Gathering Weather Information

Summary

Students use weather data and information found on the Internet to predict weather patterns.

Time Frame

6 class periods of 45 minutes each

Group Size

Individual

Life Skills

Thinking & Reasoning

Materials

video clip or picture showing a local weather disaster Internet access or daily weather maps daily forecast and/or NOAA Weather Radio thermometers wind gauge cloud charts barometer

Background for Teachers

This lesson plan has some great Internet links but it will not teach you how to interpret weather data. If you are unfamiliar with weather patterns, cloud charts, etc... then you will need to do some personal study.

Intended Learning Outcomes

Make observations, measurements, and predictions. Use reference sources to gain information. Identify variables and describe relationships between them. Collect and record data. Analyze data and draw warranted inferences. Understand science concepts and principles.

Instructional Procedures

<u>Day 1</u>

Introduce the lesson by asking students question such as:

What is the weather forecast for today?

What is the weather forecast for tomorrow? Next week?

Why is it important to know what the weather will be like?

2. Show <u>clip</u> on weather disaster. Talk about instances where knowing the weather beforehand has been helpful in the students' lives.

3. Use Internet maps or daily weather maps to teach students how to do general predictions. Hand out 'Today's Weather' sheet (see link below). Have students use instruments to get local conditions. Days 2-5 Take 10-20 minutes out of class and have students look at weather maps and make their own predictions. Have them go out and take current conditions. Come in and listen to <u>local</u> NOAA <u>weather radio</u>.

<u>Day 6</u>

Have students do Day 6 on their own at home. (They will have to guess at actual temperatures and wind speed.)

Conclusion

Once students have collected weather data for six days, instruct them to graph, analyze, and interpret their data. Instruct them to look for trends and draw inferences.

Extensions

Challenge students to collect weather data on their own for a month. Encourage them to note patterns and explain weather trends. Provide several years worth of data to your students and ask them to generalize local weather patterns.

Research how new technologies have changed scientists' understanding of atmospheric systems. Describe how technological advances in meteorology have improved the quality of life.

Assessment Plan

Give students weather data that is valid but with which they are unfamiliar. Ask them to graph, interpret, and analyze the data. Instruct them to use the data to predict upcoming weather.

Authors

ROB WAGNER