

Amy Hurlock Zock
Kelly Shirk
Leadership Proposal: Mini Professional Development

1. **Mini Professional Development Project Title:** STEMIFICATION: Beyond Science and Math Diving Deeper Into the True Nature of STEM in ALL Classrooms

2. **Justification:**

Between time constraints and content demand, English Language Arts (ELA) and Social Studies (SS) teachers may feel they have been left out or all together forgotten in the STEM mania of today. This cannot be further from reality, a truly strong STEM education is an education as rich in its humanity as it is in science.

3. **School Name(s):** Eastbrook Middle and Valley Point Middle

Number of Educators: 20 grade level content teachers combined from both schools
(2 instructional coaches, 3 VPM ELA, 3 VPM SS, 6 EMS ELA, 6 EMS SS)

Grade Level(s): Sixth, Seventh, and Eighth Grade

4. **Brief Summary of Project:**

Ms Shirk and Ms Zock work at separate schools which feed the same high school. Their joint venture into the NASA Endeavor STEM leadership program is part of an effort to unify these feeder schools in their approach to STEM education and integrated technology through jointly developed STEM labs and Robotics programs.

Collaboratively they have designed this professional learning session to highlight ways ELA and SS teachers can infuse STEM thinking to reap academic rewards far beyond the scope of traditional learning formats. Ms Zock will be focused on the ELA integration and Ms Shirk will be focused on the SS component.

The professional development will be held during common planning time at each school and will highlight the following:

NASA and ENDEAVOR Assets and Strategies:

- Use of data sources from NASA: “E” in Engineering and STEM Foundations
- NASA Express newsletter opportunities and resources
- CODING connections: Coding Robotics, and 1:1 Devices
- Critical and Computational Thinking theory and practice: Coding Robotics, and 1:1 Devices, “E” in Engineering
- Incorporating DATA into argumentative writing: “E” in Engineering and STEM Foundations
- CSET connections to DATA and Computational Thinking
- Sentence STEMS and other SIOP Strategies
- TIERED vocabulary and syntax
- Literature Connections

5. **Feedback:** Google form feedback and Pre Interest Survey