

Proposal for Professional Development

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Practicum for STEM Leadership

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September 11, 2022

Shartzler Leadership PD Proposal

Title of PD: STEM Across the Curriculum

I am a science teacher at heart and often hear my fellow colleagues from other subject areas make statements about STEM. They often say, “STEM is only for science, or something like, How does STEM apply to social studies or English? etc.” Therefore, I chose Option 1 to implement a professional development experience with the hope that I might be able to help my fellow colleagues from other subject areas see that STEM is not just a science strategy, but a strategy that can be used across several disciplines. It’s true that STEM is often referred to as science, technology, engineering, and mathematics, but it can also refer to students and teachers engaging the mind as I discovered from an Endeavor training a couple of summers ago.

My target audience then will be educators from various disciplines and various grade levels. Most likely the targeted audience will be upper elementary and middle school. However, I believe the activities could be adaptable to lower elementary and even high school. I will introduce STEM, science, technology, engineering, and mathematics, and STEM, students and teachers engaging the mind. Basically, I’m hoping to help students and teachers by engaging the mind as a way to help students develop what is often called the 4 C’s (Collaboration, Communication, Critical Thinking, and Creativity) that integrates standards that are cross-curricular but helps students make connections to the real world. The 4 C’s is part of the professional development that I received training on through the Endeavor Program here in Kentucky and I will also use some of the NASA Classroom resources to demonstrate STEM with a focus on Newton’s Laws, a little bit of history, and the help of some trade books.

I will present my professional development to a group of teachers in November at the “GRREC STEM-Fest 2022”. I will briefly share what the 4C’s are and provide various activities using the 4’C process highlighting how it could be used across subject areas. I would also like to share how these activities could be a way for teachers to also collaborate with each other and even demonstrate to students that cross-curricular subjects do cross over and don’t always occur in isolation. I believe a way I could gather feedback and be able to follow up with teachers is by generating a presurvey and a post-survey.