A Number a Day

Summary

This activity is designed to help students understand:

- The concept of number and its relationship to the calendar
- What a calendar is and how it can be used to keep track of time
- One-to-one correspondence and sequencing numbers

Time Frame

3 class periods of 15 minutes each

Materials

Software

- Drawing or painting (e.g., Kid Pix Studio, Kid Works Deluxe), Presentation (e.g., Kid Pix Studio, ClarisWorks for Kids, AppleWorks)

Other

- Presentation equipment to display Web sites to the whole class (large screen monitor, LCD panel, or classroom television connected to a computer)

Background for Teachers

Most primary grade classrooms begin the day with a discussion about the day, date, weather, and so on, setting the tone and context for the activities that follow. As students study the current day, its name, and its number, they develop mathematical ways to express the number (e.g., equations, birthdays, number of boys or girls in the class, number of teeth lost so far that month, etc.).
Using information found on Web sites, students create a more complete record of their representations of the day's number. This record can be created using drawing or painting software, videotaped for school announcements, published in a classroom newsletter, or inserted on a classroom Web page.
Note: The complexity of this activity is determined by students' current mathematical understandings. The Web sites provided in the Instructional Procedures section should be explored thoroughly for information that will best help students. In addition, using weather-related literature significantly enhances the study of the day, the date, the season, and so on.

Instructional Procedures

1. As part of opening activities, students complete sentences such as: "Today is ---," "Yesterday was ---," "Tomorrow will be ---," "The day before yesterday was ---," and "The day after tomorrow will be--." Use numerals with each date as well as the word: for example, "Today is Tuesday, March 10th."
2. Facilitate a discussion about the number that represents the date. Ask students to express the number in many different ways and relate it to things in the classroom (e.g., number sentences and equations, number of students with siblings, a birth date, the number on a football jersey, the dates on money, etc.). When they have finished, have students record these ideas using a whiteboard or chart paper, or using drawing or painting software.
3. Guide the class in visiting a Web site that further explores the number. As the class exhausts its own ideas, facilitate further exploration by demonstrating or pointing students to various Web sites that show the day's number from different perspectives. Students enjoy finding ways to express numbers that are similar to their own.
4. Keep a visible record of student discoveries. Periodically have students examine their results as a group to see if any patterns emerge in the ways to represent numbers. By discovering patterns,

students will link some of the more complex mathematical concepts to real information, earlier than scheduled on the district's scope and sequence!
5. Make connections to other curriculum areas, including history. For example, although primary grade children have not studied Egyptian culture, the mathematical connection to the contributions made by this and other cultures can be simplistically introduced to build understanding about the rich contributions many peoples have made to mathematical understanding. Have students display their findings about numbers, patterns, and history by drawing pictures, creating multimedia presentations, and any other method or activity that is appropriate for the developmental level of the students.

Extensions

The calendar and the number of the day are parts of a daily discussion in most primary classrooms. Students become adept at coming up with original ways to express a number. Using the Internet as a resource to add to the class's activity enriches and expands what students can learn. Consider having students use a digital camera to explore their school environment and photograph the graphic representations of the various numbers used in the date. Look for unusual places where numbers are found-in a public building, building numbers, streets, room numbers, codes for parts of mechanical devices, and so on. Our students have enjoyed this "treasure hunt for numbers."

Assessment Plan

Observe students working in groups or individually to explain how the day's number occurs in their environment. The explanations are presented to the entire class and published as part of a classroom newsletter, as a feature on the school's daily announcements, or posted on a classroom Web site. Keep anecdotal notes on how students are able to connect the various expressions of numbers to other classroom experiences.

Bibliography

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