Lesson Plan for Middle School Science Feature Analysis

(Note: See Literacy and Learning, Analogical Guides and Feature Analysis video lesson for an illustration of this lesson in action.)

Topic: Energy

Objectives: The students will...

- 1. revise their conclusions about the different types of energy based on information gathered during research
- 2. make generalizations about each type of energy from data shown on chart

Set Induction:

The teacher asks the students if they would like to learn about a way to summarize their research findings.

Activities:

- (Students have recently finished research projects on different types of energy and will be using the feature analysis chart to summarize their findings.)Review results obtained on the original feature analysis chart. Explain to the students that the results may change based on the research that has been completed.
- 2. Using a different colored chalk or marker, change results on the feature analysis chart to reflect new research findings. Leave the previous lesson's results on the chart so students can easily spot discrepancies. Discuss the differences for each type of energy, and ask students to give reasons why these differences may occur.
- 3. Ask students to come up with generalizations about each type of energy based on research results shown on the feature analysis chart. For example, students should be able to state which type of energy would be best suited to their home environment, and which would be the least suitable.





Closure:

As the lesson comes to a close, the teacher may ask the students to use the feature analysis chart in such a way as to assess student understanding or students may be asked to verbalize their understandings based upon the feature analysis grid. Students will be asked to share how the feature analysis technique worked for them and how they might use this technique again.

Assessment:

- 1. The group responsible for each type of energy should be knowledgeable enough to complete their portion of the feature analysis chart without difficulty.
- 2. Students will complete generalizations in their science journals for homework.

Resources and Materials:

Per student:

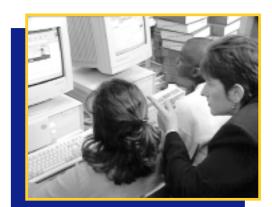
Science notebook with original chart

Pencil

Report on specific type of energy

Per class:

Chalkboard or overhead with chart drawn Colored chalk or markers



Other Applications

Feature analysis may be used within any content area class and for any grade level. It is important to remember that adequate time should be provided to students when they are developing the grid. Students develop the data grid based upon the research they have conducted. Also, time should be given for students to synthesize and to make generalizations about the data grid.

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Reaction Guide		
Teachers can use analogies to help students better understand concepts.	Agree	Disagree
Cooperative learning groups used in conjunction with literacy strategies support comprehension.		
Feature analysis is a useful literacy strategy for compiling data and making generalizations.		