South Carolina Geographic Alliance CarolinaCaching: Global Positioning Systems

Using GPS Devices in the Classroom

GPS devices can be used to create engaging, creative lessons that allow kids to problem solve! The use of GPS devices appeals to almost any student. It allows for kinesthetic movement, cooperative learning, problem solving, the use of spatial intelligence, playing with innovative technology, and treasure hunting (what kid doesn't love that?!?).

Here are some things you should remember about GPS devices and classroom experiences:

- Don't let the technology intimidate you! Children are "technology natives" (while most of us are "technological immigrants") and will catch onto using the GPS devices more quickly than you!
- GPS devices do not work well inside buildings. It is better to use them outside!
- The maximum number of children who can work well with a GPS device is 2 or 3. Since the devices are small, it is difficult to have large numbers of students working with one device. There will be students who inevitably get "left out."

Ideas for using GPS devices in the classroom:

- Using the GPS device and Google Earth, teach students real-world application of GPS technology!
- Teach students real-world uses of latitude and longitude!
- Create a scavenger hunt.
- Take a geocaching field trip where students have to find out information at historic locations! Check out www.geocaching.com for more information.
- Create a puzzle that students must solve to figure out latitude and longitude coordinates of where you have hidden a "treasure" or clues to find other locations.

Example:	35 N 80 W
	OR
	35.ABC.DEF 80.GHI.JKL

Math Idea

The 2nd missing digit in your longitude coordinate = the common denominator of these 2 numbers: 18 and 24.

Science Idea:

C = the answer to the question: How many cups equal a pint?

Social Studies Idea:

When did WWII begin? The 4th digit represents the 2nd missing digit in your latitude coordinate.

Language Arts Idea:

Read the following sentence. Count the number of personal pronouns. A = the number of personal pronouns.

Music Idea:

Find the number of whole notes in the first line of this song. D =the number of whole notes.

Foreign Language Idea:

Write the coordinates in a foreign language and have the students use their knowledge of the language to figure out the coordinates!

The possibilities are really endless for the use of GPS technology in any classroom!

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