

Proposal Submission

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TITLE:

Developing your STEM Coordinator Position

WHY:

As the head of the Science Department at Christ the King, I was part of the team that successfully integrated our STEM program to become the first Florida Catholic Conference STREAM accredited school in the state, as well as becoming a Finalist for 2018 National Future of Educational Technology Conference STEM Award of Excellence. The STEM Coordinator must be able to teach, collaborate with and learn from both teachers and students. I create multidisciplinary lessons with classroom objectives in NGSS, math, engineering and technology. This presentation will show how the STEM Coordinator should be the liaison between community stakeholders, funding resources, parents, and school administration. My goal is to educate other teachers and administrators in how to successfully integrate a STEM Coordinator into a STEM program.

NASA INTEGRATION:

In the process of demonstrating the methods of integrating the STEM Coordinator position, I will utilize two specific long term hands on projects integrated into our middle school and 5th grade curriculum. The first will be our Colonizing Mars project which utilizes 3 specific JPL activities and data collection devices (Rover Design, habitat design and utilizing satellite data to analyze Earth). The second project (5th grade) is our Managing Florida's Oceans and Waterways which utilizes satellite monitoring data, as well as NOAA buoy data specifically in State of Florida waterways.

PROPOSED AUDIENCE:

This PD will be a one hour presentation at the Florida Association of Science Teachers (FAST) conference in Miami, Florida on October 25th through the 27th, 2018. The conference includes elementary, middle, and high school Science and STEM educators from around the State of Florida. The audience will also include school administrators.

STEM Concepts or Learning Goals AND Expected Outcomes:

In this session, I will discuss successful integration of a STEM Coordinator while addressing the following specific topics: setting goals for a STEM program including long term and short term projects; curriculum integration especially related to cross curricular collaboration to allow for better utilization of class minutes and resources (especially NASA resources and NOAA resources); the need to seek funding through community business partners and grants, parent and community involvement to enhance your STEM program efforts; developing after school activities as an extension of your STEM program; grading and assessment, and impact data collection. The purpose is to meet the specific needs of your school and STEM program utilizing resources within your community. This will make the STEM work done with your students relevant and provide a solid foundation for a culture of STEM.

How and where to you intend to carry out your PD?

In June of this year, I applied to be a guest speaker at this years' FAST Conference in Miami, Florida. The conference will be on October 25th through October 27th at the Hilton Miami Airport and Convention Center. I have been invited to speak on Friday, October 26th from 9:30-10:30. This is a BYOD Conference and WIFI will be provided.

PRE/POST Survey

The pre-survey will be a simple Google Survey about STEM Coordinator positions and general knowledge about these positions. The post survey is similar plus there is a survey provided by the FAST Conference coordinators about the usefulness of the presentation.

Pre-survey questions:

1. What type of STEM program do you currently have at your school?
2. What are the ages of the students taught at your school?
3. Do you have a STEM Coordinator at your school?
4. Do you currently use NASA resources in your class?

Post-survey questions:

1. Do you believe a STEM coordinator could improve your STEM program?
2. Would you like a list of resources for your STEM program? (Please include e-mail address)
3. Do you plan to use NASA resources in your classroom in the near future?

Follow-up

I will receive an email address and basic information from every educator attending the session (from the FAST). As follow-up I will be sending a copy of the slide show information as well as a resource list that will include my NASA, NOAA and other website resources.

Data Collection to analyze PD's success

I will utilize the surveys provided by the conference on the effectiveness of the session and suggestions for improvement and follow up. The surveys are digitized for effective analysis.