

Name: Jane Guthrie

Grade Level/Subject: 1 Math

Topic: Making and Reading Pictographs and Bar Graphs

Objectives (P.A.S.S.): Grade 1 Process Standard 5 : Representation

1. Create and use a variety of representations appropriately and with flexibility to organize, record, and communicate mathematical ideas (e.g. dramatizations, manipulatives, drawings, diagrams, tables, graphs, symbolic representations).
2. Use representations to model and interpret physical, social, and mathematical situations (e.g. counters, picture, tally marks, number sentences, geometric models; translate between digrams, tables, charts, graphs.)

Introduction: I started my presentation by explaining that the new chapter we were going into involved graphing and data. Answering the question, "What's data?" which I knew someone was going to ask, I told them it was information. I then told the class that in order to graph data, we had to gather some.

Instructional process: The first question I asked was who had pets at home; specifically dogs and cats. (Everybody did.) So I told them we were going to make a graph with pictures of dogs and cats. I gave them a large piece of paper with two rows marked at the beginning and the end. I passed out rulers and everyone drew lines between the marks making two large boxes. They then labeled them "Dogs" and "Cats." Using scissors, glue and old magazines, the children cut out pictures of dogs and cats and glued them into the appropriate boxes. When this was finished, we discussed the findings of everyone. The next step was to make a graph using the Graph Club and my laptop. I individually called each child to come to my desk and make a graph of his/her graph. Each child did this and really enjoyed doing it. The computer graph made both a pictograph (which each child could easily read) and a bar graph which showed the same information as the pictograph but in another form.

Closure: Using both the computer graphs and the physical graphs that each child made, we discussed each person's results and I explained how both the pictograph and the bar graph had exactly the same information. After explaining all this, we completed the page in the math book entitled "Reading a Pictograph."

Assessment: I made a graph of apples, grapes, oranges, and bananas. I asked each child to count the objects on the graph. Most of the children counted the apples but didn't count anything else. They also totally ignored the bar graph next to the pictograph. At the end of the lesson, which took 3 days, the children read the same graph, but this time, looked

at and read the bar graph too. Then they read their own computer graphs and correctly read both the pictographs and the bar graphs.

Modifications/Accommodations: I have no special ed. students or ESL students. Since the exercise with the computer was individual, I made no accommodations or modifications to this lesson.

Reflection: This lesson took longer than I thought it would but the children really enjoyed it. We have continued studying data and graphs in the rest of the chapter, and they don't seem to be having much trouble with completing the information.