



Texas *Girls*
Collaborative Project



LEGO Mindstorms Bootcamp and WaterBotics Educator Workshop for San Antonio (UTSA PREP)

Workshop Dates:

June 6, 2016, 9:30 a.m. - 4 p.m. - LEGO Mindstorms Bootcamp - \$250/Educator

June 7-8, 2016, 8:00 a.m. - 5 p.m. - WaterBotics Educator Workshop - \$1250/Educator

Workshop Particulars:

- Each educator/instructor have a WaterBotics license purchased for them by TxGCP from Stephens Institute of Technology (<https://waterbotics.org/curriculum/license/>) prior to the training. This license gives access to the curriculum, online resources, updates, etc.
- LEGO Mindstorms Bootcamp cost is \$250 per educator and WaterBotics Educator Workshop cost is \$1250 per educator and includes lunch and snacks each day as well as workshop consumables and materials (beyond the purchased curriculum). In addition, participants will be added to a Texas Water Works distribution/eCommunity for support, sharing, etc. beyond the workshop.
- A minimum of 14 middle school or high school educators are required for the WaterBotics Educator Workshop. A minimum of 8 are required for the LEGO Mindstorms Bootcamp. The maximum for each is 30 educators.
- Educators participating in the WaterBotics Educator Workshop ONLY (and not choosing to participate in the LEGO Mindstorms Bootcamp) should have be familiar and comfortable using and teaching with LEGO Mindstorms. The WaterBotics Educator Workshop will not go through the basics of LEGO Mindstorms. (See the optional Monday, June 6th LEGO Mindstorms Bootcamp option for those needing to understand the basics.)
- Educators will need to bring a laptop that has administrator access so we can install LEGO Mindstorms on them (or they should come with LEGO Mindstorms already installed if they already have a license).
- WaterBotics kits may be purchased through LEGO and partnering organizations. Details for required equipment can be found online at <https://waterbotics.org/curriculum/equipment/>. Texas Girls Collaborative Project will provide kits for the training.

Additional information about WaterBotics can be found at <http://txgcp.org/waterworks/> or <https://waterbotics.org/overview/>.

WaterBotics Trainers:

Katelyn Wamsted is Girlstart's Director of Programs, where she develops and leads all of Girlstart's nationally-recognized STEM education programs for girls. She recruits, trains, and leads program staff—including the college students, preservice teachers and STEM majors, who conduct our programs, the STEM CREW—as well as curriculum developers who ensure that Girlstart's continually-refreshed content are standards- and research-based. Under Katelyn's leadership, Girlstart After School has grown to serving 54 schools in Texas, and Girlstart Summer Camp now reaches more than 650 girls in Central Texas and in states nationwide. As part of her collaborative engagement with the national informal science community, Katelyn is a lead trainer for WaterBotics as well as for SciGirls and serves on the Informal Science Education Association of Texas Board of Directors. Having joined Girlstart in 2005, Katelyn has been an informal educator for more than 14 years.

Gina Higby is the Program Coordinator for K-12 outreach for the Women in Engineering Program. She works with high school recruitment and on-campus outreach programs including Introduce a Girl to Engineering Day, Women Engineers at UT (WE@UT), and WEP Engineering Ambassadors. Gina earned a BS in Cellular and Molecular Biology from The University of Texas at Austin in 2011 and is currently pursuing her MBA at UT Austin. She has worked previously as an academic advisor in Computer Science at UT and in International Admissions at UTSA before joining WEP in November 2013. Gina is a lead trainer for SciGirls and Role Models Matter and a supporting trainer for WaterBotics. She serves on the Leadership Team for the Texas Girls Collaborative Project.

Jennifer Flood is an Ed Tech at Hill Country Middle School in Eanes ISD in the Austin area. She is a trainer with WaterBotics and the Texas Girls Collaborative Project and has implemented WaterBotics and other LEGO Mindstorm programs in both Bastrop ISD and Eanes ISD. She has led STEM summer camps and has been active in the Texas Computer Education Association. Jennifer is passionate about underrepresented populations in the STEM fields and designing experiences that will foster organic growth in students and teachers. She has served on the LEGO Education Advisory Panel and is active in LEGO Education across Texas.

Tricia Berry leads efforts to recruit and graduate women in the Cockrell School of Engineering as Director of the Women in Engineering Program at The University of Texas at Austin. She concurrently serves as Collaborative Lead for the [Texas Girls Collaborative Project](#) (TxGCP), leading the dissemination of STEM best practices and informal curriculum across Texas in coordination with the [National Girls Collaborative Project](#). Through both roles, she connects and supports organizations and individuals working to advance gender equity in science, technology, engineering and math (STEM) fields across Texas and beyond. Tricia is a lead trainer for SciGirls and Role Models Matter and a supporting trainer and Program Manager for WaterBotics across Texas.

Note on Technology from Stevens Institute of Technology, July 2015:

LEGO EV3 Equipment

As of December 2015 LEGO Education will discontinue sales of the NXT component. It is being replaced by a new system called the EV3 which LEGO has been selling for a while. In order to make WaterBotics compatible with the EV3, some hardware changes will be necessary. Additionally, the programming instructions for WaterBotics need to be completely revised. Stevens will be working on a new version of the WaterBotics curriculum in the coming months. We are aiming to have the EV3 version of WaterBotics available by the end of the year. We will also make arrangements with LEGO and Pitsco for new equipment kits.

All people who have WaterBotics accounts (trainers, educators, individuals) will be given access to this new version, free of charge, when it is released. Of course, all will continue to have access to the older versions and may continue to use the NXT version.

NXTs may still be available for purchase through Amazon or other 3rd party vendors after December 2015, but will not be available through LEGO Education. Also, the non-programming version of WaterBotics will not be impacted by this change to the EV3.