Student: Kaleigh Narracci Date: 2/15/12

Grade: 6 & 7 Topic: Weather Forecasting Content Area: Science

**Instructional Objective**

Objective: After the completion of a jigsaw activity identifying the different characteristics and symbols on a weather map, the students will be able to present their weather map’s forecast and make predictions for tomorrow’s weather in a region of the United States. The students will complete the task with at least seventy-five percent accuracy.

**Standards and Indicators**

NYS Science Learning Standard #4:

The Physical Setting: Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.

Key Idea #2.2i/ P.S. 2.2i:

Students should develop an understanding of Earth as a set of closely coupled systems. The concept of systems provides a framework in which students can investigate three major interacting components: lithosphere, hydrosphere, and atmosphere. Processes act within and among the three components on a wide range of time scales to bring about continuous change in Earth’s crust, oceans, and atmosphere.

Weather describes the conditions of the atmosphere at a given location for a short period of time.

Indicator:

This will be evident when the students are able to present their weather map’s forecast and make predictions for tomorrow’s weather in a region of the United States

General Skills:

Students will follow safety procedures in the classroom and laboratory.

Indicator:

This will be evident when the students are able to present their weather map’s forecast and make predictions for tomorrow’s weather in a region of the United States

**Motivation**

The students will watch a weather forecast.

**Materials**

* SMART Board
* Laptop
* Weather Forecast
* PowerPoint on Weather Forecasting
* Weather Maps
* Colored Pencils

**Strategies**

Direction Instruction: the teacher will deliver notes on weather forecasting to the class.

Jigsaw: Jigsaw is a cooperative learning strategy that enables each student of a “home” group to specialize in one aspect of a learning unit. Students meet with members from other groups who are assigned the same aspect, and after mastering the material, return to the “home” group and teach the material to their group members.

**Adaptations**

The children with severe learning disabilities will receive aid from their peers and the teacher throughout the jigsaw activity.

**Differentiation of Instruction**

Tier 1: The students will be able to present their weather map’s forecast and make predictions for tomorrow’s weather in a region of the United States after discussing it with the teacher.

Tier 2: The students will be able to present their weather map’s forecast and make predictions for tomorrow’s weather in a region of the United States.

Tier 3: The students will be able to present their weather map’s forecast and make predictions for tomorrow’s weather in a region of the United States. The students will then draw the next day’s forecast as they do on the news.

**Developmental Procedures**

* The students will receive notes on weather forecasting and the different aspects of it. *(Ok so what are the different fronts we learned about? Air masses? Pressure systems? Which is associated with fair weather? Stormy weather?)*
* The students will be broken up into groups to work on labeling different aspects of the forecast on a map. *(Which station model are you drawing? Is the wind moving fast or slow here? Is it an area of high pressure or low pressure? What temperature is affecting the region?)*
* The students will switch groups and reteach their classmates the next aspect of weather forecasting, there will be four groups. *(Which station model are you drawing? Is the wind moving fast or slow here? Is it an area of high pressure or low pressure? What temperature is affecting the region?)*
* The students will present their weather forecasts in front of the class. *(What type of weather should we be expecting? What’s occurring now?)*

**Assessment**

The students will be able to present their weather map’s forecast and make predictions for tomorrow’s weather in a region of the United States. The students will complete the task with at least seventy-five percent accuracy.

**Independent Practice**

For homework, the students will watch the weather forecast that night and write one paragraph describing the weather we will be experiencing in the next week.

**Follow-Up: Direct Teacher Intervention and Academic Enrichment**

Direct Teacher Intervention: The student, under direct intervention with the teacher, will label a weather map.

Academic Enrichment: The students will predict the five day forecast based off of their weather maps.

**Teacher References**

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Daniel, Rillero, Snyder, & Zike, (2007). *Glencore science: New york science*. New York, NY: McGraw-Hill Education.

Denecke, E. (2008). *Let's review: Earth science the physical setting*. (3rd ed.). Whitestone, NY: Barron's.

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