



WeatherBlur

A PROJECT OF THE ISLAND INSTITUTE

Blurring lines between classroom and community—a cutting-edge interactive online platform for coastal communities to explore weather, climate, storms, geomorphology, oceanography, and more.



Research Questions:

1. How can inquiry and place-based education pedagogies be used to build an online learning community?
2. How do scientists, community members, and students interact to promote learning and collaboration within a non-hierarchical online learning community?
3. To what extent can server-side data be used to identify key components of the learning experience between and among each community of learners?

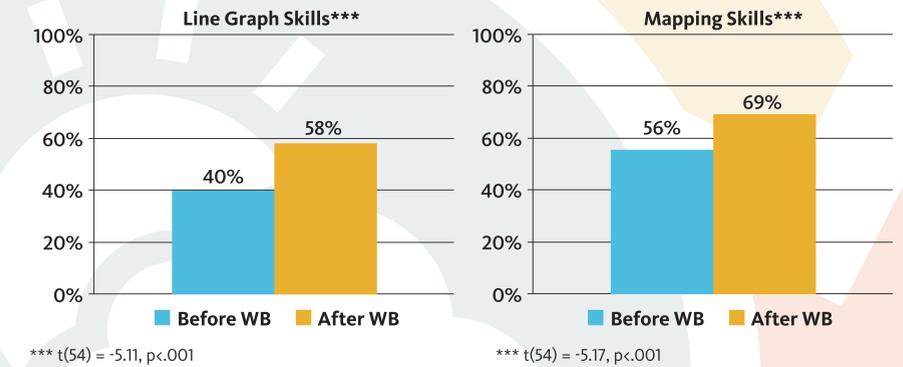
Project Deliverables To Date:

- Co-created citizen scientist mobile online learning community to investigate local questions related to climate.
- K-8 curriculum suite to introduce concepts of climate, weather, data literacy, and inquiry
- Providing place-based strategies for understanding the difference between weather and climate; user data juxtaposed on 10, 30, and 60 year climatologies

Project Findings To Date:

Data Literacy

Significant Pre-Post Changes



Performance-based assessments show that students' ability to read and interpret graphs and maps improved after the first WB field test.

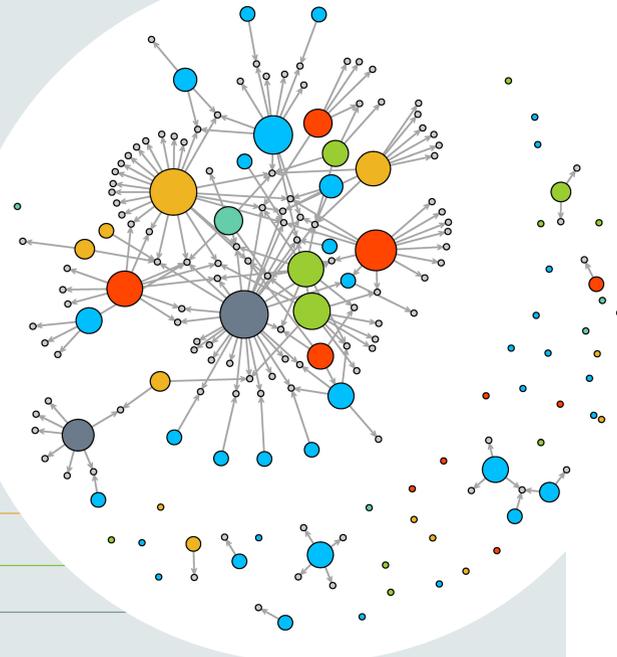
Social Networking Analysis: What does an online non-hierarchical learning community look like?

Project Outcomes to Date:

WB social network is a combination of 1,429 actors and objects

Including: 215 Users

- 137 **Students**
- 19 **Teachers**
- 13 **Fishermen**
- 16 **Scientists**
- 27 **Community Members**
- 3 **Administrators**

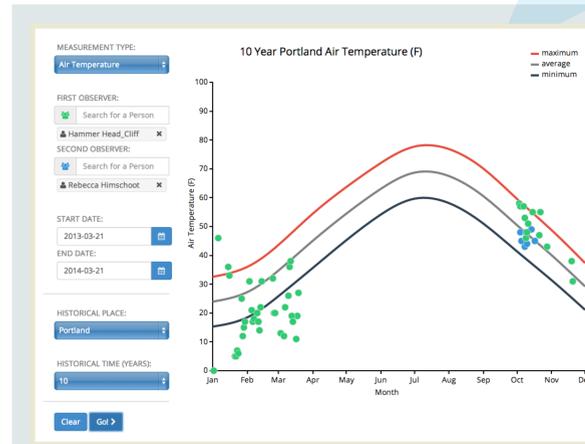


The social network visualization above displays the interactions that occurred among users during the first pilot investigation into bycatch species.

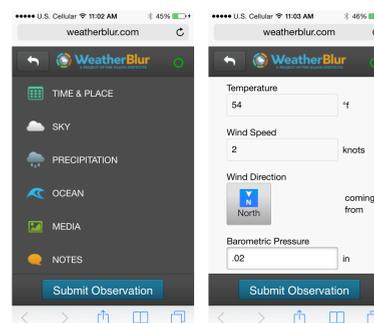
- Engagement among all user groups is high
- Users are connecting with each other across age and geographic boundaries

Connecting Climate to Community

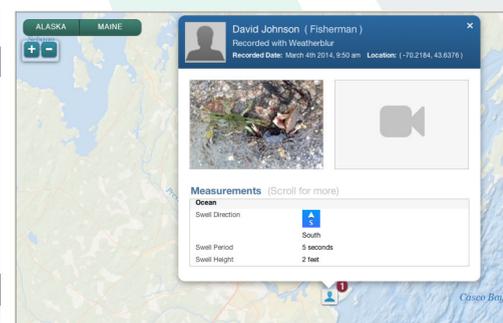
The graph function allows users to compare student-gathered daily weather observations to historical climatology data.



Mobile Data Tool



Observation Map



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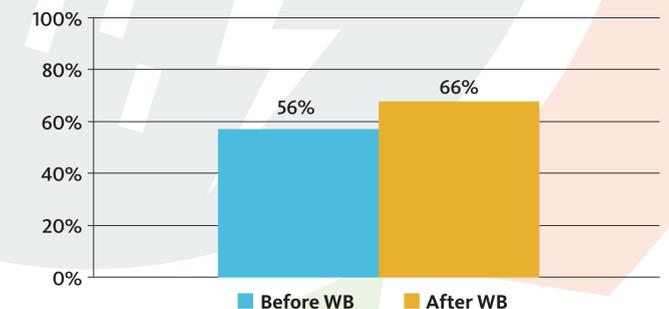
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Weather and Climate Literacy

Pre-Post Changes in Knowledge**



Pre-post content assessments using NAEP items related to weather, climate, accuracy, and inquiry show improvement.