



## 2018-19 Duke Energy Foundation STEM Grant

DEADLINE October 18, 2018 4:00 pm Foundation Office via Jackrabbit or Email

- This Classroom Grant is for 2018-2019 school year.
- Funds must be used to address a STEM related project.
- All funds must be used by May 1, 2019. A final program evaluation must be submitted by May 15, 2019.

<b>Contact Information</b>	
Applicant Name: Shivone Alphonso	Position: STEM Teacher
School: Sawgrass Bay Elementary	
Address: 16325 Superior Blvd	
Phone: 352-243-1845	Fax:
Email Address: alphonso@lake.k12.fl.us	

<b>Detailed Project Information</b>
<b>Project Title:</b> Engineering with a Purpose
<b>What priority area(s) will your project address:</b> S.T.E.M (Science, Technology, Engineering, Math) Problem Solving, and Critical Thinking
<b>What is your estimated start date:</b> November 26 <sup>th</sup>
<b>Estimated number of teachers who will participate in this project:</b> 2
<b>Estimated Number of Total Students Impacted by project:</b> 250
<b>Grade Levels to be Addressed:</b> 5 <sup>th</sup>

<b>Program Background:</b>
<i>Previous to this year, Sawgrass Bay Elementary has offered a Science Enrichment. This year the program expanded to encompass all of STEM. We are bringing robotics and programming into the hands of students with barriers to learning. Sawgrass Bay is a Title I school with large ESE and ELL populations, and we are currently the largest Elementary School in Lake County with 1400 students.</i>

<b>Project Summary:</b>
Because of our large student body, Sawgrass Bay has grown to need 22 portables, and that comes with a new set of problems. For example, the walkway to and from the portable area is uncovered. Teams of students will be presented with real life problems such as this, and they will be challenged to find a solution to the problem utilizing the Engineering Design Process. This project will allow students to create a 3d model of their design.

<b>Need:</b>
3 Da Vinci 3d Printers, 60 rolls of filament

<b>Project Goals and Objectives:</b>
<ol style="list-style-type: none"> <li>1. Students will solve real world problems using the engineering design process.</li> <li>2. Select Students will use 3D printers to build prototypes and models of their solutions.</li> <li>3. Students will have the opportunity to present their solutions to representatives from the community.</li> </ol>