

Leadership Proposal
Steve Gray

1. What is the title of your STEM professional development?

“Defining STEM”

2. Why did you select the topic?

In our district our we have not been intentional with vertical alignment associated with STEM. I feel this Professional Development (PD) offers an opportunity to start a dialogue among teachers and administrators about what STEM is. Using a science concept, common to all grades of the Missouri Learning Standards, as a phenomenon the group will work together to identify the components and associated working definitions of each. Using this foundational underpinning, teachers and administrators can begin to understand how successful they have been at implementing STEM in the classroom as individuals and how they can work together to make sure the standards are being addressed grade to grade using STEM in the classroom.

3. Who is your proposed audience (minimum 12)?

In talking with my administrators, they have agreed to have our entire staff of 30 teachers and administrators attend the professional development session at an upcoming district-wide PD day.

Which teachers will you serve with your PD and activities? What grades, subjects, and how many students do they teach?

Teachers from all disciplines will attend: Elementary (Pre-K through 6) and Junior High and High School Math, Science, ELA, Art, Business, Agriculture, Foreign Languages, Music, Social Studies, Physical Education and SPED. Additionally, Principles and the Superintendent will attend. The total student population associated with the teachers is 229.

4. What “general” science or mathematics concepts or learning goals will you and your materials address which can potentially replace other classroom activities?

Using the concept of Weather and Climate and a 5-E lesson approach attendees will explore STEM across grade levels.

5. How and where do you intend to carry out your PD?

The PD will be held in the commons area of the high school. One hour has been allocated for the training. The date is set for the afternoon of October 8th, 2018. Each teacher will be asked to bring their Chromebook so they can experience the materials we use as their students will.

6. What outcomes or expectation do you hope to see for your educators?

By the end of the hour my hope is that teachers and administrators can begin to understand what STEM looks like in our classroom, how successful we have been at implementing STEM into our individual classrooms and how we can work together to make sure the standards are being addressed grade to grade by using STEM in the classroom.

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

I will follow-up with all attendees via email and offer continued support. I will send out two surveys and I will briefly follow up with the group in February at the next scheduled "all-staff" PD.

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

Within a week, I will send a survey using Google Forms to all in attendance seeking feedback on their feelings as to the effectiveness of the training as related to influencing their thoughts of STEM and the use of STEM in the classroom.

After the end of the semester, but prior to February 1 I will send a second survey asking for input on how the training impacted their lesson development and integration with other teachers.