

HOPE COLLEGE, HOLLAND MI

Linking Student Driven Data to NASA Data: Authentic Air Quality Data Inquiry for Improved Student Self-Efficacy

Susan Ipri Brown 2/01/22 - 1/31/24



ExploreHope student Levi works with a piece of equipment Credits: Hope College

Portable air quality monitors will be provided to West Michigan middle and high schools with high percentages of students at lower socioeconomic status and from non-majority ethnicities, enhancing students' ability to participate in authentic data analysis through exploration of local and national atmospheric data. The project curriculum focuses on guiding students through the research process including writing a non-trivial research question, determining data collection protocols, analyzing data, and presenting the work. Students are engaged with authentic data as a means for inquiry-based lessons versus a specific content area, creating a curriculum that is flexible for multidisciplinary and multi-age level applications. The curriculum will also be made available for any remote classroom.

List of Partners:

 Allegan, Fennville, Grand Rapids, Holland, and West Ottawa Public Schools

The material contained in this document is based upon work supported by a NASA grant or cooperative agreement award #80NSSC22K0447, under the Teams Engaging Affiliated Museums and Informal Institutions (TEAM II) activity of NASA's Next Gen STEM Project.

Explore TEAM II Products https://www.nasa.gov/learning-resources/search/