Adriana Salazar

Mandatory 3: Proposal Submission

1. My project will be split into two 30-minute proposals, and the title of the presentations are: Introduction to the Next Generation Science Standards, and Introduction to the 5E lesson plan- integrated lessons for hands-on learning.
2. I selected this topic because the school I work at is developing curriculum that is strongly aligned with NGSS and aims to integrate STEM more efficiently. I recently gave a short presentation at a staff meeting and asked my peers about their comfort level with NGSS and technology. Out of a team of twenty-eight teachers, only one of them was comfortable with the idea of being able to implement STEM effectively. There will be a strong need for these teachers to learn about it from this point moving forward.
3. My professional development includes Science & Engineering Practices, Cross-Cutting Concepts, and Disciplinary Core Ideas. It will also include the 5E style of lesson planning and will focus on aligning lessons to the NGSS.
4. My proposed audience will be my early education/elementary teacher peers. I find that the transitional kindergarten and kindergarten teachers could also benefit from my presentation information as well. The teachers I will serve with my professional development and activities are the team of preschool through prekindergarten teachers. I will also offer the professional development and activities to the team of TK/kindergarten teachers if they are interested. This team of early

educators teach all subjects, except physical education. In total, the number of students from preschool through transitional kindergarten taught by this team is roughly around 300 students.

5. The STEM concepts my presentation and my materials will address that can potentially replace other classroom activities is the cross-curricular integration of science, technology, engineering, and math activities. This can be taught to include art as well. By showing teachers how to effectively plan a lesson using the 5E model, they can enhance their teaching through hands-on and engaging learning activities that will represent all subjects. These developed activities can replace ones that are currently being used but that may not be as effective. NGSS standards: CA state standards- Kindergarten (https://www.cde.ca.gov/pd/ca/sc/ngssstandards.asp)
6. I intend to carry out my professional development at the next monthly staff meeting in February. The session will be held for one hour and the meeting will be towards the end of the month. Teachers will have access to computers for the pre- and post-surveys.
7. For my pre-survey I will ask general questions regarding my peers' personal knowledge of NGSS, technology, and cross-curricular implementation. I would like to know their comfort level with these topics, as well as how interested they would be in using this information after the presentation. I would also ask them what barriers do they currently face in STEM integration, and/or what barriers do they foresee coming across while trying to be creative in implementation? For my post-survey, I will ask if they would like

follow-up sessions of my presentation; if they would like more information; if they would like assistance with implementation or demonstrations; and feedback on the presentation itself.

8. The outcomes I hope to see for my educators is that they develop a greater understanding of NGSS and STEM education. I hope they see the bigger picture, and that they learn that this is an easier way to teach; I hope they find as I have that STEM is fun and exciting for both students and teachers alike. I hope they find my presentation information helpful and useful to their planning.
9. I will follow-up with the teachers in attendance through surveys; I would also speak with them in person if they would like to.
10. The data collection methods I will use to analyze the success of my professional development is surveys and interviews.