The C.A.R.E Booth

Connection . Access . Recovery . Empowerment

The resource that connects you to resources

Introduction

When brainstorming ideas for my project, I leaned strongly on advice from my teacher. She told her science fair students it is important to create a topic that has personal meaning and significance towards helping to solve a crucial problem. I knew I wanted to help the countless people who struggle with housing insecurity, mental health illnesses and drug addiction. When I looked around my hometown of Tucson, Arizona I thought to myself, “What is something that will entice people to help themselves get help?” That's when I thought of an enclosed space where people can contact the nearest shelter, drug rehabilitation center, and other facilities for mental health services.

Problem

According to the 2025 point and count data report, there are 2,218 homeless people in Tucson, AZ, with no easy way to get the resources they need. Out of those people it is estimated, by reporter Monica A. Garcia, from News4 Tucson, that around 80% have a mental illness or are addicted to substances. If something isn't drastically changed, these problems will continue to grow until we can't fix them. What I plan to do is to make an enclosed space, like a telephone booth, where people can get connected immediately to resources including therapists, shelters, and drug rehabilitation centers.

Materials

1. Poster board
2. Paper
3. Razor blade
4. Hot glue and gun
5. Pencil
6. Tape
7. Paint brushes

Picture of materials

Taken by student

Methods/Procedures

Step 1: Define the problem: To build an enclosed space for people to contact resources

Step 2: Research homeless population around the US, starting with Tucson, AZ, my hometown

Step 3: Use prior research to refine the idea in turn creating my first iteration, a basic sketch

Step 4: Get feedback from my teacher and create steps for building second iteration, my first prototype of The C.A.R.E Booth

Step 1: Buy materials (see slide four)

Step 2: Using the foam boards, cut four precice walls, than use roughly the same length of the walls use to cut even lines on the top and lay gently over top. Build the bench, holders for pamphlets, and mock telephone

Part 3: Use glue and tape to put all the pieces together

Step 5: Make final adjustments to prototype, complete painted version

Iterations

1

2

3

Iteration 1 drawing by student. Iteration two taken by student. Iteration three taken by student

Photo of student painting prototype. Taken by students parent ↑

Photo of student painting prototype. Taken by students parent ↓

Photo of student painting prototype. Taken by students parent ↑

Results and Data Visualization

The results of my project were very clear. To summarize the results, I was successfully able to create a model that, when made life size, hopefully, will drastically decrease the amount of homelessness, and people on the streets who have mental illnesses and substance abuse.

Heat map of areas most populated by drug addicted individuals in the USA. Generated by student using chatgpt

Discussion and Interpretations

I was able to have an interview with an SRO officer to discuss ideal placements for the C.A.R.E. Booth. He talked about areas like the malls, washes, and specific streets where crime and drug abuse are prominent, and how they would be the most effective placements.

When making the prototype I definitely ran into some problems, like difficulties when cutting the foam boards, being able to attach the door correctly, as well as getting the paint into the crevices..

While using the free ChatGPT to create the heat map, I had a hard time getting a proper map generated. ChatGPT consistently produced a python code instead of a map to use. I had to utilize a different account with the premium subscription for it to work.

Recommendations for future research

In the future, I would like to do more detailed research on where my project can be the most useful throughout the country and what time of year it's usage may spike. I would also like to make a life size telephone booth with a solar panels, a real landline, and relevant resources.

I would also like to research what types of grants and funding that would be needed to make this a reality.

sources

https://chatgpt.com used to generate map

Hopebooth.com

Canva.com

pima.gov

tpch.net

facebook.com