

DELIVERING HANDS ON NATURAL RESOURCES EDUCATION TO JEFFERSON COUNTY'S YOUTH

County: Jefferson County

Intern: Helena Michaels
Mentor: Josey Pukrop, 4H Youth Development

WHAT I DID

I worked on developing curriculum and partook in a multitude of different kinds of outreach programs designed to deliver hands on programs to underserved youth of all different ages in Jefferson County mainly through the 4H program. This included helping with a nature camp lasting four days targeted at Kindergarten students and developing their knowledge about a variety of different parts of the environment. I also helped at several different outreach events taking place at housing units and libraries helping kids with creativity through arts and crafts. Additionally, I got the opportunity to work in the field aiding with the Quarry Fire investigation and shadowed at the ENOR camp learning more about environmental education in a camp setting. Moreover, with the help of my mentors I also ran a sewing workshop designing and implementing projects that would teach kids how to sew in a safe, fun, and effective way. However, the main project I worked on for this internship was the development and implementation of the programming I created for Metro West. This involved the creation of lesson plans that included evaluations, hands-on lessons, games, and activities/crafts to engage the kids with natural resources. Each lesson was specifically tailored to an aspect of natural resources with the goal of creating a thorough understanding of all the different parts at an age-appropriate level. Throughout the process I learned a lot about effective lesson plans and how to adapt or create activities that fit into the do, apply, and reflect framework of 4H. I also gained a lot more confidence in my delivery of the lessons and ensuring that the information was clear.

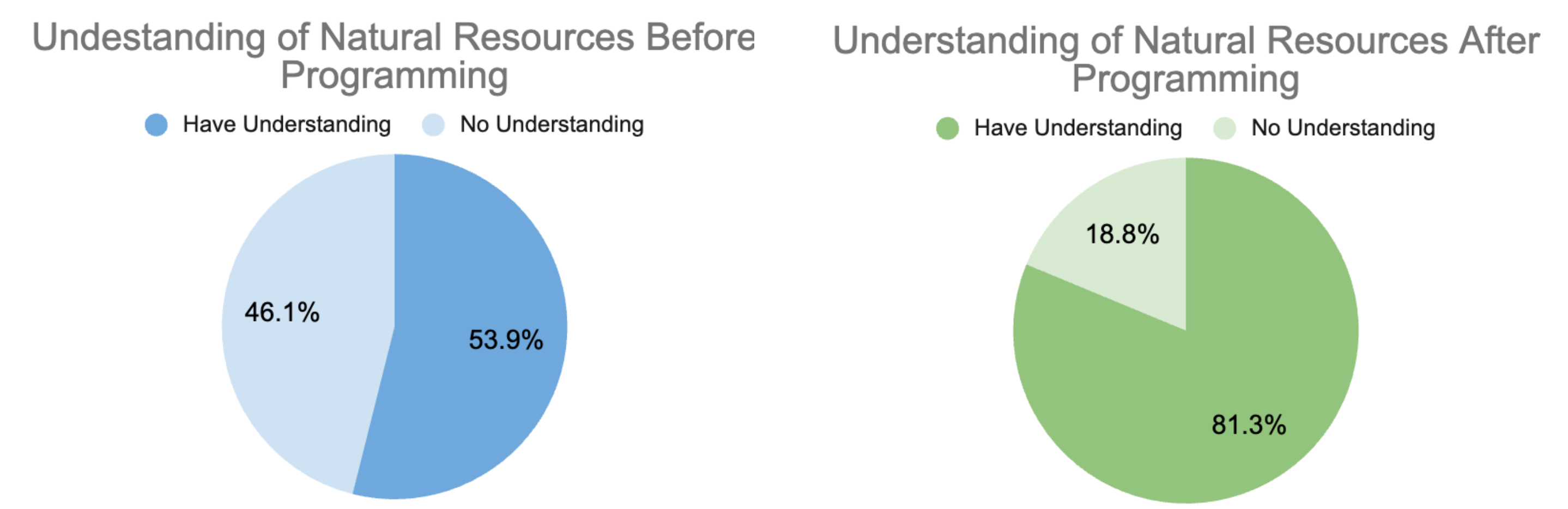
INTERNSHIP GOALS

The primary goal of this internship was to inform the youth in Jefferson County about natural resources and instill in them a passion for sustainability for a better world. The learning was experimental and encouraged kids to be active in the learning and use their hands and experiment throughout the process. Furthermore, another goal of this internship was to learn how to create an engaging curriculum that provides quality education in a fun and interactive way.

PROJECT INTRODUCTION

The premise of this project was to develop curriculum and lesson plans for five weeks of natural resources programming at the Metro West housing units. Each week was centered around a different aspect of natural resources with focuses on wildfire, water, ecosystems, renewable energy, and geology. These hour-long programs were delivered at six different locations in the Jefferson County area to elementary school aged children. The programming was targeted towards local low-income housing units to educate kids about the environment and spread awareness about important topics while providing access to quality education and activities. At all these different locations the children were asked about the baseline knowledge they had about natural resources, and again after each program to see how much they were able to learn. In this way I was also able to measure the teaching impact and the effectiveness of the curriculum.

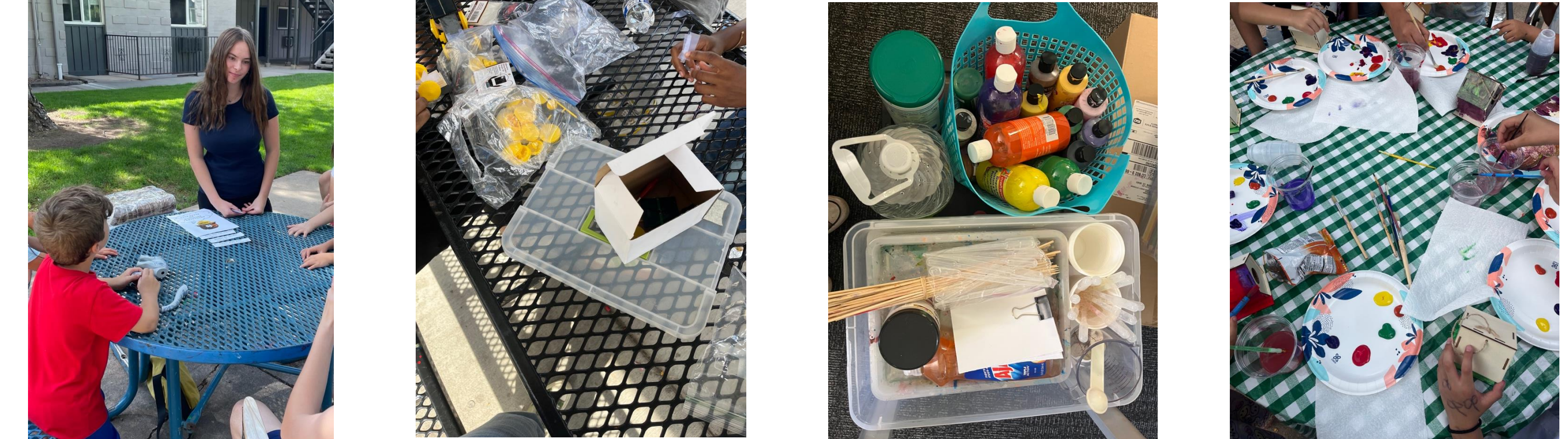
Table 1.



PROJECT OUTCOMES

The findings of this project concluded that prior to the programs, many of the kids did not have background knowledge about natural resources. After the lesson most could identify examples and had a better general understanding. However, the questions asked for the purpose of evaluation were informal, as well as the responses, so the data collected is a rough estimate of the effectiveness of the programming, and not an exact number. A total of 128 kids attended the programs with an average of 26 attendees each week. Overall, I am incredibly grateful for this experience, and I really enjoyed being able to see the kid's growth in real time.

Figure 1.



APPLICATION TO EDUCATION

I am majoring in Natural Resources Management with a Sustainable Water Interdisciplinary Minor. This internship connected my passion for the environment with my experience with teaching young children and aligns with my goals for a future career in natural resources as either an educator or a consultant. I believe that working in outreach programs to provide education is incredibly important for spreading awareness and providing the opportunity for new generations to become passionate about conservation. In this way, this internship utilized the knowledge from the courses I have taken thus far from CSU because I was able to take what I have learned and use it to create a curriculum.

WHAT I LEARNED

Overall, I learned how to create an effective curriculum and what teaching strategies work best. I was able to develop effective communication and leadership skills and build professional relationships. I was also able to gain a lot of hands-on knowledge about natural resources and horticulture and work on program development, delivery and teaching, and evaluation in informal education settings.

NEXT STEPS

Going forward I want to continue pursuing my passion for education as well as natural resources and gain more experience in both areas as I learn the best way to incorporate both into a career and use all the skills and knowledge I gained from this internship as I do so. I am considering working as a camp counselor or another internship like this one as I continue to finish up my degree and figure out what life after graduation will be like.