

Census at School: A Grade Five Introduction to Data Management

Abstract

This lesson plan is designed to supplement existing curriculum surrounding data management in the junior level classroom. The lesson was designed and successfully implemented with grade four students, but could be used, with modifications, in grades 4 and six as well.

Students take a class period to complete the online Census at School survey. The teacher then prints the resulting data, which is used to introduce and teach concepts in data management, including making tallies and various graphs, and calculating mean and mode.

The use of class-generated data lends relevance and meaning to mathematics lessons. Students are engaged by the use of technology, and take a sense of ownership in their work when they manipulate the data collected.

Students of diverse ability are able to participate in the lesson through minimal accommodations. Collaborative learning allows stronger students to scaffold the learning of struggling classmates.

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Subject/Course: Math

Name: Jessica Redmond

Grade Level: 5

Date: Nov. 30, 2004

Topic: Graphing Census Data

Time: 9:50-10:30

1. Instructional Expectations and Opportunities

The grade 5 learners will:

a) Expectations:

- Interpret survey results
- Make bar graphs and pictographs
- Calculate the mean and the mode of a set of data

b) Opportunities:

- Enjoy working in teams
- Use data from the census in schools activity

2. Preassessment

a) Learners:

- Have just completed chapter 3 in their math texts on data management.

b) Learning Environment:

- I will break students into groups of 2 (and one 3)
- Half the teams will work in the hall on the floor, half at the tables in the classroom.

c) Resources:

- Copies of relevant census data for each group
- Scratch paper for each group
- Graph Chart paper for each group
- Meter stick for each group.

4. Strategies *(continued)*

b) Consolidation of Learning:

As I check in with each group, I will ask:

- How are you going to graph your data? Why?

c) Application / Reaction:

- Students will have completed a graph of some data from the census at school activity by the end of the period.

5. Assessment

One mark for each of: title, horizontal axis labeled, vertical axis labeled, all data included, data accurately represented, appropriate scale used, graph is appropriate to the data, graph is neatly presented. (total 8 marks)