Walking and Talking Geography:

A Small-World Approach

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When teaching geography to students in the primary grades, we should provide firsthand experiences that young children need to make meaningful sense of their world. First-through-third graders are not ready developmentally to learn how to identify species of animals living in a rain forest or to color code Earth's five oceans and seven continents. These activities—dealing with distant things and abstract concepts—are more appropriate for later elementary grades. David Sobel, author of Mapmaking with Children: Sense of Place Education for the Elementary Years, maintains that activities dealing with abstractions do not honor young learners' relationships with the local environment. Rather than helping children establish connections with their immediate surroundings, such activities can alienate young students from their local environment by sending the message: Important things are far away and disconnected from you; nearby things, the local community and environment, are unimportant. Sobel suggests that teachers in the early grades adopt a small-world approach to teaching geography, whereby instruction is designed to help students understand the geography that is closest to them.

In the unit of study that follows, a smallworld approach to teaching geography is achieved by engaging young learners in a series of "sense of place" activities related to their local environment. The local environment, the neighborhood surrounding the school, is meaningful to students and easy to explore. Basic skills are learned and practiced, such as representing aspects of the environment on paper and deciding what features to record and emphasize.

A Sense of Place

In this set of lessons, students construct knowledge of important concepts and relationships related to sense of place.2 This unit of study moves through the four stages of a "learning cycle:" 1) engagement, 2) investigation, 3) reflection, and 4) explanation/clarification. The lessons draw upon curriculum strand **PEOPLE**, PLACES, AND ENVIRONMENTS³ and were implemented with two classes of third graders. They take place over three days and involve two different environments: one imaginary (Mr. Fertig's Neighborhood) and one real (the neighborhood around the school). Students are involved in creating two different kinds of graphic representa-



tions of what they are learning: individual students create a four-part "report" with words and drawings, and small groups create diorama maps. Using the ideas presented here, we encourage teachers to create their own "walking and talking geography" activities.

1. Engagement: Mapping an **Imaginary Neighborhood**

We prepared to teach this unit by drawing a map of an imaginary neighborhood on

a muslin sheet pinned to a fabric board at the front of the classroom. This pictorial map of Mr. Fertig's neighborhood consisted of his home, car, and adjoining vegetable garden; a park with a large pond at its center; and four different types of stores, all connected by streets (**Figure 1**). Drawing the map on a black or white board will also work, but a muslin map can be saved for future use.

Other props used in this activity included a box labeled GARDEN and a cloth grocery bag that can carry these items: 1) one small cherry tomato; 2) three pinecones; 3) a gallon milk jug; 4) a book; 5) a screwdriver; 6) a paper sack labeled TOMATO FERTILIZER, and 7) one very large tomato.

Place the two tomatoes in the GARDEN box and have the rest of the items waiting on a chair nearby. Using the map and these props, two teachers engaged students with the following story:

Mr. Fertig's Neighborhood

NARRATOR: In a town not so far away from here there lived a man named Mr. Fertig who was known throughout the county for his amazing ability to grow prize-winning tomatoes. Now these weren't your ordinary tomatoes—oh no— these were big, red, ripe, juicy, delicious tomatoes! Each summer, people would come from miles around and gather outside his garden gate. They wanted to be first in line to buy a pound or two of his delicious tomatoes.

After eating lunch one beautiful Saturday afternoon in July, Mr. Fertig was resting in his favorite chair when he decided to go outside and check on his tomatoes in the garden.

MR. FERTIG: Well, I've read every book in the house and it's about time for a nice walk. I think I'll go check on my tomatoes.

The teacher playing the part of Mr. Fertig gets up from his chair and "walks to his garden" by tapping on the board where the garden is marked on the map. Throughout the drama, he steps in place while tapping out a steady rhythm on the board to indicate his location on the map and to simulate the pace of his walk.

NARRATOR: He plucks a tomato off its vine, but to his dismay discovers that it is disappointingly small.

Mr. Fertig takes the cherry tomato out of the box. An expression of embarrassment passes over his face.

MR. FERTIG: Oh no, this will never do! My reputation for growing prize-winning tomatoes will be ruined if these tomatoes don't start growing soon. I need to purchase some fertilizer!

Mr. Fertig places the little tomato in a grocery sack. As he grasps the handle of an imaginary garden gate, it creaks on its hinges.

NARRATOR: Creeeeek!

MR. FERTIG: This latch is in need of repair, but I don't have a screwdriver to fix it, I must remember to get one when I have the time. Well, I'd better get started!

Mr. Fertig walks in place in front of the board, tapping out the rhythm of his pace on the map.

NARRATOR: Mr. Fertig is concerned about his tomatoes, but he can't resist strolling around Pond Park on such a beautiful day. Ducks swim and quack ("Quack!") while geese fly and honk ("Honk!") in formation overhead. After a brisk walk around the park, Mr. Fertig stops to rest on a bench near a large pine tree.

MR. FERTIG: Hmmmm, what a wonderful walk. I think I'll take these three little pinecones to help me remember this place. Well, I'd better get going. I need fertilizer for growing prize-winning tomatoes.

Mr. Fertig taps on the board a bit more rapidly now as he hurries toward the store. He is greeted by a friendly salesperson, who can be played by the narrator.

SALESPERSON: Good afternoon. How may I help you?

MR. FERTIG: Hello, my name is Mr. Fertig and I'm known throughout the county for growing prize-winning tomatoes.

SALESPERSON: Oh! The famous Mr. Fertig!

MR. FERTIG: Unfortunately, I don't think this little tomato will be winning any prizes. Do you sell plant fertilizer here?

SALESPERSON: I'm afraid I can't help you with that. This is a bookstore and we sell many different kinds of books on every subject under the sun.

MR. FERTIG: Well that's all right, I could use a good book to read in the evening instead of watching TV. What do you suggest?

The salesperson shows him a variety of books.

SALESPERSON: Finally, may I suggest this one to you? It is all about mapmaking. It's called Me on the Map by Joan Sweeney and Annette Cable.

MR. FERTIG: Yes, that would be just the thing. I'll take it.

He pays for it, and places it in his sack. Mr. Fertig glances at

MR. FERTIG: Oh my, it's getting late and I haven't found any fertilizer yet. I must be going!

He waves goodbye and walks to the next store, tapping on the map to indicate his route and pace.

A similar scene is repeated with a grocery store (where he buys a jug of milk), a hardware store (where he buys a screwdriver to fix the handle on his garden gate), and finally a garden center (where he buys a paper sack labeled "Tomato Fertilizer." With his bag now quite full, he leaves the garden center.

NARRATOR: As Mr. Fertig crosses the street, he looks up and recognizes his own house. He has walked in a complete circle!

MR. FERTIG: I can't believe my eyes! That's my house over there, not more than 20 steps away. If I had only looked at a map before leaving today, I could have located the Garden Center and saved a lot of time and energy searching for fertilizer. But then again, I would not have been able to take this marvelous walk, and gathered all these useful things.

Mime the various activities that the narrator now describes.

NARRATOR: Mr. Fertig walks home, uses his new screwdriver to fix the handle on his garden gate, sprinkles the fertilizer over his tomatoes, walks inside and proudly displays the three little pinecones on a mantle above the fireplace, pours milk in a bowl with cereal, and sits down to enjoy reading his new book about mapmaking. What a busy day Mr. Fertig has had!

THE END!

To reflect on the story with students, display all of the artifacts Mr. Fertig collected from the locations he visited during his walk on a table in front of the class, though not in correct order. Tape seven pieces of paper to the front edge of a table in the front of the room. The papers should be labeled: "First Location," "Second Location," etc., up to "Seventh Location" (Figure 2). Invite a student volunteer to (a) tell the class which artifact Mr. Fertig put in his sack first (the little tomato), (b) show the location on the map where the artifact was found or purchased (you could have the student touch the correct location on the map with the artifact), (c) explain the importance of the artifact in the story (that is, how Mr. Fertig planned to use the artifact), and (d) place the artifact in order on the table above its appropriate label.

Select a second student volunteer to perform the same actions using the second artifact (the three little pinecones) and continue in this manner until six artifacts have been dealt with.

At this point, to add suspense, ask the children,

"Did you hear that? It sounds like something growing!" Walk back to the GARDEN box, pull out the very large tomato that evidently has responded to the fertilizer treatment, and exclaim,

"Now that is a big, red, ripe, juicy, delicious, tomato, sure to win a prize for Mr. Fertig!"

Put it on the table at the "Seventh Location."

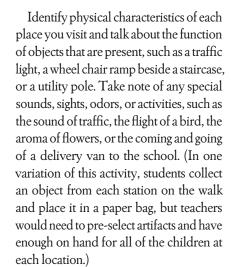
2. Investigation: **Exploring the Local Environment**

Ask students to name different places or things that they could visit outdoors on school property (such as the main entrance, playground, bus stop, fire hydrant, sidewalk, and new oak sapling). If you wish to arrange an on-foot field trip for the class, visiting the neighborhood close to your school, you could ask the students to brainstorm more broadly (naming places such as the city bus stop, the nearby creek, the food market, and the high school sports field).

Choose four places that you (as the teacher) would actually like to visit with your class, and then discuss with students what kinds of people, things, and activities they might encounter in each of the four places. Record students' predictions on chart paper for later reference.

Now go for a walk! Stop at the first place and sit in a large circle. Ask the children:

- ▶ What do you see at this place?
- ▶ What do you hear?
- ▶ What kind of place is this?
- ► Is this a place for children, for adults, or both?
- ► What do people do in this location? (Point to a specific object, such as a tree, door, or fire hydrant.)
- ► Would you call this a natural object or one that people have made?
- ► How long do you think it has been here?
- ▶ Why is it here?



Walk to the three remaining places, taking time to discuss and reflect on the local environment by repeating the cycle of questions (above) at each stop.

3. Reflection: Recording Our **Experience in Different Ways**

Upon returning to the classroom, show the students how to fold a sheet of paper in half across its length, and then again across its width. Unfold the paper to see that it is divided into four rectangular spaces. Have students label each quadrant, "First Location" through "Fourth Location." Then give them the following directions:

- 1) The first rectangle on your sheet of paper is for a drawing. In the first rectangle, sketch a quick picture that shows a thing that you saw when we stopped at the first location. This picture can be very simple. (Allow children two or three minutes to draw, and then give them a warning that you will be moving on to the next direction before you do so.)
- 2) The second rectangle on your paper is for words. In the second rectangle, write a word, or a few words, that describe what you saw or heard when we stopped at the second location.
- 3) The third rectangle on your paper contrasts natural things with the things that people build. In the third rectangle, write down something that you saw at the third location, and also write down whether this thing was "Created by Nature," or was "Made by People."
 - 4) The fourth rectangle on your paper



tells about what things are used for. In the fourth rectangle on your paper, write down what you saw, but also write down who uses this place, or who travels through it: adults, children, or both?

When students begin using their multiple senses to describe, draw and label pictures, explain and reflect on affective as well as intellectual experiences, they can begin to see themselves as integral components of their local environment. Unlike animals, insects, and plants that take many years to adapt to particular environments through a process of natural selection, human beings work together and use technology to adapt to diverse environments through the medium of culture.

During our walk around our elementary school, we visited a place near the school that had a stream and trees. There were ants in the grass for children to discover and birds overhead. We also encountered a place where construction equipment was busy transforming the land, preparing it for a housing development. We also passed by homes, businesses and two schools. This variation inspired some teacher-led discussions about development of the land and the continuum between completely natural landscapes and those dominated by human-made objects.

4. Explanation: **Creating Group Diorama Maps**

In this stage, students create diorama maps using a two-foot square piece of sturdy cardboard or thin plywood. The students can manipulate objects on the board representing the various natural and human features of the local environment. Wooden blocks, Lego, small cereal boxes, or students' 3D constructions made from colored tagboard can be used to represent homes, businesses, schools, and other buildings. People, animals, and different types of landforms can be molded from clay or salt dough.

Discuss how the places and things that the students observed on their walk might be represented on the dioramas. With the class divided into groups of four, each student can take responsibility for constructing a representation of one of the four places visited. In addition to representing features of the local environment, students can use their diorama maps to develop spatial relationships that show the relative locations of specific features of the landscape, using terms such as "next to," "in front of," "behind," and "across from." Labeling manipulatives on dioramas enables students to acquire the vocabulary needed to locate and discuss the attributes of places with greater precision and detail than they would have using memory alone.

The teachers in this project modeled for students how to use a magnetic compass to determine the cardinal directions by drawing a large compass rose on chart paper and placing it in proper orientation on the floor in the middle of the classroom. Students then used the compass rose as a guide to orient their own diorama maps correctly.

Conclusion:

What Children Learned

We concluded this unit of study by reading aloud Me on the Map.4 This is the story of a girl who loves to create maps. She maps her own bedroom, house, and the street on which she lives. Presenting the art of mapmaking as a personal quest for geographic knowledge fits well with a small world approach. Such stories motivate children to explore their local environment and raise awareness of the physical and human characteristics that make up their world, precisely what is overlooked by outside-in approaches to teaching and learning geography.

Throughout this unit, teachers created opportunities for learning geography in meaningful ways by scaffolding curriculum and instruction on students' prior knowledge and common experiences.

- ► From the story of Mr. Fertig's walk, children learned that an identifiable sequence of cause and effect events motivates people's behavior and that human action is purposeful.
- ► From their field trip and four-part report, students learned to think about the origin and purposes of objects in their own environment.
- ▶ From the collaborative effort to create dioramas, students compared and contrasted one another's ideas and suggested alternative modes of representation.
- ► And in all of these activities, students learned about representing "close-to-home" geographic features on paper with words and pictures. They gained experience engaging in the kinds of reasoning necessary for making and interpreting maps.

Finally, the students experienced a sense of success making and interpreting maps of a familiar environment. Taking a smallworld approach to teaching and learning geography in the primary grades enabled these students to learn from thoughtful reflection on their own experience.

- David Sobel, Mapmaking with Children: Sense of Place Education for the Elementary Years (Portsmouth, NH: Heinemann, 1998), 7.
- John W. Renner and Edmund Marek, The Learning Cycle and Elementary Science Teaching (Portsmouth, NH: Heinemann, 1988).
- 3. National Council for the Social Studies, Expectations of Excellence: Curriculum Standards for Social Studies (Washington, DC: NCSS, 1994).
- Joan Sweeney and Annette Cable, Me on the Map (New York: Crown, 1996).

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