As the writer of this lesson plan, I am indebted to David Sobel, who has kindly given permission to its posting on the Osher Map Library website. Mr. Sobel is Senior Faculty in the Education Department at Antioch University New England in Keene, New Hampshire and the author of *Mapmaking with Children: Sense of Place Education for the Elementary Years.* Many of the original ideas for this lesson were drawn from Chapter 3 of *Mapmaking with Children*.

1. Learning Objective and Target

In the study of maps, students will analyze how maps represent the physical world and will demonstrate their learning by creating a map of the classroom and marking where they sit with an X on their respective individual seats.

Targets:

(1) I can tell make a map of the classroom with an X marking my seat.

(2) Another classmate can use my map to find my seat without knowing that I drew the map.

2. Curriculum Connections

This lesson is the second of five lessons about map skills. Students have time each day after lunch and recess to draw anything that interests them. This map skills unit of five lessons will draw on students' experience and interest in drawing, and in this unit they will be drawing maps. The first lesson revolved around a three-dimensional model of the classroom, including a performance assessment using a map of "Mr. Brown's Classroom" representation. This second lesson will build on those two classroom representations as students create their own maps of their classroom.

The Maine Learning Results standard relevant to this lesson is: <u>Social Studies</u>: D1 - Geographic Knowledge, Concepts, Themes, and Patterns:

Students understand the nature and basic ideas of geography. b. Create visual representations of the immediate neighborhood and community. c. Use basic maps and globes to identify local and distant places and locations, directions (including N, S, E, and W), and basic physical, environmental, and cultural features.

The Common Core Standards relevant to this lesson are: <u>Mathematical Practices, Grades 1 and 2</u>

- 1. Make sense of problems and persevere in solving them.
- 2. Reason abstractly and quantitatively.
- 3. Construct viable arguments and critique the reasoning of others.
- 4. [Model with mathematics.]
- 5. Use appropriate tools strategically.
- 6. Attend to precision.
- 7. Look for and make use of structure
- 8. Look for and express regularity in repeated reasoning.

3. Assessment

- <u>Pre-assessment</u>: Students were prompted the day before this lesson to draw a map of their bedrooms as a homework assignment. By reviewing those maps, I will be able to determine who has skills to represent a room.
- <u>Performance</u>: Each student will complete a map of the classroom and mark his or her seat with an X.
- <u>Personal communication</u>: I will observe how challenging it may be for each student to complete the map as clearly as necessary, and I will ask each student to "think aloud" how the student discovered whose seat it is. I will observe whether:
 - Students correctly found the seats marked by an X
 - Students adequately drew their maps to allow a classmate to find their seats marked by an X.

<u>Selected response (short answer)</u>: Students will complete a worksheet at the conclusion of the lesson.

4. Modifications Based on Student Profiles & Plans

5. Materials, Equipment

- *My Father's Dragon* by Ruth Stiles Gannett
- o enlarged map of Wild Island
- My Map Book by Sara Fanelli
- an outline map of the classroom drawn on paper with a pencil and using a perspective other than an aerial view
- o sheet showing pictorial, panoramic, and aerial views of a house and garden
- "Mr. Brown's Classroom" (20)
- Worksheets for "Mr. Brown's Classroom" (20)
- o document camera
- o projector

6. Instructional Strategies

Read-aloud, whole group discussion, self-evaluation, use of document camera to engage visual learners, questioning.

7. Lesson Procedure

NOTE: Continue reading aloud during reading periods each day *My Father's Dragon* and refer to the map of Wild Island at appropriate times for students to identify sites.

15 minutes:

Activator: Using a document camera, project the two pages in *My Map Book* by Sara Fanelli depicting her bedroom.

Questions:

- Does this look like your bedroom? Why or why not?
- How many people live in this bedroom? How can you tell?
- What is the book her sister reading about? How can you tell?
- Who is Tom? How do you know?
- What else do you see?

Using a document camera, project the two pages in *My Map Book* by Sara Fanelli depicting her neighborhood.

Questions:

- Does this look like your neighborhood? Is it different from yours? How?
- What is Mrs. Stone's son name? How can you tell?
- What is Sara's friend's name? How can you tell?
- How many dogs are in the map? Show me where, please.

30 minutes:

Using the document camera to project your work as it is created, use a pencil and draw doors, some tables, and a few other features on the prepared map of the classroom.

Questions:

- What are the objects I've chosen to draw on my map?
- How did I draw them? Why did I draw them that way?

Ask each student to draw his or her own map of the classroom and mark where he or she sits with an X on the map. No names are to be put on the sheet of paper.

Collect and then randomly distribute them, making sure no one gets their own.

Now, using the map as the guide, tell students to sit down at the place marked with the X on the map they're holding.

When everyone is relatively settled at what they have determined is the place marked with the X on the map, each student holds up their map; and the mapmakers identify themselves and say whether the map readers correctly read where the X is.

Questions:

- Was it easy to find the spot? Why or why not?
- When you look down on things, what do they look like?
- Do they look the same as when you look from the side?
- What would this table look like if you looked at it from the ceiling?
- What would a tree or this school look like from the sky?
- How can you tell how to hold your map?
- Which is the left side of the room on your map? Which is the right side?
- Does it matter which way you're facing?

Using the document camera, project the three illustrations of the house and garden using three different perspectives. Encourage students to use any perspective they feel most comfortable with.

Do a "thumbs-up/thumbs-to-the-side" self-assessment with the students.

- Did your map help your classmate find his or her seat?
- Were you able to find the seat marked with an X on a classmate's map?

5 minutes:

Distribute copies of "Mr. Brown's Classroom" and the accompanying Worksheet and ask students to complete it and return it to me.

Do a "thumbs-up/thumbs-to-the-side" self-assessment with the students.

- Were you able to complete the worksheet?
- Did you understand the map of Mr. Brown's classroom?

8. Instructions for Ed Techs, Aides, parents, other adults