"Connecting Mathematics to the Real World"

A. Goal / Objective.

- **a.** The goal of this staff development is to teach/show math teacher how to effectively connect mathematics to the real world.
- **b. Mississippi Frameworks:** 5. Interpret and analyze data and make predictions b. Compare data and interpret quantities represented on tables and graphs, including line graphs, stem-and-leaf plots, histograms, and box-and-whiskers plots to make predictions, and solve problems based on the information. (DOK 2)
- c. Common Core: Represent and interpret data
- B. Concepts.
 - **a.** Recognize different types of graphs and charts.
- C. Materials
 - **a.** Newspapers and Magazines
 - **b.** Scissors
 - **c.** Typing paper

D. Management.

- **a.** Things to prepare ahead of time.
 - 1. Talk to principal and get approval for staff development topic.
 - 2. Inform the teacher of the meeting and the topic.
 - 3. Get newspapers and magazines
 - 4. Get enough scissors and typing paper for each group.
- **b.** Participant grouping
 - 1. I will have three tables, which will be set for four groups. Each table represents a different type of graph (pictograph, bar graph, pie chart).
 - 2. Place folded strips of paper with the name of a different graph on each strip in a cup.
 - 3. As the teachers enter the room, ask them to pull out a strip from the cup.
 - 4. The name of the graph on the paper the participant chooses will determine the table/group they belong.
- **c.** Time Frame
 - 1. The approximate time for the entire activity is 30-40 minutes.

E. Procedure.

- **a.** Introduction.
 - 1. Using prior knowledge, ask teachers several questions about graphs.
 - a. What are graphs?
 - b. What are the different types of graphs?
 - c. What do graphs represent?
 - 2. Tell teachers that today we will be looking for different types of graphs in newspaper and magazines.
- **b.** Content Activities
 - 1. Give each group a stack of newspapers, magazines, glue, scissors and typing paper.
 - 2. Tell the teachers to work with their group members to find as many of their graphs as possible in their newspapers and magazines and cut them out and place them on typing paper.

- *3.* Tell the groups to write a description for at least three of the graphs, describing what the graphs represent.
- 4. After all groups are complete, ask groups to present their findings to the other groups.

c. Closure

- **1.** Ask teachers if they benefitted from the activity.
- 2. Ask teachers to share if they think their students would benefit from using this activity.
- **3.** Explain to the teachers that by connecting the math concept to the real world it gives the students more meaning for the concept.
- **4.** Ask teachers to share whether or not they will use newspapers and magazines to teach this math concept in their classroom.
- **5.** Ask teachers to share what other math concepts they think they could use newspapers and magazines in.