

1. Title
  - a. Phenomena & Inquiry Based Learning with Real Life Application
2. Which Option did you choose and why?
  - a. I chose option 1, the Professional Development option, because I can do it with a group of my colleagues in the building that I work in. This provides convenience for me and my fellow teachers, and also provides me with the largest possibility of impact for my current and future students. The option of doing an article seemed rather lengthy and the chance of impact on my direct place of work is probably lower than choosing to do a PD with my direct colleagues.
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?
  - a. My proposed audience is my content-area team and the instructional coaches in the building. I will be serving the science teachers and instructional coaches so that they can take the information back to their classrooms and the IC's can share the instructional methods with teachers all over the district. I teach 6<sup>th</sup> grade science and serve 135 students, the 7<sup>th</sup> grade science teacher serves 128 students, the 8<sup>th</sup> grade science teacher serves 131 students, the STEAM teacher serves 6/7/8<sup>th</sup> grades and 394 students, and our instructional coaches serve 30+ teachers and over 500 students.
4. How will your project demonstrate integration of STEM in the classroom?
  - a. Looking back at my Methods of STEM Education class from the Fall of 2021, I went back through my Nature of STEM assignment and realized that even still, my science department doesn't have a firm grasp on *what* STEM education really is. My PD will focus on phenomena-based learning, student inquiry, and putting real-life application on the standards that we are required to teach. Presenting a phenomenon to the students without context and having them engage in inquiry relates directly to the nature of STEM & the NGSS Practices; by having students engage in genuine inquiry, we are teaching them to question what they see and know, to be lifelong learners, and to develop an understanding of content beyond just memorizing facts.
5. Outcomes
  - a. I hope that through this PD, my fellow science teachers will begin to present phenomena to their students and allow them to ask questions and formulate ideas before they teach them the facts/theories in the standards. I hope that they have their passion for learning reignited and can see the spark in their students minds when they are asking questions about the phenomenon that's been presented.
6. Follow-Up

- a. I will be using a Google Form to follow up with my teachers in attendance as well as conversations with the instructional coaches for further guidance/modifications of my strategy.