

We Are Water -Community Perspectives at the Center Of Designing Informal STEM Education Experiences About Water

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November 23, 2022

Abstract

Rural, Indigenous, and Latinx communities in the Southwest region of the U.S. share present and future concerns about drought and water availability as these communities face low and inconsistent precipitation. Using a collaborative process, We are Water has designed informal STEM programs and a traveling exhibit for tribal and rural libraries to create opportunities for individuals and families to engage in conversations about their personal and community connections to water. The decision to use a collaborative design process sought to respect and honor the diversity of voices in these communities by enabling them to express their experiences with water in their own words and see their perspectives incorporated in the ensuing programs and exhibit. As an important first step, the project conducted a needs assessment, which invited communities to share their perspectives and stories through surveys and interviews. As the COVID-19 pandemic unfolded our project team adjusted its approach to ensure the voices of those hardest hit by the pandemic, Indigenous and Latinx communities, were heard. Instead of in-person relationship building as initially planned, the project team pivoted toward a snowball approach to collect one-on-one phone interviews. Findings from surveys and community interviews showed water conservation, water access, water availability, and water quality were common priorities. This project shows how a collaborative process paired with evaluation can be used as tools for community participation for informed decision making in the design of informal educational experiences.

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Abstract Text:

Rural, Indigenous, and Latinx communities in the Southwest region of the U.S. share present and future concerns about drought and water availability as these communities face low and inconsistent precipitation. Using a collaborative process, We are Water has designed informal STEM programs and a traveling exhibit for tribal and rural libraries to create opportunities for individuals and families to engage in conversations about their personal and community connections to water. The decision to use a collaborative design process sought to respect and honor the diversity of voices in these communities by enabling them to express their experiences with water in their own words and see their perspectives incorporated in the ensuing programs and exhibit. As an important first step, the project conducted a needs assessment, which invited communities to share their perspectives and stories through surveys and interviews. As the COVID-19 pandemic unfolded our project team adjusted its approach to ensure the voices of those hardest hit by the pandemic, Indigenous and Latinx communities, were heard. Instead of in-person relationship building as initially planned, the project team pivoted toward a snowball approach to collect one-on-one phone interviews. Findings from surveys and community interviews showed water conservation, water access, water availability, and water quality were common priorities. This project shows how a collaborative process paired with evaluation can be used as tools for community participation for informed decision making in the design of informal educational experiences.

Session Selection:

ED010. Climate Literacy: Reaching broad audiences through informal education, youth initiatives, community impact work, and media

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Abstract Title:

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Requested Presentation Type:

Assigned by Program Committee (Oral, eLightning, or Poster)

Previously Published?:

No

AGU On-Demand:

Yes

Abstract Payment:

Paid (agu-fm20-743290-2726-4862-5713-5090)

For non-students only: I am interested in receiving information on the Mentoring365 Live program.

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