Purpose

This summer, I worked as an intern for the Maglab in the Center for Integrated Research and Learning (CIRL). My main goal over the past two months has been to provide STEM activities and outreach for summer schools, camps, and various community groups and gatherings. Because of the high demand of summer camps that we provide and other time-consuming projects, the CIRL department is traditionally only able to offer outreach over the duration of the school year. Since I had been trained with the outreach activities by the head of K-12 Outreach, Carlos Villa, I was able to execute these lesson plans for a variety of groups over the summer, including but not limited to, robotics groups, visiting families, and the FSU Young Scholars Program.

The Process

Doing outreach over the summer required a different kind of coordination than the school year, so camps and groups would contact me. Each outreach request would be unique because it was a less structured process. I oversaw and executed the communication, confirmation, and execution of all outreach activities this summer.

I also worked with MagLab webmaster Nilubon Tabtimtong to create a Summer Outreach page for the website so that we were able to promote this opportunity, as this is the first summer we’ve been able to offer it.

Outreach Results:
• Total students reached this summer: 736
• Ages reached: kindergarten through college age students
• Most requested activity: Electromagnets

Summer Camps

Interning with CIRL this summer meant that I not only planned and taught outreach for groups around Tallahassee, but we also hosted several in-house science camps, which I assisted with. The three camps: Camp TESLA, Sci-Girls, and Sci-Girls Coding, have grown steadily over the past six years to where we now invite over one hundred students to participate in our camps over the summer.

My role in these camps was as an assistant from anything such as photographing activities and field trips like the Marine Specimen Lab at Panacea, to helping campers understand more difficult projects, like using Lego Mindstorm robotics kits (where you can program your creation after building it). Since these camps have a very competitive application process, the campers admitted were fully invested in learning more science and truly enjoying all the planned activities each week.

Activity Development

In addition to teaching the outreach activities this summer, one of my main goals was to create a new outreach lesson plan and activity. I had to research different activities within important scientific concepts and create a lesson that will be added to our available outreach activities starting in Fall 2017.

What is a Scientist: Evidence

My outreach focuses on teaching students an experimental process for gathering data and evidence in order to form a conclusion. A couple of the main themes during this lesson are that scientists can change their models as they gain information and also that scientists do not have all the information. The activity that aids this lesson is called the mystery tube, where the students must gather data and try to figure out the configuration of the inner-workings of a tube with paracord that can be manipulated.

Along with the lesson plan and activity, I created pre and post activities to supplement the teacher’s plans, as well as providing the corresponding national teaching standards.

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