Student Learning Plan

**Name:** Johnathan Gamon

**Subject:** Earth and Space Science

**Grade:** 11

**Goal:** To provide the students with background information on the importance of weather and flight.

*Importance of the lesson, relevance for students*

By the end of the lesson the students will be able to list three to four aspects of the weather that affect flight and how through the generations weather prediction has changed due to changing technology. They will be able to evaluate various atmospheric situations and distinguish whether or not they would be potentially hazardous. The students will be able to relate this information to modern day flight and see how their personal flights and war base flights could be affected by the weather.

**Related Primary and Secondary Sources:**

Real time weather data from the national weather service (www.nws.noaa.gov)

http://radar.weather.gov/ridge/Conus/southplains.php

(http://lcweb2.loc.gov/diglib/vhp-stories/loc.natlibafc2001001.0222/enlarge?ID=pm0003001&page=1&size=1024)”
“Washington, D.C. The U.S. Weather Bureau station at the National Airport. Flight advisory weather service. Here pilots in flight are warned of adverse weather conditions that might affect the safe operation of the aircraft.”

Driscoll, Fred, photographer.

The comparison of these two photo’s will illustrate how through the years, weather prediction has changed. In the top photo, we have a modern day radar monitoring weather over Texas. In the above photo taken in October of 1943, we have a group of people trying to monitor the weather for the war efforts. It was vitally important that the officials in charge of the early weather predictions were accurate so that flight missions went as expected.

Secondary Resource: General text book

Expected Duration: 3-4 Days

Objectives

Academic Standards:

X Pennsylvania __ National (SPA)

3.4.7 C

3.5.7 C

Assessment method:

1. Standardized testing would allow the student to exhibit cognitive knowledge.
2. Having the students complete a project related to the material at hand.
3. Classroom discussion (open ended questions) with the students and teachers.
Objectives are:

X Cognitive   ___ Affective   ___ Psychomotor

Student Objectives: *(related to assessment)* As a result of this lesson, the students will be able to:

By the end of the lesson the students will be able to list three to four aspects of the weather that affect flight and how through the generations weather prediction has changed due to changing technology. They will be able to evaluate various atmospheric situations and distinguish whether or not they would be able to relate this information to modern day flight and see how their personal flights and war based flights could be affected by the weather.

Content Notes and Questions for Students:

1. Why would it be important for the military to have precise weather predictions during wartime efforts?
2. Explain what type of weather patterns may affect flight and how by monitoring weather, potential disasters could be avoided.
3. Provide and example of when weather forecasts were used during World War One and Two.

Professional Development

Thoughts before/after Teaching the Lesson:

I feel that this lesson could go very well. I think that the students would enjoy learning about this and to intertwine such information would be beneficial in understanding how we rely on all aspects of science to benefit us in many ways.

Additional Notes