

What is the title of your STEM professional development?

Implementing Real World Data and Applications to Increase Student Involvement in STEM Content.

Why did you select the topic?

I selected this topic because I wanted to update teachers on what opportunities are available to our students in regards to STEM content integration within our school. In addition, I wish to implement crucial data points and review over how to teach data through engaging and hands-on activities within the classroom. This topic will also demonstrate how various resources can be used to supplement the new science curriculum.

How does your PD integrate NASA assets and/or content from the Endeavor courses?

My professional development will integrate new data from various NASA missions and resources. In addition, a brief review over resources that have been made available from the Endeavor courses will also be covered. This PD will also demonstrate how NASA assets and content from the Endeavor courses can be used to complement the new science curriculum as well as general subjects within the classroom.

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?

My proposed audience will be K-5 teachers at Sunset Park Elementary School who have an increased interest in science education and making science content more accessible to all students within our school. In a sense, finding out what ways we can move Sunset Park Elementary School more towards a STEM oriented school. Teachers who teach K-5 as well as teach a variety of subjects will be invited to this professional development opportunity.

What STEM concepts or learning goals will you and your materials address which can potentially replace other classroom activities? List NGSS and CCSS or your state standards.

This professional development will cover different ways how school staff could implement more STEM concepts and content within the classroom. Not necessarily replacing other classroom activities but instead complementing those activities that already exist in the classroom. In addition, implementing different ways to incorporate more hands-on activities within the classroom. In other words, making STEM content more accessible to all students who show an increased interest in STEM content.

How long will the session be? How will you recruit your audience? Where will you advertise your PD session?

This professional development session will be approximately one hour long with various breaks. This professional development opportunity will be advertised via email and announced the week the professional development is being offered.

To demonstrate that teachers have learned something new, you will generate a pre- and post-survey. What, in general, will your pre-survey and post-survey ask?

In general, my pre-survey and post-survey will ask about the comfort level that teachers have with teaching STEM content within their classroom. In addition, questions will also be based around what resources teachers will need in order to feel successful with teaching STEM content in the classroom.

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

I hope to see an increased level of comfort with teachers teaching STEM content within their classroom. In addition, an outcome from this professional development is teachers having an increased knowledge and understanding of what STEM opportunities are available to their students. I also hope to increase teacher's motivation level by teaching STEM content within the classroom.

How will you follow up with the teachers in attendance?

I plan to follow up with all teachers who attend the professional development not too long after the PD session.

What data collection methods (e.g., surveys, interviews) will you use to analyze the PD's success?

Post-surveys will be sent out via email to all participants who were at the professional development. In addition, interviews will be conducted with at least one teacher in each of the K-5 grades.