

Linda Scarth
Mini Proposal - **Using the Real World in Your Classroom**

I am the Elementary STEM teacher in my school district. I work in 7 Elementary schools. My job is to develop STEM/STEAM projects and train the teachers how to teach them - and through that - train them to incorporate STEM/STEAM into their classrooms. I have already worked with teachers on many of the topics covered in our classes; we have coded on scratch, connected makey makeys and developed input devices, created missions and run robots through them in maker clubs, etc... So I have been trying to think of a meaningful PD i could run that would not be redundant - and would incorporate some of the amazing resources I have learned about through these courses. I would be training 20 teachers who teach K-5 plus special areas. Our school has approximately 300 students.

I also helped run a curriculum writing session over the summer where each grade created NGSS/ NYSSLS aligned lessons for one unit. We are almost finished presenting those at grade level meetings. The one thing I feel like we haven't really developed is using real world problems/data to drive lessons. We are also in the process of adding a native butterfly garden to our school. We are trying to find standards based lessons for all the grades that can be taught through the garden. So when my principal said I could do a grade level meeting I thought this might be a good topic that teachers could start to use even with all the other things they have going on and maybe some of the real problems concerning the garden could also be addressed.

I am hoping to create a hyper-doc in our shared google drive that teachers can access and add to with links organized by topics that they feel they can use. This would make it easy for them to access live data and other websites whenever they need them with their students. so part of my presentation will be on the benefits of using real world problems and data with students, and the second part will be on what is a hyper doc and how to use it. I am planning for teachers to add to the hyper doc as we continue to grow and incorporate more resources. I will have a 40 minute faculty meeting for this presentation. I am planning to create a survey to determine how much people are currently using real world resources prior to this PD. I am planning to give the survey again in June to see if there has been any change. Here are some of the resources I am going to include but I will add more as the teachers let me know what they need-

<https://oceanservice.noaa.gov/kids/>

<http://www.noaa.gov/education>

<http://www.noaa.gov/education/education-resource-collections>

<http://www.noaa.gov/resource-collections/weather-systems-patterns>

<http://www.noaa.gov/resource-collections/life-in-estuary>

<http://nasawavelength.org>

<https://earth.google.com/web/data=CgQSAggB>

<https://earthengine.google.com/timelapse/>

<https://www.5gyres.org/faq>

<https://flowingdata.com/tag/national-geographic/>