Lesson Plan

Grade Level: 6           Subject: Science
Teacher: K. Hensley

Materials Needed:
Computers
Story Boards
Quiz
Alice program

Education Standards Addressed:

Objective 1.01
Identify and create questions and hypotheses that can be answered through scientific investigations.

Objective 1.02
Develop appropriate experimental procedures for:
- Given questions.
- Student generated questions.

Objective 1.04
Analyze variables in scientific investigations:
- Identify dependent and independent.
- Use of a control.
- Manipulate.
- Describe relationships between.
- Define operationally.

Objective 1.05
Analyze evidence to:
- Explain observations.
- Make inferences and predictions.
- Develop the relationship between evidence and explanation.

Objective 1.07
Prepare models and/or computer simulations to:
- Test hypotheses.
- Evaluate how data fit.
Objective 1.08
Use oral and written language to:
• Communicate findings.
• Defend conclusions of scientific investigations.

Objective 1.09
Use technologies and information systems to:
• Research.
• Gather and analyze data
• Visualize data.
• Disseminate findings to others.

Objectives:
Students will review the steps of the Scientific Method. They will use these steps to prepare a computer simulation of the appropriate experimental procedures for a given topic.

Focus:
I will have each student write an Acrostic Poem that defines the steps of the scientific method.

Direct Instruction:
I will design an Alice program that reviews the steps of the scientific method and show a demonstration of a computer simulation that demonstrates the appropriate experimental procedures for a topic.

Guided Practice:
Students will complete a story board that goes through each step in the scientific method for their topic.

Independent Practice:
Students will work independently on computers in Alice programming to demonstrate the use of the experimental procedures for their topic.

Assessment:
Students will be graded by rubric on their world in relation to the assignment.
Closure:
Class presentations of worlds and class discussion about the importance of the scientific method.