.e., Bloom’s application, analysis, synthesis, and evaluation levels of thinking. The observer does not distinguish among these higher levels; rather, he or she uses the “HOTS” acronym to note that a higher order thinking skill question was raised.

Whenever a “HOTS” question is asked at the beginning of a discussion that seems to be open-ended and conducive to the asking of “HOTS” questions, the observer writes down the counter number in the Miscellaneous Notes column. By recording the counter number, the observer will find it less difficult to later retrieve these questions and verify the coding.

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Although the observer does not need to make distinctions among the higher levels of thinking, the following explanations for each of the four levels may help observers better understand the questions that are coded “HOTS.” Application questions require the transfer of learned material to solve problems or make use of information. Analysis questions ask the learner to break information into separate parts, analyze the relationship among the parts, and to recognize the organizational principles of the parts. Synthesis questions ask the learner to put parts together to form a new whole. Synthesis questions usually require creative thinking on the part of the learner. Evaluation questions ask the learner to judge the value of information for a given purpose (See Appendix F for additional explanation of the levels in Bloom’s taxonomy).

If the verbal interaction between the teacher or target students is in the form of a request or command, “RC” is placed in the What column. If the interaction is an explanation or statement, “ES” is coded in the What Column. After a question, an “R” for a response and “N” for no response are coded in the What column.

Teachers frequently preface questions with explanations or statements. Therefore, if the teacher begins a verbal interaction with an explanation or statement (ES) followed immediately by a question, the observer records the type of question in the What column and does not record the explanation or statement (ES).

Explanation of Wait Time Column. Wait time is the length of the pauses separating utterances during verbal interactions. Pre-response wait time refers to the pause or elapsed silent time after a question has been asked. Post-response wait time refers to the pause after an answer has been given, but before a verbal judgment or comment has been made about that answer. The observer places a check mark (√) in the Wait Time column if the pre-or post-response wait time exceeds the minimum of three seconds. The observer may use his or her pulse or the second hand of a clock or watch to determine the amount of pre or post response time that occurs in verbal interaction sequences.

Explanation of Miscellaneous Notes Column. Observers may make comments in the Miscellaneous Notes column on page three of the CPR. The observer may decide to write down the verbatim question or comment made by the teacher or students or make a note to which he or she may refer when conducting the teacher interview or writing the daily summary. For example, the observer may notice that the teacher frequently or always initiates class discussions by addressing questions to Target Student #1, and writes this observation in the Miscellaneous Notes as a reminder to include this in the Daily Summary. If the observer develops his or her own coding system for noting unexpected events in the Miscellaneous Notes column, the observer should provide a legend for these notes.

The three examples below illustrate verbal interaction sequences. Note, observers place a **double** line after each a total interaction sequence to indicate the completion of the sequence. An additional practice exercise for coding verbal interaction sequences is included in the Home Training section of this manual.

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#### Example A: Interaction Sequence

T: "What was the main character's name?"

S#2: "Mrs. Jewels."

Who	To Whom	What	Wait Time	Miscellaneous Notes
T	S#2	KC		
S#2	T	R		

#### Example B: Interaction Sequence

T: "Mark, if you were a pharaoh, how would you rule?"

S#1: "For one thing, I'd let my people have whatever religion they wanted."

T: "Why do you think this is important?"

S#1: "Because people should have freedom to worship however they want."

T: "Yes, the Pilgrims thought freedom to worship was important too."

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Who	To Whom	What	Wait Time	Miscellaneous Notes
T	S#1	HOTS		
S#1	T	R		
T	S#1	HOTS		
S#1	T	R		
T	S#1	ES		

#### Example C: Interaction Sequence

T: "Class, what could be a different ending for this story?"

S#2: "I think the boy should have returned home."

T: "Why do you think so?"

S#2: "I just like happy endings."

T: "Class, what are some other possible endings for this story?"

Non-target Student: "Perhaps the boy could have gone to. . ."

Discussion continues between teacher and non-target students. . . .

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Who	To Whom	What	Wait Time	Miscellaneous Notes
T	AL	HOTS		
S#2	T	R		
T	S#2	HOTS		
S#2	T	R		
T	AL	HOTS		
<hr/>				

#### CPR: Interview

Interviews with teachers are conducted at the end of the school day. At the end of the first observation day, the observer uses the interview schedule found on page 4 of the CPR with the homeroom teacher to follow-up on observations recorded throughout the day. At the end of the second observation day, the observer interviews other teachers (if any) who provided instruction (on either observation day) to the target gifted and talented students, Target Student #1's. The observer does not probe during the interview to obtain teachers' opinions regarding grouping or curricular differentiation; rather, the observer asks questions designed to clarify the use of these practices in the classroom. If a teacher rated a student high in ability and the student scored in the average range on an achievement test, the observer could ask questions to determine the basis for that rating; however, the observer does not reveal to the teacher during the interview that observations were conducted on only two students throughout each day.

#### CPR: Daily Summary

At the conclusion of each observation day, the observer writes a summary report that describes the instructional situation (self-contained, departmentalized, ability grouping across classrooms or grade levels. . . ) and summarizes the observed differentiation experienced by the target gifted and talented or superior ability student. The observer also notes any special or unique things observed during the day that made it an atypical day or a unique educational setting. The observer avoids writing subjective comments in the summary report; rather, the report should reflect the observations recorded on the CPR throughout the day. At the conclusion of the second observation day, the observer asks the classroom teacher to complete and return the Classroom Practices Survey.



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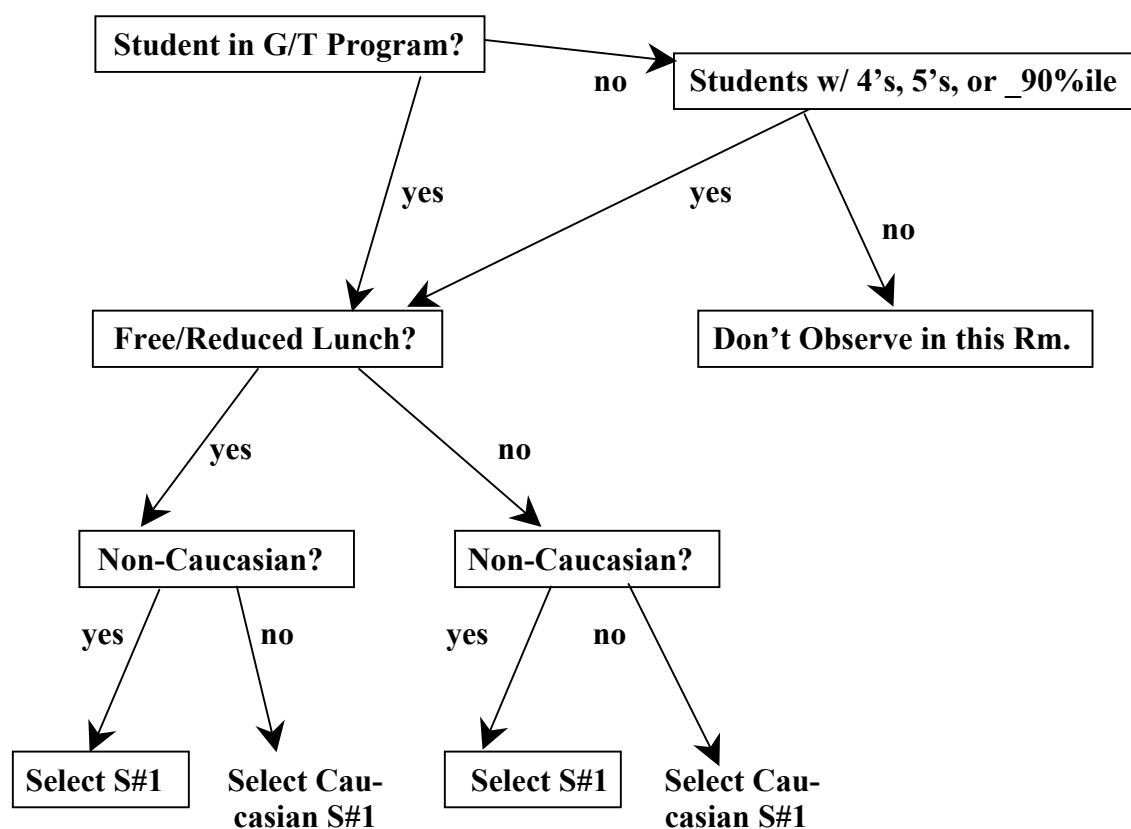
### **Summary of Major Procedures**

A summary of the major procedures for an observer to follow when conducting observations for the Classroom Practices Study are listed below.

1. Observations are conducted during instruction in five academic subjects:
  - > reading
  - > language arts (language, spelling, and penmanship)
  - > mathematics
  - > social studies
  - > science
2. Observations on pages 2 and 3 of the CPR, the Curricular Activities and Verbal Interaction sections, are recorded simultaneously.
3. Two target students, one gifted and talented or superior student and one average ability student, are observed each day. If it is not possible to observe both an average student and gifted and talented student at the same time, the target gifted and talented or superior student is observed unless this student and all of the remaining potential target gifted and talented or superior students went to the gifted education resource room. If this occurs, only the target average student is observed.
4. If either the target gifted and talented/superior ability student or the target average student leaves the classroom, and other students of similar ability are available in the classroom, one of these remaining students is substituted for the observation during the time when the target student is absent.

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## FLOW CHART FOR SELECTING TARGET STUDENT #1(S#1)



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## Home Training Exercise: Selection of Students From Student Roster

List potential Target Student #1's and Target Student #2's from the following roster.

### STUDENT ROSTER

Teacher's Name \_\_\_\_\_ School \_\_\_\_\_

- I. Please list students' first names, gender, ethnicity (Caucasian-American, African-American, Asian-American, Hispanic-American, Native-American, Other) in the columns below.
- II. Indicate the students who receive free or reduced lunch by placing a check mark (✓) in the subsidized lunch column.
- III. In the ability rating column, please provide a general, numerical rating of each student's ability level that corresponds to the following scale: 5=superior, 4=above average, 3=average, 2=below average, 1=low. Please do not spend a great deal of time thinking about this—record your first reaction. This task should not take longer than five minutes.
- IV. In the special program column, indicate the students who have been formally identified for a special program (special ed., gifted ed., Chapter I) by naming the program from which they are receiving special services.
- V. In the last column, indicate the composite percentile score received by students' on their most recently administered standardized achievement test. Write the name of this test here. Stanford Achievement Test

Students' First Names (Add initial for duplicates.)	Gender	Ethnicity	Subsidized Lunch	Ability Rating	Special Program	Achiev. Percentile
1. Elias	M	Hisp/Lat	✓	4		83
2. Megan D.	F	Caucasian		5	g/t	99
3. Heather	F	Cauc.		5	g/t	93
4. Shana	F	Hisp/Lat		4		88
5. Jennifer A.	F	Cauc.		3		78
6. Tared	M	Cauc.		5	g/t	99
7. Elizabeth	F	Cauc.		4		92
8. Miguel	M	Hisp/Lat		3		80
9. Dody	F	African-Am		3		79
10. Angela	F	Cauc.		4		95
11. James	M	Cauc.	✓	1		40
12. Keith	M	Cauc.		5	g/t	97
13. Tanisa	F	Cauc.		4		90
14. Jessica B.	F	Cauc.	✓	2		65
15. José	M	Hisp/Lat		5	g/t	94
16. Margaret	F	Hisp/Lat		2		50
17. Jennifer L.	F	Cauc.		3		82
18. Mollie	F	Cauc.		5	g/t	95
19. Kristi	F	African-Am		2		65
20. Rebecca	F	Cauc.		1	EMR	34
21. Ricky	M	Cauc.	✓	1	EMR	30
22. Samantha	F	Cauc.		5		89
23. Meghan B.	F	Cauc.		5		92
24. Brandon	M	Cauc.		4		87
25. Kevin	M	Cauc.		3		73
26. Yav. tza	F	Hisp/Lat		4	bilingual	89
27. Jameson	M	Cauc.		5	LD	90

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### **Answer to Home Training Exercise: Selection of Students From Student Roster**

Potential Target Student #1's: Jose

Potential Target Student #2's: Miguel

### **Home Training Exercise: Curricular Activities**

List the codes for the following curricular activities:

1. The teacher is showing students how to use microscopes, and spends a few minutes showing the target gifted or superior student how to use an electron microscope.  
Activity = \_\_\_\_\_ Grouping Size = \_\_\_\_\_ Differentiation = \_\_\_\_\_
2. The teacher and students in the reading class are discussing the script for a play that they are going to perform for the reading classes in the other rooms.  
Activity = \_\_\_\_\_ Grouping Size = \_\_\_\_\_ Differentiation = \_\_\_\_\_
3. Students of differing abilities are working in groups of 4-6 students on *Gold Rush*, a simulation game published by Interact, Inc.  
Activity = \_\_\_\_\_ Grouping Size = \_\_\_\_\_ Grouping Composition = \_\_\_\_\_
4. While the rest of the homeroom class is doing exercises in their reading workbooks, Target Student #1 is reading a book on acid rain, a topic that has interested her for years and a topic on which she intends to do an independent project.  
Activity = \_\_\_\_\_ Grouping Size = \_\_\_\_\_ Differentiation = \_\_\_\_\_  
Miscellaneous Notes = \_\_\_\_\_

(Answers for the above curricular activities are on the next page.)

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## **Answers for Home Training Exercise: Curricular Activities**

Codes are listed for the following curricular activities:

1. The teacher is showing students how to use microscopes, and spends a few minutes showing the target gifted or superior student how to use an electron microscope.  
Activity = 2    Grouping Size = 1    Differentiation = 2
2. The teacher and students in the reading class are discussing the script for a play they are going to perform for the reading groups in the other rooms.  
Activity = 3    Grouping Size = 4  
Differentiation = *blank*
3. Students of differing abilities are working in groups of 4-6 students on *Gold Rush*, a simulation game published by Interact, Inc.  
Activity = 11    Grouping Size = 2  
Grouping Composition = *Ht*
4. While the rest of the homeroom class is doing exercises in their reading workbooks, Target Student #1 is reading a book on acid rain, a topic that has interested her for years and a topic on which she intends to do an independent project.  
Activity = 10    Grouping Size = 1  
Differentiation = 5    Miscellaneous Notes = *S#2 is doing Act. #14 (wkbk.)*

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## Home Training Exercise: Verbal Interactions

Code the following verbal interaction sequence.

The teacher asked the class, “What was the major problem George Washington Carver found in the south that led him to develop so many uses for peanuts?”

Target Student #2 said, “Everyone there was growing cotton which was very hard on the soil.”

The teacher asked the class, “What else?”

A Non-target Student replied, “The boll weevil insects were moving in on the cotton fields, and peanuts were a better crop.”

The teacher said, “Yes, peanuts were better for the soil and weren’t bothered by the boll weevils, but what was the problem with growing lots of peanuts?”

A Non-target Student answered, “They couldn’t sell that many peanuts because they weren’t used for much until Carver came up with new uses for them, such as new foods, soaps, and polishes.”

The teacher said, “He even used the thin outer coverings of the peanuts for a new paper, didn’t he? He was like a modern day recycler. Can you think of a waste product that we have an abundance of today for which we could come up with new uses?”

A Non-target Student replied, “Newspapers.”

“Yes, and they now get recycled around here—can you think of other things?” said the teacher.

A Non-target Student said, “We have an abundance of Styrofoam that is used in packages and is used for trays in the grocery stores.”

The teacher said, “Yes, that is a good one. Let’s brainstorm—remember we don’t judge ideas when we brainstorm—what are some new, potential uses for Styrofoam?”

Target Student #1 said, “How about using it for fuel?”

Several Non-target Students gave additional responses before discussion ended on this topic.

Who	To Whom	What	Wait Time	Miscellaneous Notes

Westberg, K. L., Archambault, F. X., Jr., Dobyns, S. M., & Salvin, T. J. (1993). *An observational study of instructional and curricular practices used with gifted and talented students in regular classrooms* (Research Monograph 93104). University of Connecticut, The National Research Center on the Gifted and Talented. <https://nrcgt.uconn.edu/wp-content/uploads/sites/953/2015/04/rm93104.pdf>

### Answer to Home Training Exercise: Verbal Interactions

Who	To Whom	What	Wait Time	Miscellaneous Notes
T	AL	KC		
SP2	T	R		
T	AL	KC		
T	AL	KC		
T	AL	HOTS		
T	AL	HOTS		
T	AL	HOTS		
SH1	T	R		

Westberg, K. L., Archambault, F. X., Jr., Dobyys, S. M., & Salvin, T. J. (1993). *An observational study of instructional and curricular practices used with gifted and talented students in regular classrooms* (Research Monograph 93104). University of Connecticut, The National Research Center on the Gifted and Talented. <https://nrcgt.uconn.edu/wp-content/uploads/sites/953/2015/04/rm93104.pdf>

## References

- Bloom, B. S. (Ed.). (1956). *Taxonomy of educational objectives, handbook 1: Cognitive domain*. New York: Longman.
- Evertson, C. M. & Burry, J. A. (1989). Capturing classroom context: The observation system as a lens for assessment. *Journal of Personnel Evaluation in Education*, 2, 297–320.
- Giesen, P. & Sirotnik, K. A. (1979). *The methodology of classroom observations in a study of schooling* (Report No. SP 019 812). Dayton, OH: Institute for Development of Educational Activities. (ERIC Document Reproduction Service No. ED 214 875)
- Goodlad, J. I. (1984). *A place called school: Prospects for the future*. New York: McGraw Hill.
- Gronlund, N. E. (1985). *Stating objectives for classroom instruction* (3rd ed.). New York: Macmillan.



## **Appendix A** **Classroom Practices Record (CPR)**

### **CPR: Identification Information**

Date of Observation \_\_\_\_\_ Observer \_\_\_\_\_ Observation No. \_\_\_\_\_  
(in this classroom)

Classroom Teacher \_\_\_\_\_ School \_\_\_\_\_

School District \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_

Grade Level \_\_\_\_\_ No. of Students in Classroom \_\_\_\_\_ No. of Girls \_\_\_\_\_ No. of Boys \_\_\_\_\_

**Target Student #1:**

- ☐ Gender (M/F)
- ☐ Limited English Proficient (specify native language: \_\_\_\_\_)
- ☐ Handicapping Condition (specify: \_\_\_\_\_)
- ☐ Economically Disadvantaged (i.e., free or reduced lunch)

**Ethnicity:**

- ☐ African-American
- ☐ Asian-American /Pacific Islander
- ☐ Hispanic-American
- ☐ Native-American
- ☐ Caucasian-American
- ☐ Other

**Target Student #2:**

- ☐ Gender (M/F)
- ☐ Limited English Proficient (specify native language: \_\_\_\_\_)
- ☐ Handicapping Condition (specify: \_\_\_\_\_)
- ☐ Economically Disadvantaged (i.e., free or reduced lunch)

**Ethnicity:**

- ☐ African-American
- ☐ Asian-American/Pacific Islander
- ☐ Hispanic-American
- ☐ Native-American
- ☐ Caucasian-American
- ☐ Other

### **CPR: Physical Environment Inventory**

**Learning Centers:**

- ☐ 3 or more learning/interest centers (specify topics: \_\_\_\_\_)
- ☐ 2 learning/interest centers (specify topics: \_\_\_\_\_)
- ☐ 1 learning/interest center (specify topic: \_\_\_\_\_)
- ☐ No learning/interest centers

Attach the classroom teacher's seating chart. Circle and label Target Student #1 (S#1) and Target Student #2 (S#2).





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### **CPR: Teacher Interview**

#### **Topics to be Discussed Include:**

1. Typical Day—did the teacher believe he or she changed his or her behavior today? Did anything happen during the day that made it an atypical day?
2. If other adults or visitors were present in classroom, who were they and what was their role?
3. Clarification of Descriptive Notes on CPR: Curricular Activities.
4. Instructional and Curricular Differentiation—clarification of differentiated materials, availability of enrichment resources, acceleration policies. . . . If curricular modifications were observed, how does this affect student evaluation?
5. Student Grouping—how groups are formed, flexibility of groups. . . .
6. Teaching of Groups—how is the decision made with regard to who teaches a particular ability-level group?
7. Other

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### **CPR: Daily Summary**

Please summarize the observations made during the day. Describe the instructional setting, summarize the observed differentiation experienced by Target Student #1, and describe the frequency and type of verbal interactions between the teacher and Target Student #1. The major issue to be addressed is “Did Target Student #1 experience any differentiated instruction or curricular experiences than those experienced by Target Student #2?”

Circle the names of Target Student #1 and Target Student #2 on the Student Roster sheet and attach to this report.

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## Appendix B

[date]

[teacher name]

[teacher's school]

[teacher's address]

[teacher's city, state, zip]

Dear [teacher]:

Thank you for your willingness to allow [observer's name] to spend two days observing in your classroom next month. I am writing to confirm the dates that were arranged for these visits, to provide you with information about this observation study, and to explain three forms we would like you to complete before [observer's name] arrives in your classroom. [Principal's name] explained briefly to you that The University of Connecticut site of The National Research Center on the Gifted and Talented (NRC/GT) is conducting a "Classroom Practices Study," a national study designed to examine the curricular and instructional practices used with students in regular classrooms; however, you would probably appreciate additional information about this project.

### Purpose of the Study

Although considerable research has been conducted on classroom practices, a systematic study of what happens to high ability students in the regular classroom has not been undertaken. The Classroom Practices Study addresses this need by examining the curricular and instructional practices used with high ability and average ability students in regular elementary classrooms. Descriptive information about these practices is being obtained from teacher surveys distributed to over 7000 third and fourth grade teachers and from structured observations conducted in approximately 50 third and fourth grade classrooms around the country.

### Overview of the Observational Research for the Classroom Practices Study

On [first scheduled date] and [second scheduled date], [observer's name] will be recording observations on students in your [third or fourth] grade classroom. [Observer's name] will be

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recording information about the curricular activities experienced by students and the verbal interactions that occur in the classroom. [Observer's name] will use a tape recorder to assist with coding verbal interactions that are lengthy, and therefore, difficult to code when they occur.

As [principal] explained to you, we would like you to complete three forms before [observer's name] arrives in your classroom: (1) a student roster (enclosed), (2) a diagram of the seating arrangement in your classroom, and (3) a copy of your students' schedule. Note, please write students' first names only on the roster sheet and the diagram of where these students sit in the classroom. A completed roster will provide [observer's name] with a list of the students in your classroom, as well as students' gender, ethnicity, participation in a free or reduced lunch program, placement in special programs, ability level, and composite percentile scores on a standardized achievement test. Would you please discuss this observation with another teacher at your grade level and ask him or her to be prepared to complete the forms on short notice in the event you are ill on the day of the observer's visit to your classroom?

At the conclusion of the first visit on [first date], [observer's name] would like to spend approximately one-half hour with you to follow-up on questions [he or she] may have. If your students receive instruction in a basic subject area from another teacher, [he or she] may want to ask that teacher a few questions at the end of the second day, [second date].

Please be assured that strict confidentiality will be maintained for students, teachers, and districts who participate in this study. All data will be coded and analyzed in reference to codes. Only the state in which the observation occurred will be identified in research reports. [Observer's name] will not be evaluating you or your students—this is not an evaluation study, rather it is a descriptive study. [Mr. or Mrs. observer's name]'s observation notes will not be shared with anyone in your school district.

If you have any questions about these visits or the study, please call me at 203-486-0167. A stamped, return envelope addressed to [observer's name] has been enclosed for mailing the completed student roster, your students' schedule, and the classroom seating diagram. Thank you

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for your willingness to assist with this research project by completing the forms and allowing us to visit in your classroom.

Sincerely,

Karen L. Westberg, Ph.D.  
Assistant Professor, University of Connecticut Site of the NRC/GT

Enc. Student Roster Sheet & SAS Envelope



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## Appendix C

### STUDENT ROSTER

Teacher's Name \_\_\_\_\_ School \_\_\_\_\_

- I. Please list students' first names, gender, ethnicity (Caucasian-American, African-American, Asian-American, Hispanic-American, Native-American, Other) in the columns below.
- II. Indicate the students who receive free or reduced lunch by placing a check mark ( ☐ ) in the subsidized lunch column.
- III. In the ability rating column, please provide a general, numerical rating of each student's ability level that corresponds to the following scale: 5=superior, 4=above average, 3=average, 2=below average, 1=low. Please do not spend a great deal of time thinking about this—record your first reaction. This task should not take longer than five minutes.
- IV. In the special program column, indicate the students who have been formally identified for a special program (special ed., gifted ed., Chapter I) by naming the program from which they are receiving special services.
- V. In the last column, indicate the composite percentile score received by students on their most recently administered standardized achievement test. Write the name of this test here. \_\_\_\_\_

	Students' First Names (Add initial for duplicates.)	Gender	Ethnicity	Subsidized Lunch	Ability Rating	Special Program	Achiev. Percentile
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							
21.							
22.							
23.							
24.							
25.							
26.							
27.							
28.							
29.							
30.							
31.							
32.							

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## **Appendix D**

Script for Classroom Teachers to Use When Introducing Observers:

As you can see we have a visitor in our classroom today. She/he is a teacher from \_\_\_\_\_ who is interested in seeing the types of things we do during a school day. Our visitor's name is Mr./Mrs./Miss \_\_\_\_\_.

She/he may write down some notes during the day. She/he is not grading or testing us. . . . Mr./Mrs./Miss is just making notes for himself/herself. She/he wants to see a regular day in our classroom.

# Appendix E

## Classroom Practices Record (CPR) (Sample)

### CPR: Identification Information

Date of Observation	2/21/91	Observer	Mary Smith	Observation No.	1
				(in this classroom)	
Classroom Teacher	Mrs. T. Chen	School	Lenslow Elem.		
School District	Anytown School Dist.	City	Anytown	State	CT
Grade Level	4	No. of Students in Classroom	24	No. of Girls	13
				No. of Boys	11

#### Target Student #1:

- M Gender (M/F)  
 \_\_\_\_\_ Limited English Proficient (specify native language, \_\_\_\_\_)  
 \_\_\_\_\_ Handicapping Condition (specify, \_\_\_\_\_)  
 \_\_\_\_\_ Economically Disadvantaged (i.e., free or reduced lunch)

#### Ethnicity:

- \_\_\_\_\_ African-American  
 \_\_\_\_\_ Asian-American /Pacific Islander  
☒ Hispanic-American  
 \_\_\_\_\_ Native-American  
 \_\_\_\_\_ Caucasian-American  
 \_\_\_\_\_ Other

#### Target Student #2:

- M Gender (M/F)  
 \_\_\_\_\_ Limited English Proficient (specify native language, \_\_\_\_\_)  
 \_\_\_\_\_ Handicapping Condition (specify, \_\_\_\_\_)  
 \_\_\_\_\_ Economically Disadvantaged (i.e., free or reduced lunch)

#### Ethnicity:

- \_\_\_\_\_ African-American  
 \_\_\_\_\_ Asian-American /Pacific Islander  
☒ Hispanic-American  
 \_\_\_\_\_ Native-American  
 \_\_\_\_\_ Caucasian-American  
 \_\_\_\_\_ Other

### CPR: Physical Environment Inventory

#### Learning Centers:

- ☒ 3 or more learning/interest centers (specify topics, Rsch. Activ. Poetry Current Events)  
 \_\_\_\_\_ 2 learning/interest centers (specify topics, \_\_\_\_\_)  
 \_\_\_\_\_ 1 learning/interest center (specify topic, \_\_\_\_\_)  
 \_\_\_\_\_ No learning/interest centers

Attach the classroom teacher's seating chart. Circle and label Target Student #1 (S#1) and Target Student #2 (S#2).

(CPR Instrument Developed by The University of Connecticut--National Research Center on Gifted and Talented)

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### CPR: Curricular Activities

**Activity Codes, i.e.,** (1) audio visual (6) non-academic activity (11) simulation/role playing  
 Tchr. Act. involving S#1: (2) demonstration (7) oral reading (12) testing  
 (3) discussion (8) project work (13) verbal practice or performance  
 (4) explain/lecture (9) review/recitation (14) written assignments  
 (5) games (10) silent reading

**Group Size Codes, i.e.,** Target Student #1 is working: (1) individually (3) in a group of 7 or more students  
 (2) in a group of 2-6 students (4) with a total class

**Group Composition Codes:** (Ht) heterogeneous ability grouping  
 (Hm) homogeneous ability grouping

**Descriptive Notes:** (1) Target Student #1 is involved in advanced content instruction/materials  
 (2) Target Student #1 is involved in advanced process instruction/materials  
 (3) Target Student #1 is working on an advanced product or project work  
 (4) Target Student #1 is working on an independent study project based on assigned topic  
 (5) Target Student #1 is working on an independent study project based on self-selected topic  
 (6) Other indications of differentiation experienced by Target Student #1

**Miscellaneous Notes:** Observer's notes for recording S#2's activity, conducting the teacher interview, or writing the summary report.

**Academic Subject:** *Lang. Arts: Reading, Penmanship*

Beg. Time	End. Time	Act. Code	Grp./Size Code	Grp./Cmp. Code	Codes & Descriptive Notes of Differentiation	Misc. Notes
10:10	10:15	4	4	Ht		Explanation ... broke into rdng. groups
10:15	10:30	14	3	Hm	S#1 in group w/ gr. 5 Basal	3 Rdng. Groups Here
10:30	11:00	3	3	Hm		S#2: Activ. 10 → 14 → 3
11:00	11:15	10	3	Hm		
11:15	11:25	6				Break
11:25	11:45	14	4	Ht		Penmanship Practice

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### CPR: Verbal Interactions

#### Who and To Whom Codes:

(T) Teaching adult  
(S#1) Target Student #1  
(S#2) Target Student #2  
(NT) Non-target Student  
(AL) Students At-Large

#### What Codes:

(KC) knowledge/comprehension question  
(HOTS) higher-order thinking skills question  
(RC) request or command  
(ES) explanation or statement

(R) response  
(N) no verbal response

#### Wait Time:

(✓) minimum of 3 seconds pre or post response time

Who	To Whom	What	Wait Time	Miscellaneous Notes
T	AL	KC		Tchrs. first thing group v. small (couldn't hear dial.)
S#1	T	R		"Story told from who's view point?"
T	AL	HOTS	✓	"Why did author use a 1st pt. of view to tell the story? attention grabber, ..."
S#1	T	R		
T	AL	HOTS		
T	AL	HOTS		
T	AL	KC		"Summarize story for us."
S#2	T	R		"What was high pt. of story?"
T	S#2	KC		
S#2	T	R		
T	AL	KC		
T	AL	KC		

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### CPR: Teacher Interview

#### Topics to be Discussed Include:

1. Typical Day--did the teacher believe he or she changed his or her behavior today? Did anything happen during the day that made it an atypical day?

*NO*  
Nothing other than observer - but they frequently have observers in room.

2. If other adults or visitors were present in classroom, who were they and what was their role?

*Student teacher - just observing this week.*

3. Clarification of Descriptive Notes on CPR: Curricular Activities.

*3 Rdn. Groups within the classroom.  
Top group's wkng. in gr. 5 basal. They did gr. 4 basal in 1 semester.*

4. Instructional and Curricular Differentiation-- clarification of differentiated of materials, availability of enrichment resources, acceleration policies, .... If curricular modifications were observed, how does this affect student evaluation?

*Rdn. policy just changed this year. Kids making great progress moving thru 2 texts in 1 year. (top)  
Can eliminate lots of skills w/ top group (i.e., wkbk. pages, wkshts.) Use publisher's criterion-referenced tests - top group consistently shows mastery & sig.*

5. Student Grouping-- how groups are formed, flexibility of groups, ....

*- Rdn. groups formed on basis of rdn. assessment test in Sept. Some flexibility - moved some kids.  
- Has started cooperative lrg. groups in other subj. (not observed today) - heterogeneous (Johnson-Johnson model)*

6. Teaching of Groups--how is the decision made with regard to who teaches a particular ability-level group?

*Not Applicable*

7. Other

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### **CPR: Daily Summary**

Please summarize the observations made during the day. Describe the instructional setting, summarize the observed differentiation experienced by Target Student #1, and describe the frequency and type of verbal interactions between the teacher and Target Student #1.

*This was a traditional, self-contained classroom. Students were ability grouped for reading only, (i.e., within class grouping). The top reading group is progressing through grade 4 and grade 5 basals in one year (a new policy permits this). The teacher has been able to eliminate much of the practice on skills found in the publisher's workbook and worksheets. Teacher reports that these students consistently demonstrate mastery (80% criterion) on publisher's criterion-referenced tests.*

*Whole class instruction was used in math, social studies, and science. No instructional or curricular differentiation for Target Student #1 was observed during these subjects. The teacher reported that she has started using heterogeneous, cooperative learning groups, but none were used during this observation day.*

*More verbal interactions occurred between the teacher and Target Student #1 as compared to those with Target Student #2. More HOTS questions were directed to S#1 than to S#2, but the majority of the teacher questions were at the knowledge/comprehension level. When difficult KC or HOTS questions were raised, the teacher gave more eye contact to high ability students.*

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## Appendix F

Table II. Major Categories in the Cognitive Domain of the Taxonomy of Educational Objectives (Bloom, 1956)

<i>Descriptions of the Major Categories in the Cognitive Domain</i>	
1.	<b>Knowledge.</b> Knowledge is defined as the remembering of previously learned material. This may involve the recall of a wide range of material, from specific facts to complete theories, but all that is required is the bringing to mind of the appropriate information. Knowledge represents the lowest level of learning outcomes in the cognitive domain.
2.	<b>Comprehension.</b> Comprehension is defined as the ability to grasp the meaning of material. This may be shown by translating material from one form to another (words to numbers), by interpreting materials (explaining or summarizing), and by estimating future trends (predicting consequences or effects). These learning outcomes go one step beyond the simple remembering of material, and represent the lowest level of understanding.
3.	<b>Application.</b> Application refers to the ability to use learned material in new and concrete situations. This may include the application of such things as rules, methods, concepts, principles, laws, and theories. Learning outcomes in this area require a higher level of understanding than those under comprehension.
4.	<b>Analysis.</b> Analysis refers to the ability to break down material into its component parts so that its organizational structure may be understood. This may include the identification of the parts, analysis of the relationships between parts, and recognition of the organizational principles involved. Learning outcomes here represent a higher intellectual level than comprehension and application because they require an understanding of both the content and the structural form of the material.
5.	<b>Synthesis.</b> Synthesis refers to the ability to put parts together to form a new whole. This may involve the production of a unique communication (theme or speech), a plan or operations (research proposal), or a set of abstract relations (scheme of classifying information). Learning outcomes in this area stress creative behaviors, with major emphasis on the formulation of <i>new</i> pattern or structure.
6.	<b>Evaluation.</b> Evaluation is concerned with the ability to judge the value of material (statement, novel, poem, research report) for a given purpose. The judgments are to be based on definite criteria. These may be internal criteria (organization) or external criteria (relevance to the purpose) and the student may determine the criteria or be given them. Learning outcomes in this area are highest in the cognitive hierarchy because they contain elements of all of the other categories, plus conscious value judgments based on clearly defined criteria.

Gronlund, N. E. (1985). *Stating objectives for classroom instruction* (3rd ed.). New York: Macmillan.