

2023 Beyond the Classroom Impact Report

COUR MISSION

With the outdoors as a backdrop for learning, Keystone Science School inspires curiosity and critical thinking through the lens of science to change lives and strengthen communities.

THANK YOU TO OUR BEYOND THE CLASSROOM SPONSORS!





PROGRAM OVERVIEW



Beyond the Classroom provides teachers with all the tools necessary to facilitate a complete unit on environmental issues within a traditional classroom. The lessons from the workshop can form a stand-alone unit or supplement a Keystone Science School overnight field trip. Our framework allows teachers to explore challenging topics, such as climate science and how it relates to ecology, while learning about all sides and perspectives of an issue. We use the topic of water in the West to explore environmental issues but the lessons we present are adaptable to any local, regional, or global issue.

In this workshop, teachers receive lesson plans that are flexible for grades 4th through 12th. Teachers also gain ideas and techniques for how to engage their local community and get their students out of the classroom to experience a local environmental issue first-hand.

New this year, teachers participated alongside our H2O Outdoors program for high school students, allowing teachers to observe the student experience to learn how an activity may be facilitated.

PROGRAM GOALS

1. Brainstorm and plan ways to facilitate an environmental issue-based curriculum based on a local issue for their own students.

2. Analyze and interpret the perspectives of real-life stakeholders in Colorado water management through the lens of sustainability.

3. Practice 'solutions-oriented' collaborative approaches to managing regional issues.

4. Explain the concept of a watershed & identify major watersheds in the US, Colorado, and Summit County.

5. Understand water supply and demand issues in Colorado and the Colorado River Watershed.

6. Collect field data relevant to water quantity & quality.



PARTICIPANTS

6 teachers attended from Colorado

Eagle Academy Westminster Academy got International Studies Falcon Middle School Endeavor Academy Vista Peak Preparatory Lincoln Hills Cares

Testimonials

⁴⁶I loved everything, I learned so much about Colorado water and law and policy. The activities were fun, I liked the Lorax and how you can take things from that and apply it.⁹⁹

⁴⁴The highlight was watching the students, getting to talk with the stakeholders, and all the stuff we learned.⁹⁹

⁴⁴ The highlight of the program was getting to observe students going through the process as well to get a realistic view.⁹⁹





Our framework encourages the process of inquiry within the study of environmental issues. It is a step-bystep set of instructions that guides students through an interdisciplinary, fact-based investigative process. As an interdisciplinary tool, the framework integrates science, math, social studies, and language arts throughout the investigation. Activities within the Key Issues curriculum are aligned to Common Core and

Step 1 Define an environmental issue and related terms.

- **Step 2** Determine environmental issues of concern to you, the students, and your community. Select one to investigate.
- **Step 3** Analyze the players.
- **Step 4** Begin piecing together 'The Big Picture' of the issue.

Step 5 Determine what pieces of the Big Picture are still missing and design research questions to complete the information



- **Step 6 Determine research plans,** sampling methods, and create data collection instruments.
- Step 7 Carry out research plans and analyze data collected.
- **Step 8** Examine possible solutions.
- **Step 9** Choose a solution by reaching consensus with all Players.
- **Step 10** Make recommendations and share findings.



"We will be following the framework model in my classroom using issues in our community"

- Beyond the Classroom participant

DAY 1

8am Welcome

9am Course Overview

11am Field Time

3pm Expert Panel

4pm Expert Panel Debrief



8am Introduce & Define Local Issue, Open Discussion

8:30am Chat with Denver and Aurora Water partners about how to connect with local partners

9:30am Brainstorm and reach out to local partners in your area

Ipm Water Quality Testing as Research & BEETLES example

3pm Observe and contribute to the research & data presentations from H20 participants, Observe plumbing the Colorado activity



KEYSTONE SCIENCE SCHOOL

SEE YOU AT THE NEXT BEYOND THE GLASSROOM COMING FALL 2024