Taylor Lewis
Methods of STEM Education Elementary
Data Integration Assignment
Due: 6/24/19

Data Source

Title: National Hurricane Center and Central Pacific Hurricane Center Tracker
Link: https://www.nhc.noaa.gov/tracking_charts.shtml

Lesson Enhancement

This link shows data for the National Hurricane Center. The website provides blank hurricane tracking charts so that students can follow along and also track the weather systems. As a future session plan, I will incorporate hurricanes as a topic. First, I will show a short video clip of a hurricane and the damage it caused. Then, I would ask the students to describe what they saw using adjectives and descriptive language to express their ideas about the hurricane itself and the destruction it caused. Then, I will read a short informational text about hurricanes that contains new vocabulary words. The students will be asked to answer comprehension questions based on the passage and to define the new vocabulary words using context clues. Using the hurricane tracking sheets, the students would then be asked to plot the points of a hurricane. Then, using descriptive language they will describe the characteristics of the hurricane and the path it took.

This data resource enhances the lesson because it provides the students with a real-life example of the topic they are learning. The students will be able to visualize the path of a real hurricane and will be able to sequence its steps and describe its characteristics. Often times speech goals are addressed in the contexts of literacy and language arts however, I find students become more captivated in lessons that incorporate science, engineering and technology.

Therefore, by using real-life weather phenomena and its corresponding data it will definitely pique the students' interests and get them excited to work on their speech goals.

In my speech room, I take data in every session. Whether I am measuring the students' accuracy on a specific goal, assessing their language skills using a standardized test, or tracking the presence of a behavior, I am always taking data. I highly appreciate the use of data because it allows me to determine the amount of progress a student is making toward a goal. The data also helps me to see where the student's break down lies and which goals should be created in order to help remediate these deficits.

Interdisciplinary Context

The reason for using this data source is to enhance the topic of hurricanes and help students see and use actual data from real weather phenomena. The use of this data will also allow the students to tie in different components from various academic disciplines. The topic of hurricanes involves the discipline of science because hurricanes are a type of weather condition. By using hurricanes, students can be taught about wind currents, rain fall and other components that tie into extreme weather conditions like hurricanes. The discipline of mathematics can also be incorporated into this lesson because the students will plot the coordinates of the hurricane onto their hurricane tracking sheets. This will allow them to learn about graphing, coordinates, longitude and latitude. Social studies is another discipline that can also be incorporated into this lesson. The students could learn about various historically destructive hurricanes (i.e., Katrina, Gloria, Sandy) and the widespread effects they had on the communities they hit. The students might also learn about what structures these communities built and put in place to prevent future damage as a result of these hurricanes. This lesson can also tie into the discipline of engineering because the students could design their own hurricane shelters. They could also design and build

miniature structures that would help prevent against hurricane wind or storm surge damage to the

land and buildings.