

Strom Leadership PD Proposal

1. What is the title of your leadership project?

Integrating Authentic Data with NASA Assets

2. Which option did you choose and why did you select the option/topic?

I will be planning and leading a professional development session. I chose this as I feel it will allow me to directly share the NASA assets I learned about in this course with the other science teachers in my department. Additionally, this enhances our department's current goals of increasing student engagement with rich, generative phenomena.

3. Who is your proposed audience? Which teachers will you serve with your PD and activities? What grades, subjects, and how many students do they teach?

I will present to our science department in a department meeting. Our department has 8 total teachers (including myself) in addition to our school's data coach and our AP who attend meetings as well. Collectively, we serve all of the students in our school (~900) via the following classes: honors biology, honors chemistry, honors physics, honors anatomy & physiology, AP biology, AP chemistry, AP environmental science, AP physics 1, AP physics 2, and AP psychology.

4. How will your project demonstrate integration of STEM in the classroom?

I will share out my experience in the program with our teachers. Then, I will show examples of how I have incorporated NASA assets learned through this program in my classes across a wide variety of contexts. I will have teachers look through NASA assets and select at least one that they could incorporate into their coursework and describe when/how they would use that data source in their teaching.

5. What outcomes or expectations do you hope to see for your educators?

I hope that teachers leave with 2 understandings: (1) NASA has data/assets that can be used in a wide variety of contexts beyond space (which is a conception I had when starting this program) and (2) the value of authentic data in expanding students' understanding of and engagement with the science practices. Currently, our department is engaging in a book study of *Ambitious Science Teaching* and I believe that this proposed presentation will assist them in selecting generative and authentic phenomena that can be supported with datasets for students to work with and learn from.

6. How will you follow up with the teachers in attendance?

Teachers will fill out a survey (exact structure yet-to-be determined) in which they will reflect on their learning experience and also describe how they intend to incorporate a NASA asset in their teaching. At the next department meeting, I will follow up with teachers and ask them to share out their teaching experiences, reflecting on student engagement with their chosen NASA asset.