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Mathematics Instruction Using Technology
March 9, 2012
Mean, Median, and Mode Lesson Plan

Title/Theme: Using Mean Median and Mode to Identify Trends in Baseball Game Attendance

Level: High School Math
Timespan: 3 Class Days + Out of class work if necessary
Frameworks: Mean, Median, and Mode

Assignment:

Teams of students will analyze attendance data from Major League Baseball ballparks to identify trends, and present the data in visually appealing ways. The students will use their understanding of mean median and mode, as well as their critical thinking skills to analyze the data and present it in a clear, and well-thought out way.

Sequence of Events

Day 1:

1. Introduce the assignment and put students into groups of 3 or 4
2. Teams pick 3 Major League Baseball teams to focus on.
3. They will then begin to analyze the attendance data for their teams by finding the info online.

Day 2:

1. The students will continue finding data and analyzing it to find various trends that involve mean, median, and/or mode. Examples would include mean monthly attendance over the course of the season, median attendance of home games vs. away games, and number of sellouts (mode).
2. As a team the students should identify three trends in the attendance data that they want to report on.
3. Once they identify the trends they want to use, (as an alternative to and a combination of the survey, non-internet activity and worksheet) the students will need to design a data collection sheet to show how they collected the data they used, and what data they used. This way they are not simply copying and pasting the info into Excel, the worksheet should show where the data came from, what the data means, why it's important to their trend, and the data itself.
4. They will then begin to construct graphs and tables using Excel to display their findings.

Day 3:

1. Continue work from Day 2.

Day 4:

1. Each group will present their findings to the class.

Technology Activities

1. Students will conduct appropriate searches using effective research strategies to find the data.
2. They will then analyze and browse the sites on which they find the data to compile it.
3. The data will then be compiled in Microsoft Excel, where tables and graphs will be created. (At least one graph for each trend)