

Who Measures What in Our Neighborhood?

A Project by a Kindergarten/First-Grade Class
at University Primary School, Champaign, Illinois
Length of Project: One semester
Teachers: Nancy Hertzog & Marjorie Klein

Phase One

Beginning the Project

The head teacher began the project by sharing a story about the wall in her house where family heights were recorded. Students shared many stories about being measured by a doctor and measuring to build things. They represented their memories with drawings, surveys, Kid Pix graphics, and models of measuring tools made of clay, Legos, blocks, rods, or boxes and junk. The teacher and class brainstormed words associated with measurement and categorized them to form a web. Students had questions about the ideas they generated. "What tools are used for measuring?" "How do measuring tools work?" "What things get measured?" "How do you measure with measuring tools?" "Why do we measure?" "Who measures what in our neighborhood?" Their questions guided their investigations.

Phase Two

Developing the Project

The students engaged in field studies and asked experts to answer their questions. Field studies included several neighboring sites: Children's Research Center, Illini Credit Union, ceramics studio, Fire Service Institute, State Water Survey, and a sheep farm. Visitors included a mechanical engineer, a food inspector, animal researcher, a potter, a pilot, a seamstress, and a father who brought his car to show the children what you measure in a car.

Phase Three

Concluding the Project

During Phase 3, students reviewed and reflected upon their work with the goal of communicating what they had learned. To conclude the project, students brainstormed and summarized what they had learned about *Who Measures What in Our Neighborhood?* Students also discussed how they would tell the story of what they learned about *Who Measures What in Our Neighborhood?* Students worked in small and large groups sharing comments, listening, and discussing the products that they were constructing for the open house. They chose a number of ways to share their findings. Some groups finished their representations that told about their fieldwork, while others worked on a fabric quilt, murals depicting the concepts learned, stories, homophones, poems, and PowerPoint presentations.

Comments

The students' reflections demonstrated that they now have a better understanding of how measurement is a part of everyday life. The vocabulary that they used in their second web showed that they increased their knowledge of types of measuring tools. This vocabulary extended beyond the typical kindergarten and first-grade mathematics curriculum. By using graphic organizers to analyze and draw conclusions from their data, students met and often exceeded Illinois Learning Standards for kindergarten and first grade. The students gained an awareness that measurement is a part of everyday life. In addition to rulers, scales, and tape measures, students learned about specific types of scales, including spring scales and balance scales. Students became more comfortable using measuring tools and measuring for their own purposes.



Representation of a coil machine that measures the depth of water.



Representation of a sheep gate that measures the size of sheep.



A dump truck in progress.