



### 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: Elizabeth Mills	Position: Second Grade Teacher
School: The Villages Elementary of Lady Lake	
Address: 695 Rolling Acres Road, Lady Lake, FL 32159	
Phone: 352-751-0111	Fax: 352-751-0119
Email Address: millse@lake.k12.fl.us	

<b>Detailed Project Information</b>
Project Title: Growing Attendance
What priority area(s) will your project address: Attendance, Math, Science
What is your estimated start date: as soon as funds are available
Estimated number of teachers who will participate in this project: 2
Estimated Number of Total Students Impacted by project: 40
Grade Levels to be Addressed: Second

**Program Background:**

This summer I attended a county workshop involving tower gardens, "Growing the Future in Your Classroom". I was drawn to this workshop because of its claim to improve student attendance. This has been a high priority at my school for many years and is currently a major initiative for our district with their "Arrive! Strive! Thrive!" campaign. Steve Ritz, author of the book The Power of a Plant: A Teacher's Odyssey to Grow Healthy Minds and Schools (2017), is a teacher at one of the most troubled schools in the South Bronx. He discovered, quite by accident, a correlation between tower gardens and attendance at his school. While reading about the application of his discovery, I realized that there were parallels between his school and mine. For example, 99% of the students at Mr. Ritz's school qualify for free/reduced lunch. At my school, 82% of our population qualifies for free/reduced lunch. The attendance rate at his school, before implementing the tower garden program, was at 40%. At my school, the daily attendance rate averages 94%. However, the percentage of our students that are chronically truant is at 18%, which is considerable. Since the implementation of his program, the percentage of free/reduced lunch students at Mr. Ritz's school has remained the same, but their attendance rate has risen from 40% in attendance to 93%. This is an incredible increase! Since the start of school in August, my class has not completed one week of school with 100% attendance. This is detrimental to their stability as a student and overall success in school. It is my hope that by implementing Steve Ritz's concepts, along with the amazing Tower Garden STEM lessons I have found from Seton Hall University, my class attendance will improve and my STEM instruction will become a more hands on and meaningful experience for my students. Science concepts regarding plant growth, use of the scientific method to predict and test successful plant growth, along with various other Science concepts will be of focus during these lessons. Engineering concepts will be involved in the construction of the tower garden, but more importantly students will have to brainstorm and create ways to stabilize and brace the plants that will be growing from the tower garden. Structures like this are not included