Tina's Texting Tragedy

Summary

Students will be able to display numerical data to give meaning; give quantitative measures (mean, median, center, spread, interquartile range) as well as, describe patterns and deviations and use these skills to solve real-world problems related to cell phone usage.

Main Core Tie

Mathematics Grade 6

Strand: STATISTICS AND PROBABILITY (6.SP) Standard 6.SP.2

Time Frame

1 class periods of 60 minutes each

Group Size

Small Groups

Life Skills

Character

Materials

Copy of the task sheet

Pencils

Paper

Calculator

Any manipulatives students may choose to help them solve the problem.

Background for Teachers

- Curriculum Guide for Grade 6 Statistics and Probability Standard 4
- Curriculum Guide for Grade 6 Statistics and Probability Standard 5

Student Prior Knowledge

Students will need to have:

A working knowledge of how to organize and understand data

Opportunities to review phone bills

A working knowledge of key vocabulary related to statistics

Intended Learning Outcomes

Students will be able to display numerical data to give meaning; give quantitative measures (mean, median, center, spread, interquartile range) as well as, describe patterns and deviations. They will use these skills to make decisions about cell phone usage.

Strategies for Diverse Learners

Sub-task A

For struggling students: What does "unlimited texting" mean?

Sub-task B

How do you make a "box & whiskers plot"?

What parts do we need? How do we find the average? What is a quartile? What is an outlier?

For advanced students, demonstrate at least one more way to represent/prove your answer(s).

Extensions

Present additional task as follows: 1. Change the number of free texting minutes to 350 per month 2. Cost of texting 351-500 messages is \$.25 3. Cost of texting from 501-up messages is \$.35 4. Now how much money would Tina need to earn to pay her mom back?

Bibliography

Adapted from: Smith, Margaret Schwan, Victoria Bill, and Elizabeth K. Hughes. "Thinking Through a Lesson Protocol: Successfully Implementing High-Level Tasks." Mathematics Teaching in the Middle School 14 (October 2008): 132-138.

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