

Using the NASA 5E Template to Create
Science Inquiry Lessons
A PD Proposal
by Lynette Sigh

Most teachers are familiar with the STEM Acronym yet they do not know how to create integrated hands-on STEM lessons. I chose the above topic because I want to teach teachers how to create simple inquiry based, relevant, fun STEM lessons.

The NASA Endeavor classes have provided me with many self-created resources; such as, simple one page slide Power-points, hands-on lessons, and STEM websites links. This Professional development will utilize many of these resources. Scaffolding strategies will be used to support the teachers.

Because of my passion for STEM, several teachers in my school and outside of my school, have shown an interest in understanding how to create STEM lessons. My proposed audience will be administrators, teachers, and our school STEM Team. My audience will also include teachers in other schools and teachers in countries outside of America. Overall, my audience caters to over 400 students. I will use staff meetings and social media to reach my audience. We are still working out the session dates and time, but overall it will be one hour, broken up into different sessions. All teachers must have access to a computer and/or social media to participate.

The STEM concepts addressed will include the 8 practices of Science and Engineering (NGSS, 2013). The emphasis will be on inquiry learning; asking questions, creating models,

using evidence, and communicating learning. The pre and post survey will provide baseline data; such as, attitudes about STEM, goals, inquiry learning knowledge, and needs.

My overall outcome is to model and assist teachers in creating simple interdisciplinary STEM lessons. This will be an interactive PD. The first session will define 5 E inquiry lessons and provide resources of inquiry questions. The next session will include working individually with teachers to create inquiry lessons which include dynamic investigations. The final session, will include showcasing each teachers' lesson.

My follow up will include assisting teachers in showcasing their STEM lessons to the community. Data collected from a survey will also be part of the follow-up. The survey will cover knowledge learned and information and new confident level when creating STEM lessons. A follow-up committee consisting of the STEM team, will be available to provide continuous support to teachers.