

Authentic Data Integration (10 Points)

Data can be used to engage students and bridge their classroom investigations to research done beyond the classroom. Data-driven decision making and student-centered investigations are highly valued by The Next Generation Science Standards and Common Core State Standards. Data-driven classroom activities are key to integrated STEM.

1. Select a data source on which to focus this assignment. Your instructors provide many examples in the live sessions, discussions and resource page for this course. You may use one that you find outside this course as well.

2. Components of the assignment:

- a) **Data source:** provide a title for the data and the SPECIFIC link for access.

Grades 6-8 Activity Guide- http://www.nasa.gov/pdf/630754main_NASAsBESTActivityGuide6-8.pdf

- b) **Lesson Enhancement:** Describe how the data enhances a topic that you currently teach or plan to teach. Include a 1 paragraph statement about your personal feelings regarding using data.

The data provided in the activity guide has helped me prepare myself for the new STEM class that I am teaching for middle school this trimester. I will be using the information to share with students that the engineers at NASA also have to do research to better prepare them for their projects.

Before taking this methods class I would use the data collected by our teachers to help guide me with my lesson plans. Administration wanted me to use the data as a guide to integrate lessons that would reinforce the categories that students tested low in hopes that student scores would improve the next time students took the test.

- c) **Interdisciplinary context:** How can the data be used to create interdisciplinary lessons, discussions or activities in your classroom. How can you connect to multiple content areas?

In the past I have used our data to guide me in what lessons I should focus on with each grade levels data collected after the testing that is given on our campus. I have used our data in the past and have created on lesson that covered multiple subjects. Example: Design and create a “Theme Park”. Students in third grade designed the theme park using a sheet of graph paper to assist them in reinforcing “area and perimeter”. Then students had to price each ride and food item at the park and practice their math skills in finding out how much people would spend at the park. Students also had to create a flyer on pages to promote their theme park. The unit took several weeks and reinforced math and language arts within the project as a whole.