

## **APPENDIX D**

### **Classroom Observation Protocol (General)**

Teacher Barcode Label

Observer Barcode Label

## Evaluation of Mathematics Curricula

# OBSERVATION OF MATH INSTRUCTION

### Lesson Form

**IMPORTANT NOTE**

Please use a BLACK pen. Blue or red pens and pencil cannot be read by our scanners.  
When asked to mark boxes, make an "X" through the box.

Sample:  Right     Wrong

If you wish to change a response, please mark the correct response and CIRCLE it.  
Use block printing as shown below when you complete any numeric or text responses.

0	1	2	3	4	5	6	7	8	9	SAMPLE TEXT
---	---	---	---	---	---	---	---	---	---	-------------

**Teacher Name - First**

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Last**

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Site Visitor Name - First**

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Last**

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**School Name**

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**District Name**

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Date of Observation**

		/			/				
mo			day			year			



LESSON - specify number or name:

Time: Begin

 : 

AM

PM

End

 : 

AM

PM

## A. Teacher Initiated Instructional Behaviors

**Frequency of Instructional Behaviors** (tally frequency for instructional behaviors, not directions or class management)  
(enter total of "21" for 21 or more tallies)

Total		Tally
1 <input type="text"/>	Asks <b>close-ended</b> questions (teacher accepts only one answer)	<input type="text"/>
2 <input type="text"/>	Poses <b>open-ended</b> questions (tally number of different responses)	<input type="text"/>
3 <input type="text"/>	<b>Tells</b> information, models procedures, or shows students how to represent concepts	<input type="text"/>
4 <input type="text"/>	<b>Guides</b> practice on <b>problems</b> (tally number of problems)	<input type="text"/>
5 <input type="text"/>	Elicits <b>multiple strategies</b> /solutions (tally number of problems)	<input type="text"/>
6 <input type="text"/>	Uses <b>representations</b> (tally number of types of representations)	<input type="text"/>

## B. Teacher Feedback

**How did the teacher provide feedback to students?**

**Teacher Response to student answers:**

1 <input type="text"/>	States if <b>correct</b> or not without elaborating or repeats what child said with indication of right or wrong	<input type="text"/>
2 <input type="text"/>	<b>Calls on other students</b> until the "correct" answer is given	<input type="text"/>
3 <input type="text"/>	<b>Provides correct</b> answer right away (no probing for thinking or hinting)	<input type="text"/>
4 <input type="text"/>	Asks class if they <b>agree or disagree</b> with student's response	<input type="text"/>
5 <input type="text"/>	Takes student through <b>step-by-step</b> procedure	<input type="text"/>
6 <input type="text"/>	<b>Tells</b> student <b>strategy</b> to use	<input type="text"/>
7 <input type="text"/>	<b>Elicits</b> other students' <b>questions</b> about the student's response	<input type="text"/>
8 <input type="text"/>	<b>Labels</b> math strategy, problem, or concept	<input type="text"/>
9 <input type="text"/>	<b>Repeats</b> student answer in a <b>neutral</b> way (no indication of right or wrong)	<input type="text"/>

**Teacher Guidance and follow up questions:**

10 <input type="text"/>	Probes for <b>reasoning</b> or justification of solution	<input type="text"/>
11 <input type="text"/>	Provides <b>hint</b> to students	<input type="text"/>
12 <input type="text"/>	<b>Clarifies</b> what student says or does	<input type="text"/>
13 <input type="text"/>	<b>Extends</b> what student says or does	<input type="text"/>

**Teacher Praise:**

14 <input type="text"/>	Uses praise or makes <b>positive comments</b> focused on <b>content</b>	<input type="text"/>
15 <input type="text"/>	<b>Highlights student work</b> or <i>solution</i> to class	<input type="text"/>
16 <input type="text"/>	Praises <b>effort or behavior</b>	<input type="text"/>

7502



### C. Student Work

Total		Tally
1	<input type="text"/> <input type="text"/> Demonstrated work to peers (tally number of <b>students</b> )	<input type="text"/>
2	<input type="text"/> <input type="text"/> Number of different <b>types</b> of visual or 3D <b>representations</b> created	<input type="text"/>

### D. Evidence of Instructional Behaviors

- 1  Yes  No States lesson **objective** at the beginning of class
- 2  Yes  No Connects lesson to **prior knowledge**/instruction
- 3  Yes  No Demonstrates how to play **game**
- 4  Yes  No Guides children in **acting out a problem**
- 5  Yes  No Leads children in a rap, **song**, or fingerplay to illustrate math concept or practice
- 6  Yes  No Uses children's **book** to make connections to math concept
- 7  Yes  No Connects math to **real life** problems or situations
- 8  Yes  No Directs or encourages students to **help one another** with math
- 9  Yes  No Prompts child to guide practice or **lead class** in a routine
- 10  Yes  No Leads **summary** of what was learned or asks students to lead/share summary
- 11  Yes  No Administered a **written assessment**

NOTES



### E. Student Actions in Routine(s) and Lesson

Teacher provided students with the following opportunities to learn:  
(note the fractional of class involved in these activities)

1	<input type="checkbox"/> 0 <input type="checkbox"/> 1/4 <input type="checkbox"/> 1/3 <input type="checkbox"/> 1/2 <input type="checkbox"/> 2/3 <input type="checkbox"/> 3/4 <input type="checkbox"/> All	Wrote equations or number sentences
2	<input type="checkbox"/> 0 <input type="checkbox"/> 1/4 <input type="checkbox"/> 1/3 <input type="checkbox"/> 1/2 <input type="checkbox"/> 2/3 <input type="checkbox"/> 3/4 <input type="checkbox"/> All	Wrote about math concepts, strategies, or solutions
3	<input type="checkbox"/> 0 <input type="checkbox"/> 1/4 <input type="checkbox"/> 1/3 <input type="checkbox"/> 1/2 <input type="checkbox"/> 2/3 <input type="checkbox"/> 3/4 <input type="checkbox"/> All	Wrote story for equation
4	<input type="checkbox"/> 0 <input type="checkbox"/> 1/4 <input type="checkbox"/> 1/3 <input type="checkbox"/> 1/2 <input type="checkbox"/> 2/3 <input type="checkbox"/> 3/4 <input type="checkbox"/> All	Created math problems
5	<input type="checkbox"/> 0 <input type="checkbox"/> 1/4 <input type="checkbox"/> 1/3 <input type="checkbox"/> 1/2 <input type="checkbox"/> 2/3 <input type="checkbox"/> 3/4 <input type="checkbox"/> All	Practiced number facts or procedures
6	<input type="checkbox"/> 0 <input type="checkbox"/> 1/4 <input type="checkbox"/> 1/3 <input type="checkbox"/> 1/2 <input type="checkbox"/> 2/3 <input type="checkbox"/> 3/4 <input type="checkbox"/> All	Played math games
7	<input type="checkbox"/> 0 <input type="checkbox"/> 1/4 <input type="checkbox"/> 1/3 <input type="checkbox"/> 1/2 <input type="checkbox"/> 2/3 <input type="checkbox"/> 3/4 <input type="checkbox"/> All	Curricula specific activity Specify activity: <input type="text"/>

8	<input type="checkbox"/> Never <input type="checkbox"/> Sometimes <input type="checkbox"/> Frequently	Asked peers questions (about math)
9	<input type="checkbox"/> Never <input type="checkbox"/> Sometimes <input type="checkbox"/> Frequently	Discussed strategies/solutions with partner or small group
10	<input type="checkbox"/> Never <input type="checkbox"/> Sometimes <input type="checkbox"/> Frequently	Group response to questions

11	<b>Counting (Lesson only)</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>By:</b> <input type="checkbox"/> One <input type="checkbox"/> Two <input type="checkbox"/> Five <input type="checkbox"/> Ten <input type="checkbox"/> One Hundred <input type="checkbox"/> Three <input type="checkbox"/> Ordinal <input type="checkbox"/> Other, specify: <input type="checkbox"/> Backwards <input type="text"/>
----	---

### F. Math Practice (Routine and Lesson)

		Tally
1	<input type="text"/> <input type="text"/> Number of <b>practice problems</b> focused on <b>today's objective</b>	<input type="text"/>
2	<input type="text"/> <input type="text"/> Number of <b>problems</b> focused on review of <b>previously learned</b> material	<input type="text"/>
3	<input type="checkbox"/> Yes <input type="checkbox"/> No <b>Review of homework</b> (together in class or marked answers only)	

### G. Materials used by children: (check all that apply in routine(s) and lesson)

<input type="checkbox"/> Pattern blocks	<input type="checkbox"/> Base ten blocks/bean sticks	<input type="checkbox"/> Ten frames
<input type="checkbox"/> Linking cubes	<input type="checkbox"/> Fingers	<input type="checkbox"/> Stairsteps
<input type="checkbox"/> Geoboards	<input type="checkbox"/> Calculators	<input type="checkbox"/> Fact cards/sheets
<input type="checkbox"/> Blank cubes	<input type="checkbox"/> Dot cubes	<input type="checkbox"/> Math boards
<input type="checkbox"/> Coins	<input type="checkbox"/> Counters	<input type="checkbox"/> Wrap ups
<input type="checkbox"/> Number lines	<input type="checkbox"/> Other, specify:	<input type="checkbox"/> Part part board
<input type="checkbox"/> Hundreds (120) charts	<input type="text"/>	<input type="checkbox"/> Standard measuring tools



**H. Types of Representations** (check all those used in routine(s) and lesson)

<input type="checkbox"/> Drawing pictures/dots	<input type="checkbox"/> Tables
<input type="checkbox"/> Diagrams	<input type="checkbox"/> Break-aparts
<input type="checkbox"/> Graphs	<input type="checkbox"/> Labels
<input type="checkbox"/> Vertical equation/number sentence	<input type="checkbox"/> Number line
<input type="checkbox"/> Horizontal equation/number sentence	<input type="checkbox"/> Sticks/circles
<input type="checkbox"/> Make 3D model	<input type="checkbox"/> Tallies
<input type="checkbox"/> Look for pattern	<input type="checkbox"/> Other: <input type="text"/>

**I. Percent of time in each group size (in Routine plus Lesson):**

1	<input type="checkbox"/> Not at all	<input type="checkbox"/> 5-25%	<input type="checkbox"/> 26-49%	<input type="checkbox"/> 50-74%	<input type="checkbox"/> 75-100%	<b>Large group</b>
2	<input type="checkbox"/> Not at all	<input type="checkbox"/> 5-25%	<input type="checkbox"/> 26-49%	<input type="checkbox"/> 50-74%	<input type="checkbox"/> 75-100%	<b>Small group</b>
3	<input type="checkbox"/> Not at all	<input type="checkbox"/> 5-25%	<input type="checkbox"/> 26-49%	<input type="checkbox"/> 50-74%	<input type="checkbox"/> 75-100%	<b>Pairs</b>
4	<input type="checkbox"/> Not at all	<input type="checkbox"/> 5-25%	<input type="checkbox"/> 26-49%	<input type="checkbox"/> 50-74%	<input type="checkbox"/> 75-100%	<b>Individual</b>

NOTES



## J. Classroom Characteristics

Rate how characteristic the statement is of the class that you observed (check one box for each statement)

1 = **Not at All** (almost never)

2 = **Minimally** Characteristic (sometimes evident)

3 = **Strongly** Characteristic (frequently evident)

4 = **Extremely** Characteristic (almost always evident)

1	Students are cooperative and attentive to the lesson.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
2	Teacher spends a lot of time managing behavior.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
3	Student behavior disrupts the classroom.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
4	Students are perfectly behaved.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
5	Teacher used praise or rewards to maintain positive behavior.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
6	Teacher utilized nonverbal methods (that don't disrupt class) to manage misbehaviors (or no misbehavior was evident).	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
7	Class runs without disruption from student behavior.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
8	Students appear excited by the lesson (smiling, leaning forward, waving hands, starting easily and quickly on activity).	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
9	Students are actively engaged (asking questions, responding, working with materials, writing )	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
10	Students attended to the lesson in a passive way (looking at the speaker, sitting up, but with limited opportunity to talk or write or manipulate materials).	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
11	Students are off-task.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
12	Teacher and students have a warm, positive relationship.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
13	Teacher encourages students to help one another understand the math.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
14	Students help one another to understand math concepts or procedures.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
15	Peer to peer interaction about math occurs.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
16	Teacher has techniques for gaining class attention in less than 10 seconds.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
17	Students spend little time waiting or transitioning between topics.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
18	Transitions are smooth and students get to work quickly.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
19	Students need to wait for the teacher to begin or for other students to finish working before they work on next problem or activity.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
20	Teacher spends a lot of time giving directions.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4



**J. Classroom Characteristics** (continued)

Rate how characteristic the statement is of the class that you observed (check one box for each statement)

- 1 = **Not at All** (almost never)
- 2 = **Minimally** Characteristic (sometimes evident)
- 3 = **Strongly** Characteristic (frequently evident)
- 4 = **Extremely** Characteristic (almost always evident)

21	Teacher has materials prepared and ready for students.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22	Class time is spent on understanding or practicing math.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23	Students had easy access and permission to use manipulatives when working.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24	The teacher is fluid in her presentation of the lesson.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25	Students appear familiar with the materials and procedures used.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26	Students are given the opportunity to think and respond (i.e., adequate wait time is given).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27	During independent work time the teacher monitored student work. <input type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28	In monitoring student work, teacher followed through to ensure understanding.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29	Teacher differentiated curriculum for children who were <b>above</b> level.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30	Teacher differentiated curriculum for children who were <b>below</b> level.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31	Teacher differentiated curriculum for children who were English language learners.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**K. Please describe any supplementary materials or activities that you observed being used (if possible attach copies. Be sure to note the objective for the materials (reteaching concepts, extra focused practice, mixed practice or fluency on facts or procedures):**






---

**L. Additional comments (unexpected observations):**
