

# Volcanoes

Physical Science, Fall 2021  
EMPACTS Project



Northwest Arkansas Community College  
Bentonville, AR 72712  
C.D. Phillips, Instructor

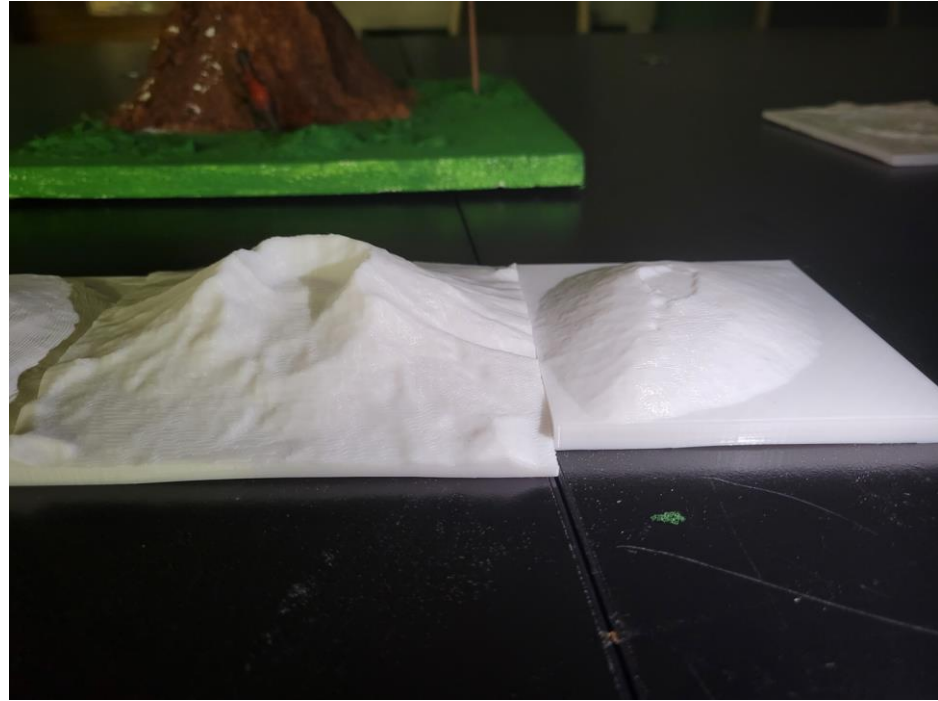
# Project Introduction

The Final Project for this class had to be selected from a list of earth science topics.

We chose volcanoes and decided to produce instructional tools for K-8 and also adult learners.

Our EMPACTS Team incorporated 3D printed models of volcanoes for visually impaired learners.

We also designed and built our own erupting demonstration for our class.



# Our Class



Sarahi Gomez, Danny Munoz, Misti Krueger, Shelby Wright, Lindsey Gaddy, Genesis Hernandez, and Brittney Khounborine

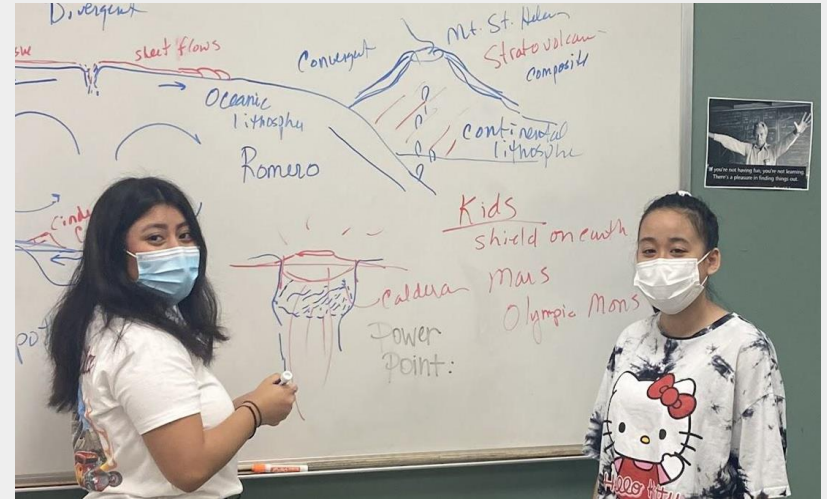
# Our Volcano Design Team

Misti Krueger  
Shelby Wright  
Sarahi Gomez  
Danny Munoz



# College Peer Presentation Team

Genesis Hernandez and  
Brittney Khounborine



# K-8 Curriculum

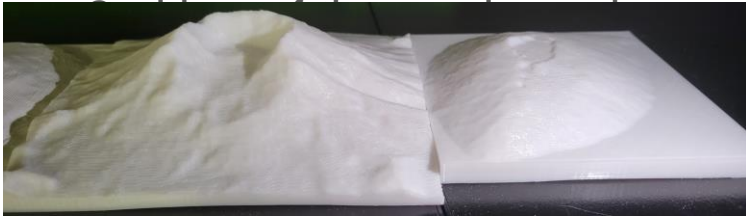
Lindsey Gaddy



# Curriculum

## College Level Presentation

- Volcanoes
- Plate Tectonics
- Magma vs lava
- Model of the earth - layers



## K-8 Content Presentation





**Teamwork and Experimentation**





# Products of our learning experience

- EMPACTS Skills
- Information Literacy
- Earth Science College Curriculum - Volcanoes
- Final Project
  - College Level Peer Presentation
  - K-8 Level Presentation
  - 3D Printed Manipulatives
  - Experimental Design
  - Finished Model
  - Webpage



# EMPACTS

## Skills Developed

- Teamwork
- Communication
- Community Service
- Critical Thinking Experimental design
- Technology



Our team used 3D  
Printed examples  
of different  
volcanoes to show  
how volcano types  
form differently



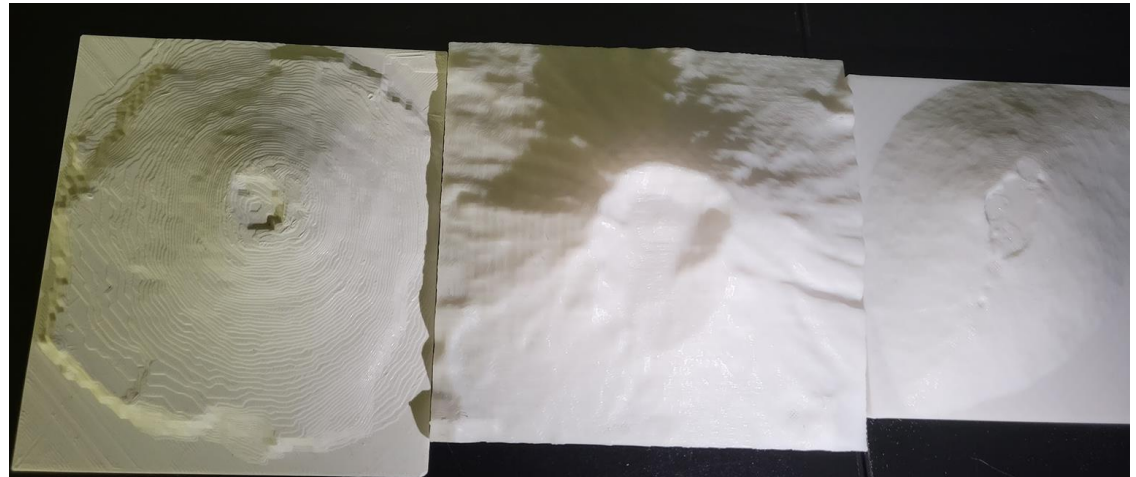
# Thank YOU!

**EMPACTS Laboratory Staff:** 3D Printing advice and printing

- Dawson Robinson
- River Robinson

**Professor Phillips:**

- Mentoring
- Materials
- Funds for paints



Citations are on the individual components of  
this project.