A STEM Integrated Native Pollinator Program: An Innovative Idea
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### Introduction
- There is a continued need for more STEM educated employees in the US workforce (US News, 2015).
- STEM integration helps youth to apply STEM concepts to a real world problem by using design.
- In this program, youth learned the critical thinking skills to help them investigate the issue of pollinator decline (Pollinator, 2015).

### Program Objectives
- This program aims to increase STEM literacy in 4th-6th students that attend an afterschool program at the local YMCA.
- The objectives of the program include:
  - Measure STEM knowledge gained by youth in a pollinator afterschool program
  - Measure youth’s abilities to construct evidence-based reasoning and utilization of metacognitive practices
  - Identify potential factors that influence volunteer educators’ desire to teach the subject matter

### How It Works
- Curriculum focusing on all areas of STEM has been developed, with specific lessons on:
  - Basic plant and soil science
  - Native pollinator identification
  - Weather and environmental impact on native pollinators
  - Engineering design
  - Designing and building nests for native pollinators
  - Creating a pollinator friendly garden
  - Skills for collecting data for monitoring native pollinators

### Program Phases
- September 2016: Develop Curriculum
- October 2016: Pilot Test Curriculum
- November 2016: Master Gardener Training
- December 2016: Recruit Students for Program at Local YMCA
- February 2017: Begin Weekly Indoor Program
- August 2017: Showcase Event
- May 2017: Begin Outdoor Program

### Results
- Master Gardeners (MG) that attended the PD event felt more comfortable teaching youth about the horticulture topics than before.
- The strongest motivational factors for MGs participating in the program were continued training, seeing results, and working with youth.
- Master Gardeners are being interviewed about their experience with the program.
- Students participating in the private lessons are being interviewed about their experience in the program and their summer research project.
- Student data analysis will take place late summer 2017.

References and contact information available upon request.