Stony Brook University

Experiential Learning Programs at Stony Brook University
Carrie-Ann Miller, Director of Experiential Learning for STEM-Smart Programs

Tech Prep and STEM Tech Mission: To provide repetitive exposure to STEM experiences and build confidence and competence in students abilities.

Tech PREP Program
Project Based Learning
Experiential learning program for Middle School students from two underserved school districts (60 students) on Long Island.
Three progressive educational modules: Computer Science, Math and Physics, Engineering and Innovation. Students engage and are mentored by college students. All participate in Women in Engineering Day.

STEM Tech Program
This service-learning program is for middle school and high girls from high needs communities. It is community based and rooted in issues that students feel passionate about. Students research the issue, and using the Engineering Designed model explore possible solution. Reflection is part of the curriculum. Groups are co-facilitate by college mentors and community partners.

Experiential Learning Design Model

Identification of issues that are concerning
Meaningful exploration and discussion
Engineering Design Model or Problem Solving Model
Application of Classroom knowledge
Connection to other real world issues that promote social good!

Reflection is an important in Experiential Learning
How do I feel about what I did?

Observations about group dynamics(Process)

What can I do next?

How can I apply what I learned to another project?

STEM Tech and Tech PREP Industry and Community Partners

Motorola Solutions Foundation Long Island Community Fund

Local School Districts   Brookhaven National Laboratory

Center for Leadership and Community Engagement

Girls Inc. of Long Island   Girl Scouts of Suffolk County

The Humanology Projects Mission: to provide every individual affected by mental and neurological illness a voice and the resources needed to understand and cope with the effects of their illness. Web based project

www.humanologyproject.org

Keep the Bugs at Bay, Nature's Way — Mosquitoes Be Gone

Mosquitoes Be Gone Mission: To develop, market, and sell an all-natural mosquito repellent that will reduce the prevalence of mosquito transmitted diseases worldwide. Proceeds from the project are to be used to purchase and donate repellents to developing countries.
www.mosquitoesbegonellc.co