



THE GLOBE PROGRAM

2024 GLOBE Annual Meeting Student Experience

Research Teams and Project Details

Thirty-nine students from 10 countries attended the 2024 GLOBE Annual Meeting student experience. Students were invited based on their participation in one of three student-related GLOBE research events and activities: GLOBE [International Virtual Science Symposium \(IVSS\)](#), GLOBE [U.S. Student Research Symposia](#), or the GLOBE [Student Vlogger Program](#). Invited teams and research projects for the 2024 student experience are listed below.

International Virtual Science Symposium Stipend Recipients and Invited Students

Africa Region

PROJECT TITLE: [Impact of Industrial Emissions on Climate](#)

SCHOOL: Shree Swaminarayan Academy, Mombasa, **Kenya**

STUDENTS: Hafsa Jamal Yasir, Rahini Dhirendra Halai, Ashley Nzingo Onyango, and Ketura Wanjiru Kuria

GRADE LEVEL: Middle School (grades 6–8, ages 11–14)

Asia and Pacific Region

PROJECT TITLE: [A Comprehensive Investigation on Carbon Storage in the Vegetation of Our Schoolyard and Determining the Carbon Footprint of the School Through the Measurement of Carbon Using GLOBE's Carbon Cycle Protocols](#)

SCHOOL: Pelrithang Higher Secondary School, Gelephu, **Bhutan**

STUDENTS: Sangay Choden, Yeshi Wangchuk, Kalpana Mongar, Usha Pyakurel, and Shankar Ghimrey

GRADE LEVEL: Middle School (grades 6–8, ages 11–14)

PROJECT TITLE: [Developing Equipment to Help Anchor Seagrass Seedlings to Increase Seagrass Survival Rates](#)

SCHOOL: Princess Chulabhorn Science High School Trang, **Thailand**

STUDENT: Tanaporn Numuean

GRADE LEVEL: Secondary School (grades 9–12, ages 14–18)

PROJECT TITLE: *A Study of Microplastics Contamination in Soil, Seawater, and Seagrass at Sikao District, Trang Province*

SCHOOL: Princess Chulabhorn Science High School Trang, **Thailand**

STUDENT: Kantaros Asbilly

GRADE LEVEL: Secondary School (grades 9–12, ages 14–18)

PROJECT TITLE: *Analysis of Black Particulate Matter Composition in the Air of Keelung and Discussion of Its Sources*

SCHOOL: Keelung Municipal Anle Senior High School, **Taiwan**

STUDENTS: Ting-yu Pan, Yu-ning Cheng, and Shih-en Lai

GRADE LEVEL: Secondary School (grades 9–12, ages 14–18)

Europe and Eurasia Region

PROJECT TITLE: *Monitoring and Protection Marmont Alley*

SCHOOL: OS Dubovac, Karlovac, **Croatia**

STUDENTS: Josip Ferenčina and Marta Kupres

GRADE LEVEL: Middle School (grades 6–8, ages 11–14)

Latin America and Caribbean Region

PROJECT TITLE: *Reducing Our Carbon Footprint: Rochester School's Strategies to Reduce Emissions*

SCHOOL: Rochester School, Chia, **Colombia**

STUDENTS: Diego Sierra, Laura Pardo, Angelina Chiodo, Mariana Roa, Luciana Lozano, Paula Romero

GRADE LEVEL: Secondary School (grades 9–12, ages 14–18)

Near East and North Africa Region

PROJECT TITLE: *The Effect of Soil Type on the Growth of Rose Flowers*

SCHOOL: Alshaffa bint Abdullah, Suhar, **Oman**

STUDENTS: Malk Yaser Humaid Al Ghafri and Mahrah Salim Mohammed Al Mazruii

GRADE LEVEL: Secondary School (grades 9–12, ages 14–18)

North America Region

PROJECT TITLE: *A Random Forest Analysis of Remote Sensing Driven Mosquito Habitat Prediction in West Africa*

EDUCATOR: Cassie Soeffing

ORGANIZATION: Institute for Global Environmental Strategies (IGES) GLOBE v-School (NASA SEES Summer Program), **USA**

STUDENTS: Ruchi Bondre, Ryan Chan, Andrew Liu

GRADE LEVEL: Secondary School (grades 9–12, ages 14–18)

PROJECT TITLE: *Water Temperature and pH Measurements on Gulkana Glacier and Phelan Creek, Alaska*

ORGANIZATION: Department of Natural Resources and Environment, Fairbanks, **AK, USA**

STUDENT: Teslin Brannan

GRADE LEVEL: Secondary School (grades 9–12, ages 14–18)

Student Research Symposia Invited Teams – 5 teams from the USA

Midwest SRS

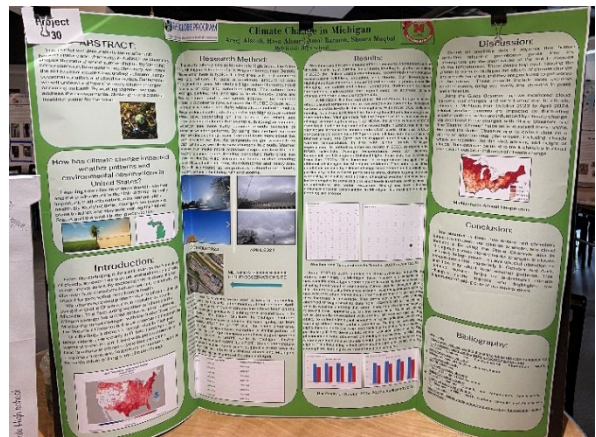
(not able to attend the Annual Meeting)

PROJECT TITLE: *Climate Change in Michigan*

SCHOOL: Melvindale High School, MI

STUDENTS: Hoshn Al Amri, Areej Alsoofi, Amal Barman, and Shoora Muqbal

GRADE LEVEL: Secondary School (grades 9–12, ages 14–18)



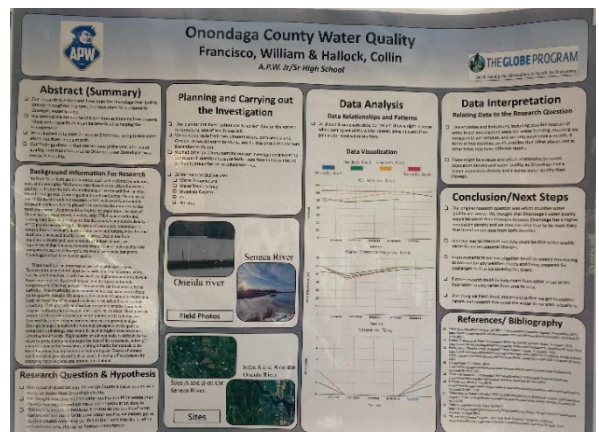
Northeast & Mid-Atlantic SRS

PROJECT TITLE: *Onondaga County River Quality and Oswego County River Quality*

School: Altmar-Parish-Williamstown Jr/Sr High School, NY

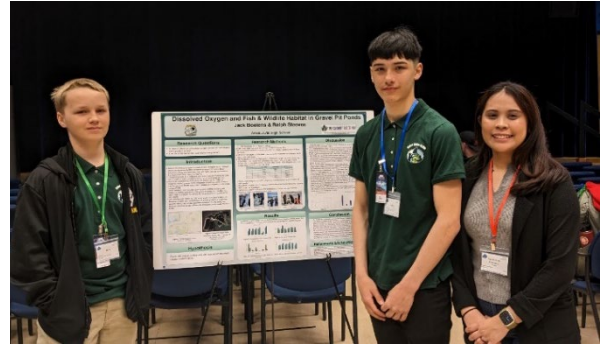
STUDENTS: William Francisco, Collin Hallock, Zym Goodberry, Nico Wejko, and Devin Eberly

GRADE LEVEL: Secondary School (grades 9–12, ages 14–18)



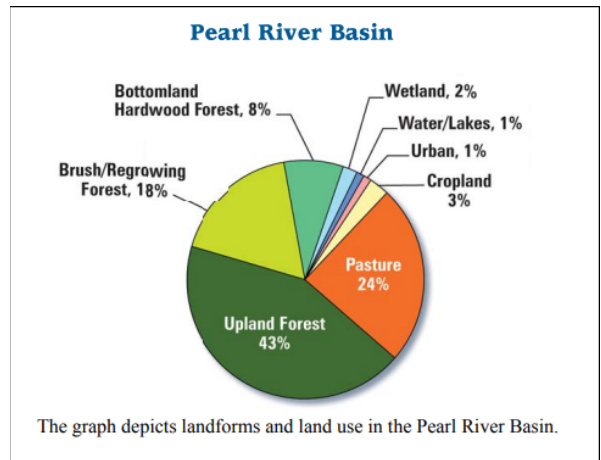
Pacific & Northwest SRS

PROJECT TITLE: *Dissolved Oxygen and Fish and Wildlife Habitat in Gravel Pit Ponds*
 SCHOOL: Aniak Junior Senior High School
 STUDENTS: Ralph Steeves and Gavin Smith
 GRADE LEVEL: Secondary School
 (grades 9–12, ages 14–18)



Southeast SRS

PROJECT TITLE: *Pearl River Pollution*
 SCHOOL: Bayou View Middle School, MS
 STUDENTS: Kylie Triplett, Lauren Hanshaw, and Jaden Sanford
 GRADE LEVEL: Middle School (grades 6–8, ages 11–14)



Southwest SRS

PROJECT TITLE: *Outdoor Air Quality on the Reservation*
 SCHOOL: Mescalero Apache School, NM
 STUDENTS: Haleigh Shendo, Caydence Palmer, and Miley Cojo
 GRADE LEVEL: Secondary School
 (grades 9–12, ages 14–18)

Outdoor Air Quality on the reservation
 By: Haleigh Shendo
 Mescalero Apache High School

Abstract
 The purpose of this project was to determine the outdoor air quality on the reservation. The project was conducted over a period of six weeks. The results of the project show that the outdoor air quality on the reservation is generally poor. This is due to a variety of factors, including the presence of industrial facilities, traffic, and the use of fossil fuels.

Research Question
 How does the outdoor air quality on the reservation compare to the outdoor air quality in other areas of the state?

Research Methods
 The research was conducted using a variety of methods, including the use of air quality monitors, the collection of samples, and the use of a variety of other tools.

Results
 The results of the project show that the outdoor air quality on the reservation is generally poor. This is due to a variety of factors, including the presence of industrial facilities, traffic, and the use of fossil fuels.

Discussion & Future Plans
 The results of this project are important because they show that the outdoor air quality on the reservation is generally poor. This is due to a variety of factors, including the presence of industrial facilities, traffic, and the use of fossil fuels.

Conclusions/The Main Goal
 The main goal of this project was to determine the outdoor air quality on the reservation. The results of the project show that the outdoor air quality on the reservation is generally poor.

Bibliography
 The following sources were used in this project:

GLOBE Student Vloggers

Asia and Pacific Region

STUDENT: Andrei Alayon (example [Vlogger video](#))

GRADE LEVEL: 12

COUNTRY: Philippines

Europe and Eurasia Region

STUDENT: Hannah Vella (example [Vlogger video](#))

GRADE LEVEL: 12

COUNTRY: Malta