Mandatory 3: Proposal Submission.
Submit a 2-page project proposal plan which includes the following:

• What is the title of your STEM professional development?
"Teaching Through Technology"

• Why did you select the topic?
I selected the topic of technology integration because as a school we are on the path to fully implementing STEAM framework, so knowing and utilizing technology to enhance the lessons and making it more interesting and creative is imperative. Our students use technology all the time so to make sure that they are engaged in their learning, we must integrate technology explicitly.

- How does your PD integrate NASA assets and/or content from the Endeavor courses.
In the spring session of the endeavor course I took the course called Coding, Robotics, and 1:1 devices. That course helped me learn about many technology tools that are available for us to use to make teaching more interactive, personal, and creative. Teaching students to code is very important as it helps them critically think and become more aware of the technological world around them. We also learned about flipping the classroom where the teacher records mini lessons and guides students through their learning. Flipping classroom is a great way to make learning more differentiated and a way for teachers to become more of facilitators than lecturers.

- Who is your proposed audience (minimum 12)?
My proposed audience are the PreK - 8th Grade Teachers plus subject teachers which makes it total of 18. Plus usually our assistant teachers also take part in PD which will make the number go to 30.

- Which teachers will you serve with your PD and activities? What grades, subjects, and how many students do they teach?
  - **Early Childhood Center**
  Preschool (# of students: 13) - 1 lead teacher (All core subjects) + 1 assistant
  PreKindergarten (# of students: 18) - 1 lead teacher (All core subjects) + 1 assistant
  Kindergarten (# of students: 21) - 1 lead teacher (All core subjects) + 1 assistant
  Primary Montessori (3-6 age group) (# of students: 28) - 1 lead teacher (All core subjects) + 3 assistants
  Elementary Montessori (6-9 age group) (# of students: 18) - 1 lead teacher (All core subjects) + 1 assistant
  Arabic language teacher (Teaches all grades in the Early Childhood Center)
  Religious Studies teacher (Teaches all grades in the Early Childhood Center)
  - **Main Campus of School**
    - **Elementary Section**
    Grade 1 (# of students: 17) - 1 lead teacher (All core subjects) + assistant

Grade 2 (# of students: 18) - 1 lead teacher (All core subjects) + assistant
Religious Studies Teachers (Grades 1 and 2) - 2
Grade 3 (# of students: 20) - 1 lead teacher (All core subjects) + assistant
Grade 4 (# of students: 24) - 1 lead teacher (All core subjects) + assistant

- **Middle School Section (Grades 5 - 8)**
  ELA Teacher (# of students 43) - 1
  Math Teacher (# of students 43) - 1
  Social Studies Teacher (# of students 43)- 1
  Science Teacher (# of students 43) - 2
  Religious Studies Teacher (Grades 3 - 8) - 3
  Arabic Language Teacher (Grades 1 - 8) - 1 lead teacher + assistant

• What STEM concepts or learning goals will you and your materials address which can potentially replace other classroom activities? List NGSS and CCSS or your state standards.

Since I am dealing with a large grade band of teachers, my PD will concentrate on introducing them to different age appropriate technologies to use in their classrooms. Each grade band will be supplied with the standard that they will have to work with and the technology that will integrate within their lesson and be able to execute it themselves.

- Preschool - KG & Primary Montessori will integrate Dash & Dot robot to teach mathematical concepts
- Grades 1 - 4 & Elementary Montessori will use digital storytelling to integrate technology their ELA lessons
- Grade 5 - 8 will use digital tool such as tinkerCAD to plan and design a model to integrate with their PBL.

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

  I will hold the PD at my school

- How long will the session be? When will it be held? Will teachers have access to computers?

  The session will be an hour to hour and half long (minimum). It will be held on October 11th, 2019. The teachers will have access to computers.

• What, in general, will your pre-survey and post-survey ask?

Some of the questions that I will ask in Pre-survey will be:
How comfortable are you with using computers?
How important do you think it is to integrate technology in your lessons?
How often do you use online or off-line technology tools to help in your lessons?
Have you had any experience with coding or robotics?
What are your thoughts about blended learning?

Some of the questions that I will ask in the Post-survey:

How comfortable are you now with using computers?
How would you rate the quality of a lesson that has integrated technology?
Can online or off-line technology tools help to make your lessons interactive and engaging?
How do you feel about adding coding or robotics to your lesson plans?
Can blended learning help in the process of teaching and student learning?

• What outcomes or expectation do you hope to see for your educators?

The outcome I want to see in my teacher is the willingness to try and feel more relaxed about integrating technology. I am not looking for overnight change but definitely I want to provide them with tools that they can slowly add to their lessons to make it more engaging.

• How will you follow up with the teachers in attendance?

As I look over their lesson plans, I will see whether I see any integration happening or not. Since I don't want to push them or overwhelm them, I will have one on one meetings with them and help them see where they could have added technology to make their lesson more engaging.

• What data collection methods (e.g. surveys, interviews) will you use to analyze thePD's success?

In my post survey I will have a small section to rate my PD and get their feedback.