LESSON PLAN

Name: Casey Corcoran
Date: October 9, 2002
Content Area(s): Social Studies and Mathematics
Unit Topic: Mapping
Today’s Lesson: Directions and distances
Grade Level: 3rd
Duration: 50 minutes

LESSON RATIONALE
New York State English Language Arts Learning Standards:

Standard 1: Students will read, write, listen, and speak for information and understanding.

  Key Idea 2: Speaking and writing to acquire and transmit information requires asking probing and clarifying questions, interpreting information in one’s own words, applying information from one context to another, and presenting the information and interpretation clearly, concisely, and comprehensibly.

New York State Learning Standards for Mathematics, Science, and Technology:

Standard 3: Students will understand mathematics and become mathematically confident by communicating and reasoning mathematically, by applying mathematics in real-world settings, and by solving problems through the integrated study of number systems, geometry, algebra, data analysis, probability, and trigonometry.

  Key Idea 1: Students use reasoning to analyze mathematical situations, make conjectures, gather evidence, and construct an argument.

  Key Idea 3: Students use mathematical operations and relationships among them to understand mathematics.

New York State Learning Standards for Social Studies:

Standard 3: Students will use a variety of intellectual skills to demonstrate their understanding of the geography of the interdependent world in which we live – local, national, and global – including the distribution of people, places, and environments over the Earth’s surface.

  Key Idea 2: Geography requires the development and application of the skills of asking and answering geographic questions; analyzing theories of geography; and acquiring, organizing, and analyzing geographic information

Instructional Objectives:
Students will:
1. Identify the cardinal directions with 100% accuracy. [Knowledge]
2. Compute distance between locations with at least 90% accuracy. [Application]
3. Plan the fastest way to get to a location with at least 90% accuracy. [Synthesis]
Adaptations:
- The student that is the “mileage reader” may bring a piece of paper along during the activity to record distances if it is too difficult to process mentally.

Materials:
- 1 plastic broom stick
- Cards depicting different locations
- Cards depicting stop signs
- Strings (roads) with mileage cards attached
- Cards depicting where the witch must go

LESSON OPENING

Anticipatory Set:

“Who remembers yesterday what type of map we created on the grids? (Map of a town) Yes, it was the map of a town that we created in our minds. What are some of the things we included in our town? (Listen for responses) Perfect! Now I have a question for you. If I was to actually use your map that you created in you imaginary town, what could you have added to it or did add to help me know how far away one place is from another? How about in what direction one place is from another? For example, how far away the bank was from the school? Or in what direction the school is in from the bank? (Look for answers, and try to hint towards the answer of “distances and compass/directions”)

Well, now that we know that providing distance and a compass should help us find locations easier, we are going to do an activity in which we are actually going to travel to different locations.”

LESSON BODY

Activities:
1. Explain directions to class about the activity and set up.
   - “I have some strings. These strings are roads, which are labeled with a number and a name. The name is the name of the road, and the number is simply the distance of that road. I will have some people hold the strings and be stop lights at the ends of the streets.”
   - Use cards to pick students and set the different roads up around the room.
   - “Ok now that we have our roads set up, I have made some different locations that we are going to place around these roads. I will call some people to come hold these signs and act as our locations.”
   - Use cards to pick names and give them a location.
   - “Some people will have to be our trees and lakes and will be placed around the room.”
   - Use cards to pick names and give them a location.
   - “Now we need one student to be our traveler and find different places on the map. This student will be “flying” around on a broom. I was going to bring in a toy car, but I thought since we were reading the book, The Witches, it would be a perfect fit. Also, you all think I am a witch anyways because I am a teacher! Also, we will have another person
that will fly around with the witch to different locations and be our mileage reader. This person will tell us how far the witch has traveled.”

• Assign students roles by picking cards and set up in the middle of the roads.

2. Teacher will pick a card out of the bag and read the card aloud. Tell the students that I must find that location and travel along the roads to get there. When I am traveling, I must announce the direction in which I am traveling. For example, North, South, East, or West. Once the person finds their destination, then the mileage reader can tell the class how far the witch traveled. This person can bring a piece of paper along with them in case they need to record the distances along the way. Teacher will do an example of this for the class. Ask if there are any questions.

[Modeling and Checking for Understanding]

3. Explain that once the witch found his or her destination, then I will pick two different cards and those people will trade positions.

4. Students will go through this by themselves. Teacher will pick a destination and ask questions regarding mileage and if there was a more time efficient way to get to that location.

[Independent practice and Checking for Understanding]

5. Students will put materials on back table and quietly go back to seats.

Closure:

“Today we were able to create our own map using our own bodies. Do you think that if the witch or ghoul had a map then it would have been easier for him or her to find the location? (Listen for responses) Did the key help us with finding our locations? How did it help us? (Listen for responses) When traveling to a location, were some routes or roads faster to take than others? Did it get easier for us to remember the direction we were headed as we went to more and more locations? I have one question to leave you with………. AM I REALLY A WITCH??????”

LESSON FOLLOW-UP

Independent Practice: Find what direction North, South, East, and West are from your house, and talk it over with your parents.

Evaluation:

What did you want the student to learn?

• How to interpret cardinal directions and distances from a map, and how helpful they are when reading a map.

How will you know that they learned it?

• I will listen to their verbal responses
• I will observe their actions when traveling on the broomstick.

LESSON RESOURCES

References for teacher use:

• NYS Social Study, Mathematic, and English Language Arts Standards