

Educational Engagement Activity Report

Please complete and submit this form each time you host an educational engagement event.

(Return within 2 weeks of the event end date)

School/Organization name: University of Alabama, Huntsville – Charger Rocket Works

Date(s) of event: 11/12/2016

Location of event: University of Alabama, Huntsville, Conference Training Center

Instructions for participant count

*Education/Direct Interactions: A count of participants in instructional, hands-on activities where participants engage in learning a STEM topic by actively participating in an activity. This includes instructor- led facilitation around an activity regardless of media (e.g. DLN, face-to-face, downlink.etc.). Example: Students learn about Newton’s Laws through building and flying a rocket. **This type of interaction will count towards your requirement for the project.***

Education/Indirect Interactions: A count of participants engaged in learning a STEM topic through instructor-led facilitation or presentation. Example: Students learn about Newton’s Laws through a PowerPoint presentation.

Outreach/Direct Interaction: A count of participants who do not necessarily learn a STEM topic, but are able to get a hands-on look at STEM hardware. For example, team does a presentation to students about their Student Launch project, brings their rocket and components to the event, and flies a rocket at the end of the presentation.

Outreach/Indirect Interaction: A count of participants that interact with the team. For example: The team sets up a display at the local museum during Science Night. Students come by and talk to the team about their project.

Grade level and number of participants: (If you are able to break down the participants into grade levels: PreK-4, 5-9, 10-12, and 12+, this will be helpful.)

Participant’s Grade Level	Education		Outreach	
	Direct Interactions	Indirect Interactions	Direct Interactions	Indirect Interactions
K-4	50			
5-9	30			
10-12				
12+				
Educators (5-9)				
Educators (other)				

Are the participants with a special group/organization (i.e. Girl Scouts, 4-H, school)? Y

If yes, what group/organization?

Girl Scouts of North Alabama

Briefly describe your activities with this group:

CRW members participated in two workshops at Girl Scouts STEM Fest at UAH on November 12th. This event is hosted annually at UAH and has roughly 150 Girl Scouts involved. Through the two events that CRW assisted with, a total of 80 total individuals were impacted through direct educational engagement. Members of CRW assisted the UAH Society of Women Engineers in educating participants in structures, forces, and basic fluid mechanics through hands on workshops. These workshops consisted of a marshmallow tower competition where the girls were informed of the basics of weight distribution, statics and how to make a structure sound. The goal of this was to build the tallest, most stable tower in a set amount of time. A second topic covered was basic fluids and force distributions through the design and fabrication of simple hovercrafts. The scouts were shown a quick video on how hovercrafts work and were then given the supplies needed to construct their very own hovercraft. Through the use of a balloon, screw top bottle lids, and a CD, the scouts saw that as fluid (in this case air) is let out through a nozzle (the bottle top) it creates an equal but opposite force of air flow to counteract the force of gravity pushing down on the system, allowing the system to hover across the floor.

Did you conduct an evaluation? If so, what were the results?

No formal evaluation was conducted.

Describe the comprehensive feedback received.

During the event, CRW received many positive comments, one of which was "This is the best booth here!". When asked if there were ways that the workshops would have been improved, the scouts suggested that we should have more displays set up. This would allow for the girls to better understand the end goal of which they were to reach. For example, many had difficulty understanding how to begin a structurally sound tower and ultimately became slightly frustrated. Another improvement was for the hovercraft, the setup of this project was time consuming and the end result was not as exciting as the building process. In future events, additional options aside to the hovercraft project will be chosen, as many seemed to lose interest towards the end of the workshop.