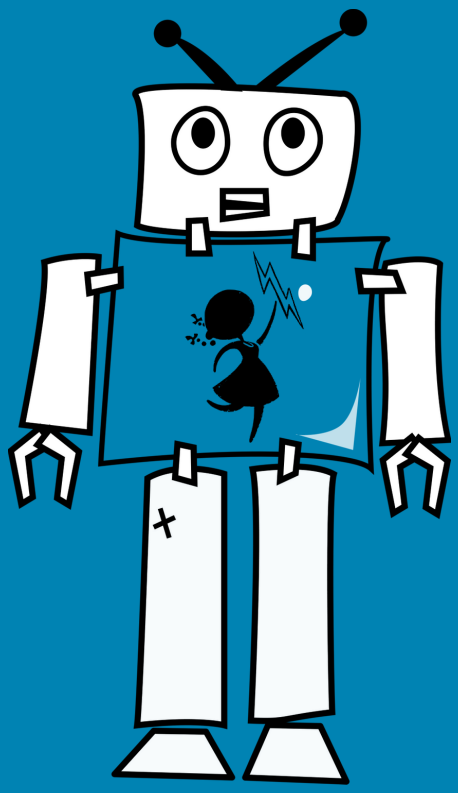


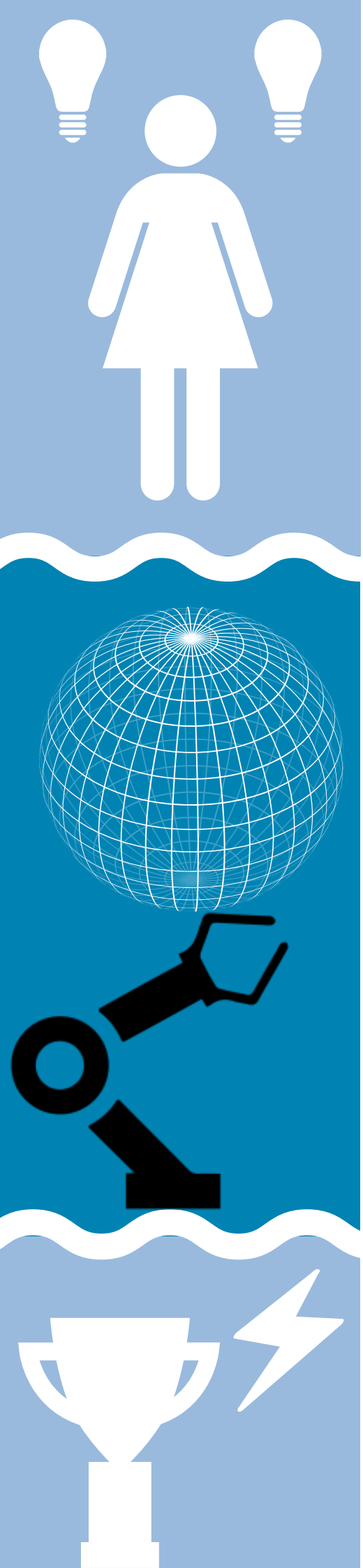
HOW I FOUND SIGMA

A VRC Girl Powered Pictorial Essay

As an eight-year-old girl in third grade, my biggest dream was to be an architect. I asked for legos on my birthday to practice building, design kits to practice drawing, and told all my friends and family about my passions. Instead of the tools I yearned for, I received the "Lego Disney Princess Dream Castle," an "Interior Design Sketchbook," and when, for my end-of-year project, I wanted to write a fictional narrative about a female architect in Ancient Egypt, my teacher told me to start over since "women were not allowed to have math and science based careers in that age."

Following elementary school, I had not further entertained any interests in architecture or engineering. I settled on taking art as an elective instead of robotics class. Moreover, because our technology and robotics classes were dominated by boys, I was under the impression that I would never belong in a STEM field. I continued to operate under this faulty paradigm for a total of 7 years. It was not until my sophomore year of high school when I broke out of this pattern of thought.

The importance of tenth grade for me was that I came across a TED Talk by Debbie Sterling, an engineer and leading spokesperson in the movement to increase girls' interest in technology and engineering. Her invention GoldieBlox is an interactive book series that aims to give girls a foundation of abilities in math and science. The main character, Goldie, solves everyday problems - like helping her dog chase its tail - by constructing simple machines, and as a result, helps young girls build their spatial skills.



Most girls lose interest in STEM once they reach elementary school just like I did because they were not exposed to toys that develop spatial skills (i.e. train sets, building blocks, lincoln logs) the same way boys are. As a result, girls feel inferior when doing math and science, strongly minimizing the possibility of succeeding in a STEM field.

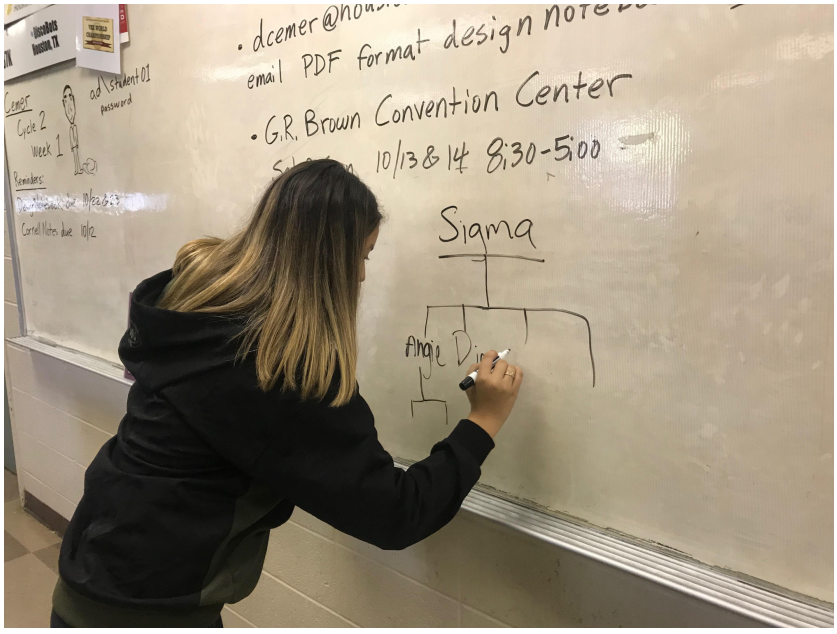
She is an inspiration to me because of the initiative she took in molding young minds and making girls feel included in the world of math and science. After listening to her speech I started wondering what position I could have been in now if I had a toy like GoldieBlox when I was growing up, and how vastly different my perspective on my future would be. If all people were to think the exact same way the world would probably not be where it is today, and a majority of the inventions we have within our modern society would not even exist. Diversity of perspectives is only attainable by bringing together people from different walks of life with different stories to tell. The way we experience the world changes our outlook, and through all of these experiences the best ideas are born.

When it comes to robot design, we all have a different way of viewing the game, and these diverging interpretations of the game give rise to various approaches on how to take on the situation. This is beneficial to the robot design, because creative discussion takes place as a result of the differing perspectives. Members bounce ideas off of each other, and through a process of analysis and elimination an incredible product is born. If only one person decided to take on the role of designing the robot, there would probably be a larger failure margin because a single outlook cannot foresee all possible problems.

My school's robotics team, the Lamar Discobots, was male dominated up to last semester. There was an evident need for change in the demographics of the team, and this is where the idea of Sigma came from. One of the biggest changes in diversity within my our robotics team has been the growing number of female members, especially on our newly created Sigma team.

The incorporation of girls into the team has proven to be extremely beneficial. In fact, we have taken on the role of working on team organization. Now, we see better allocation of resources, new methods of obtaining resources to ensure the success of the team, and a more organized approach to the challenges faced by the team. In order for a team to be efficient there must be good communication, and a major aspect to this is ensuring that all viewpoints are taken into account.

Our high school is business and technology oriented, so it only made sense to create a team within robotics that spoke to a greater population within the school. We found that through the creation of this team, we were able to add diversity to the robotics club overall. Many girls seemed to find interest in the administration and technology side of STEM. Sigma came to be a girl dominated team within our robotics organization. We focus on online challenges, the general organization of the club, and take on a special role when it comes to community outreach. Through the formation of Sigma we are working to spread a message that there should be no fear associated with joining a STEM based club simply because of gender. We hope to inspire other girls within our school and community to join their robotics teams by sharing our personal narratives of our experiences within our robotics club, and proving how special this organization is.



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