

1. Geronimo

2. The title of our project is “Cross Curricular STEAM Implementation.” “*Jump into the STEAM*” Geronimo was a project selected by a small group of teachers from the Hart County Kentucky area. We implemented a professional development experience. We used an ongoing lesson that we created during our Math Connections class which connects science and math standards as a way to reach our students in middle grades. While showing this sample lesson, we also discussed how students benefit from using STEAM projects across content areas to enhance their learning experiences.

3. Group Members: Tonya Handley, Teresa Robertson, Amanda Wilt, and Maegan Trent

4. Our proposed audience was all grade level math and science teachers from kindergarten to 8th grade, including special education teachers. We will also identify ways to bridge the gap with our special education population. We would like to work with teachers from any of these grade levels and content areas to have a learning progression in our schools/district. While our focus is on math and science, any content area could benefit. (Typical class sizes at these levels are 25-30 students per class.) We highlighted the use of NASA resources as a way to make real-world connections for students and teachers in ways they may have never realized. Our sample lesson focused on the geometry and physics of parachutes. The NGSS connects with physics (Forces and Motion) in Kindergarten, Third, Fifth and middle school grades. These

same grade levels have common mathematical standards in measurement and geometry. However, the ideas we use could be beneficial to any grade level interested in addressing multiple curricula at once. We will integrate a STEAM lesson that we used to bridge science and math curriculum while also providing suggestions for ways to incorporate technology, art, social studies and language arts.

5. Feedback from the professional development activity included the following:

Teachers enjoyed the hands-on resources that were given to incorporate stem into multiple disciplines. Math and science was explained through the use of designing a parachute, career exploration was done through Onet and an intentional math connection was made. Students created parachute trials which allowed them to experience failure and revisited their original plans to make improvements. Math can be fun and still cover content. Leadership was demonstrated through the use of a collaborative Google classroom resource to bring all educator ideas together. Encouraging working with colleagues in order to cover standards while keeping the activity engaging.

Best presentation of the day. Great job!

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Peer feedback

