Lesson Plans for Classroom-on-Wheels

World Wide Web

Subjects

- Educational Technology
- Vocational Education
  -- Computers

Grade

- 3-5
- 6-8

Brief Description

A fun grouping activity teaches about databases. Then students test kid-friendly search engines to find the best one.

Objectives

Students will

- learn what a database is.
- learn what a search engine does.
- learn how to formulate search criteria for a search engine.

Keywords

technology, computer, search engine, database

Materials Needed

- computer with Internet access
- Search Engine work sheet

Lesson Plan

Explain to students that a database is a name given to a collection of items. Point out that a telephone book is a database of phone numbers; a zoo is a database of animals; a library is a database of books; a classroom is a database of students. Brainstorm other databases with
students. They might mention, for example, an encyclopedia or dictionary, a sports team, a video rental store, or a restaurant menu.

On the interactive whiteboard write a list of categories, such as age, eye color, hair color, and favorite ice cream flavor.

- Call out the first category (age) and have students raise their hands based on their age. Write the number of groups beneath the category name. You might have two groups of students based on age -- for example, eight-year-olds and nine-year-olds.
- Call out the second category (eye color) and ask students to raise their hands based on both age and eye color. Write the number of groups beneath that category name. (You might now have six groups for example, blue-eyed 8 year-olds and blue-eyed 9 year-olds; green-eyed 8 year-olds and green-eyed 9 year-olds; brown-eyed 8 year-olds and brown-eyed 9 year-olds.)
- Repeat with one or more additional categories.

Ask students what they noticed as they participated in the activity. They should point out that the groups got smaller and smaller, that a database contains many smaller groups within the large group, and that those groups can be arranged in a number of ways depending on the criteria used.

Tell students that the World Wide Web is a database of Web sites. Within that database are billions of Web sites on millions of different topics. Ask: How can you find information you need on the World Wide Web without looking through each of those billions of Web sites? Most students will know that the answer is "by using a search engine. Explain that search engines sort the information on the WWW into smaller groups of information based on criteria the user specifies -- just as the categories on the chalkboard were used to create smaller and smaller groups of students. Ask: Why is it important to enter the most specific information possible when using a search engine?

Invite students to explore various criteria and learn about some search engines for kids by completing the Search Engine work sheet.

Assessment

Answer Key: (The following are the results of my search. Answers may vary.)
1. 0; 2. 0; 3. 5; 4. 0; 5. 0; 6. 5; 7. 1; 8. 19; 9. and 10.

TECHNOLOGY
GRADES K - 12
NT.K-12.1 Basic Operations and Concepts
NT.K-12.3 Technology Productivity tools
NT.K-12.4 Technology Communications tools
NT.K-12.6 Technology Problem-Solving and Decision-Making tools

Lesson plan slightly modified http://www.educationworld.com/a_lesson/02/lp285-04.shtml