

# EmpowerHer STEM Club: 5<sup>th</sup> Grade Women in STEM After-school Club

Primary Author: Lilli Gonzales, Co-Authors: Zoie Munoz, Daisy Carrillo, Kelley Wyatt, Hermela Leul

Faculty: Christina Ayala, Sarah Jung, Jessica Alvarez

## Abstract

EmpowerHer STEM Club is an after-school program dedicated to encouraging young girls to explore careers in science, technology, engineering, and mathematics (STEM). In collaboration with E.M. Daggett Elementary School, the program seeks to address the gender gap in STEM fields, where women currently hold only 28% of STEM occupations. Research suggests that early mentorship plays a crucial role in shaping young women's academic and career aspirations.

EmpowerHer STEM Club provides mentorship and hands-on learning experiences to inspire and support young girls in their STEM interests. The program introduces students to diverse STEM fields through interactive experiments that complement their classroom curriculum. Additionally, participants learn about various STEM careers and the achievements of influential women in these fields. Through this engaging approach, EmpowerHer STEM Club fosters curiosity, confidence, and a passion for STEM while building connections with the next generation of leaders.



## Background:

I came up with the project because in my second year here, I was tutoring at E.M. Daggett, and the girls specifically enjoyed hearing about what I do at school. They liked looking at pictures of the various reactions I had done in chemistry lab that week and were excited to hear about it. That same week I saw a statistic that women occupy 28% of occupations in the STEM field. This was a crazy statistic to me, and I realized we need to work towards closing this gap. I then talked to a trusted mentor about it and we came up with the idea of an after-school program for these girls. My main reason for doing this is ultimately to empower young girls to be interested in classes and things pertaining to "STEM." The ultimate goal is for these girls to be educated about the different opportunities out there and to empower them to choose a career in STEM.

## Results:

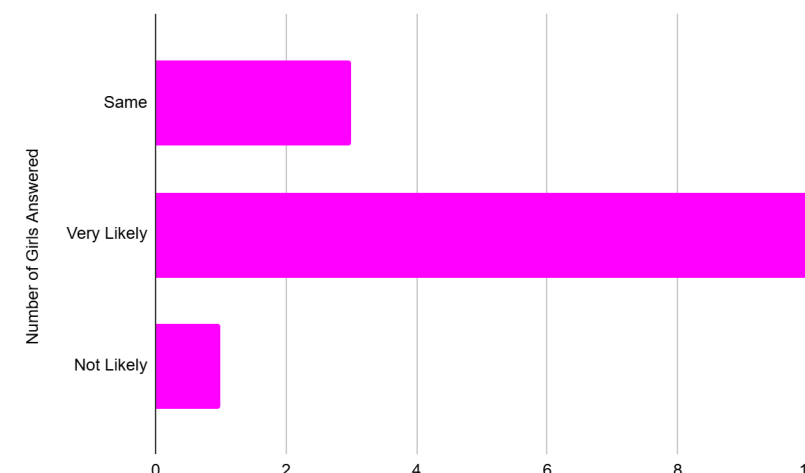


Figure 1: After being in this program, how interested are you in continuing to do science experiments or other activities related to STEM?

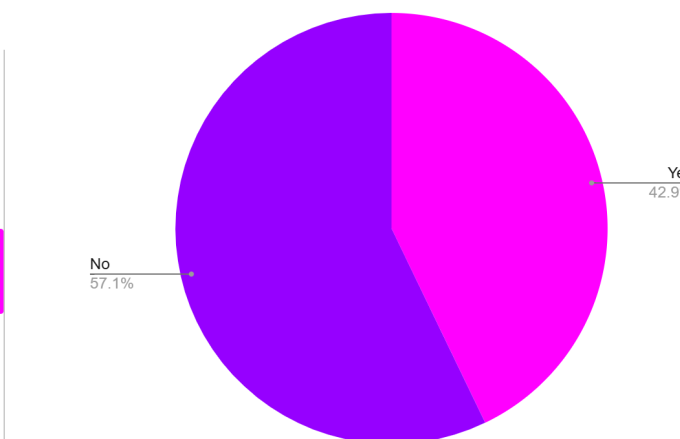


Figure 3: Girls interested in future STEM careers

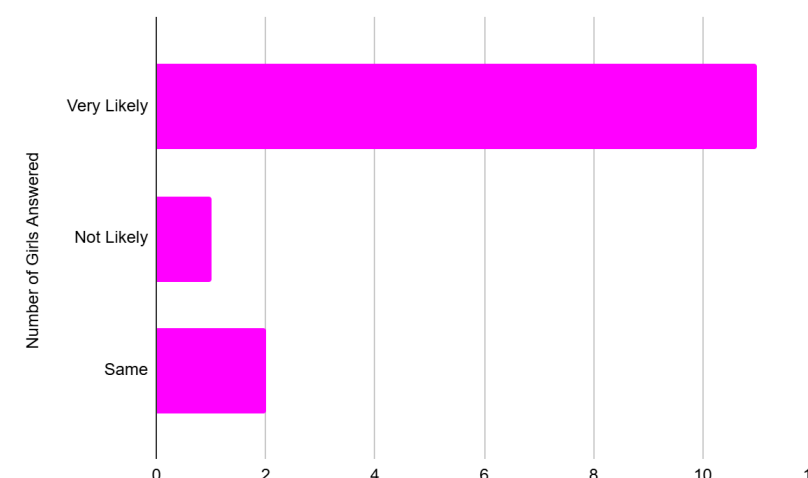


Figure 2: How likely are you to continue to study classes that are science and mathematics classes after this program?

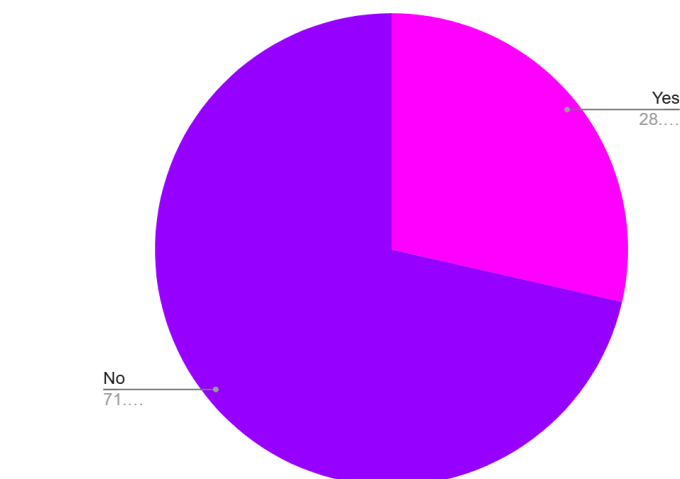
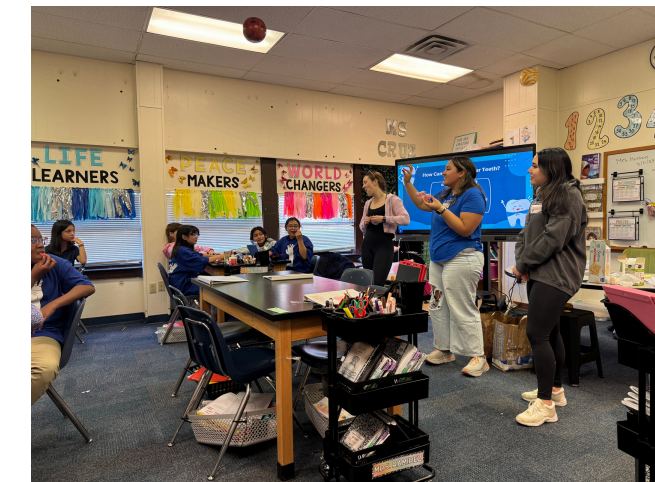


Figure 4: Before this program, have you ever visited a college campus and explored the classrooms or labs?



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