

Empowering Students to Increase their Resilience Through Filmmaking



Erin H. Leckey, Megan Littrell-Baez,
and Anne U. Gold



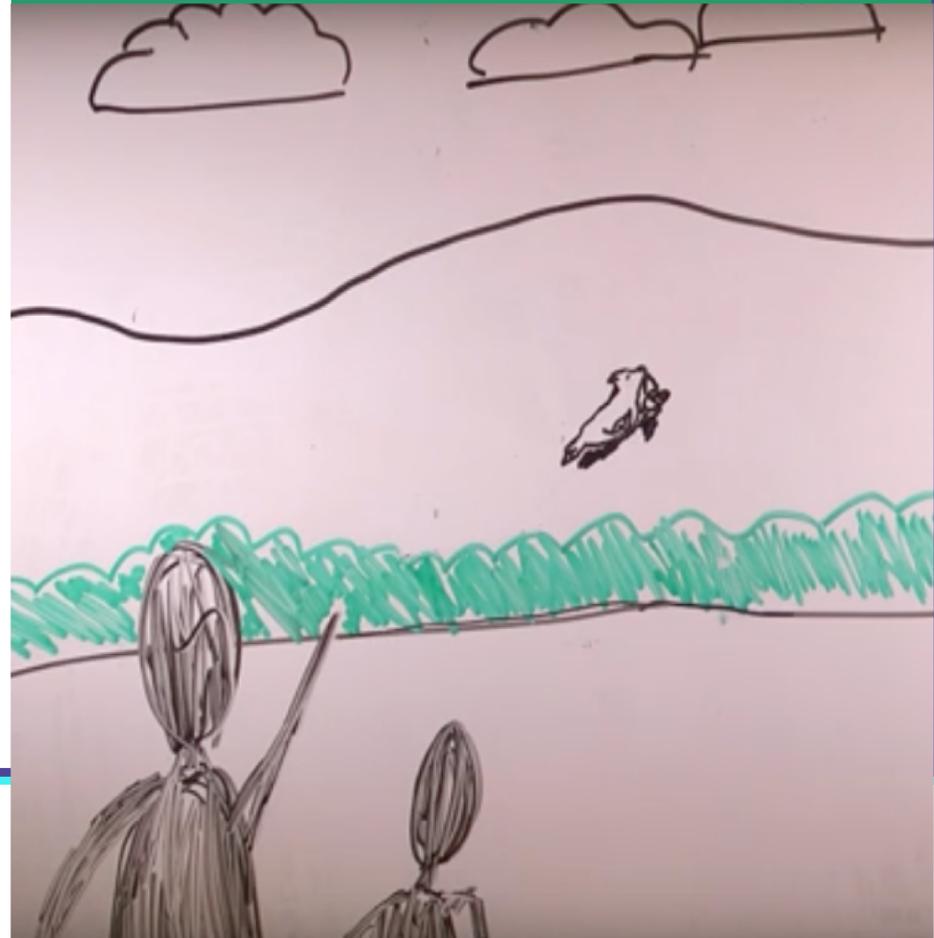
University of Colorado
Boulder

Lens on Climate Change



Middle and High School kids make films to tell their climate story

Coyote and the Drought



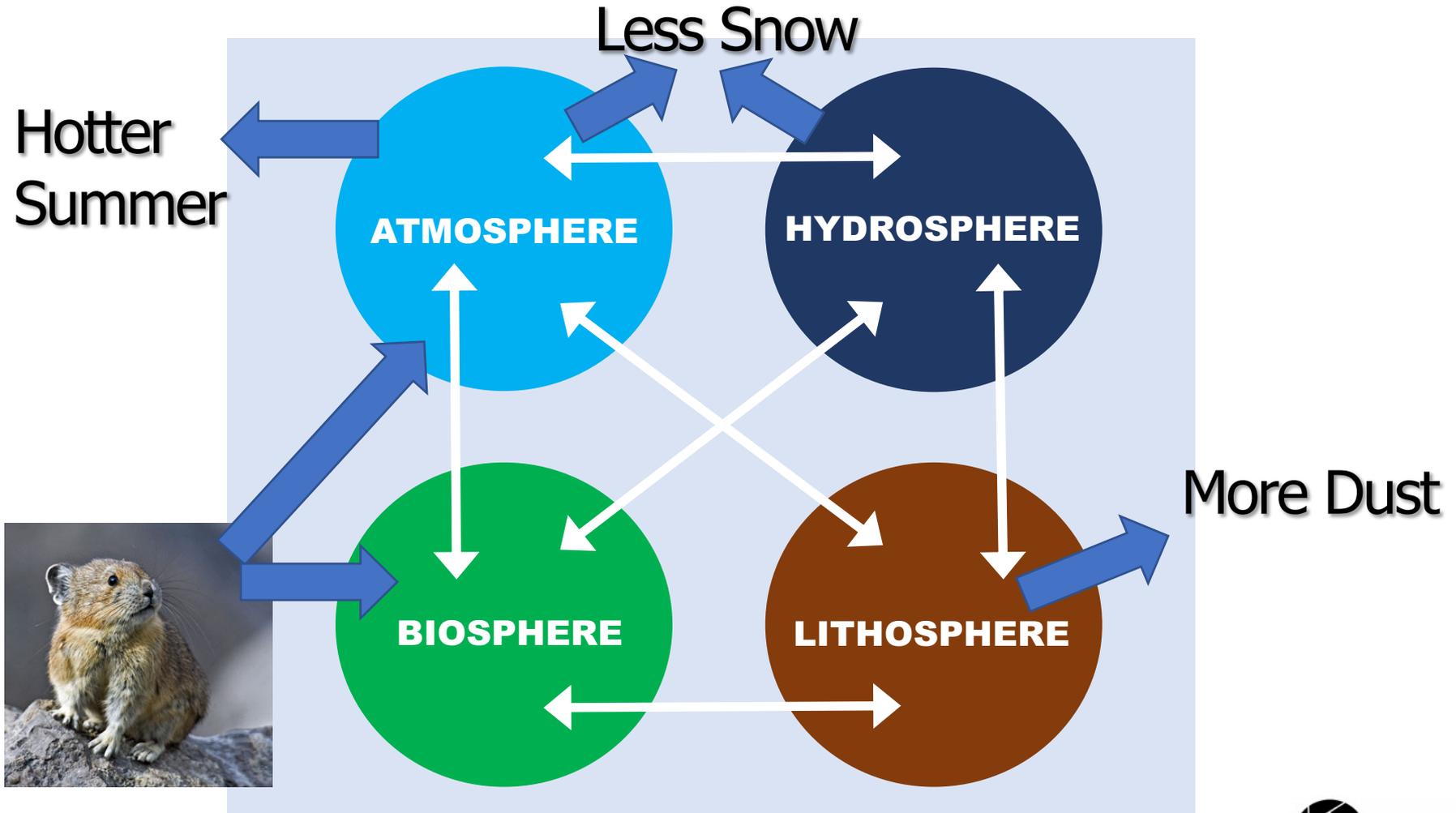
Empowering kids to tell their community's story

We can speak with authority about our own story



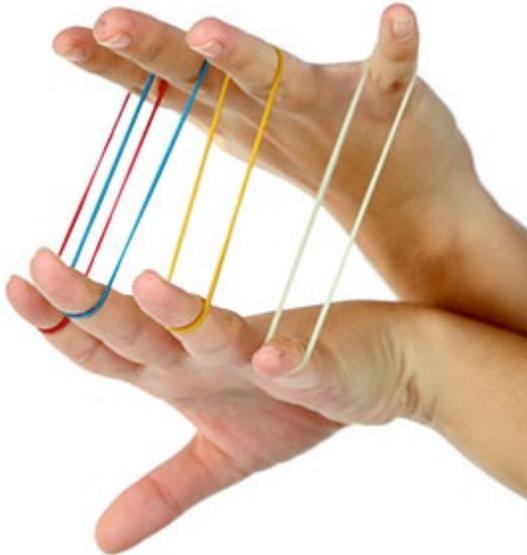
We want to listen to other people's stories

How is Earth's System Impacted by Climate Change?



What is Resilience?

The ability for an object or system to maintain its structure and function after a disturbance.



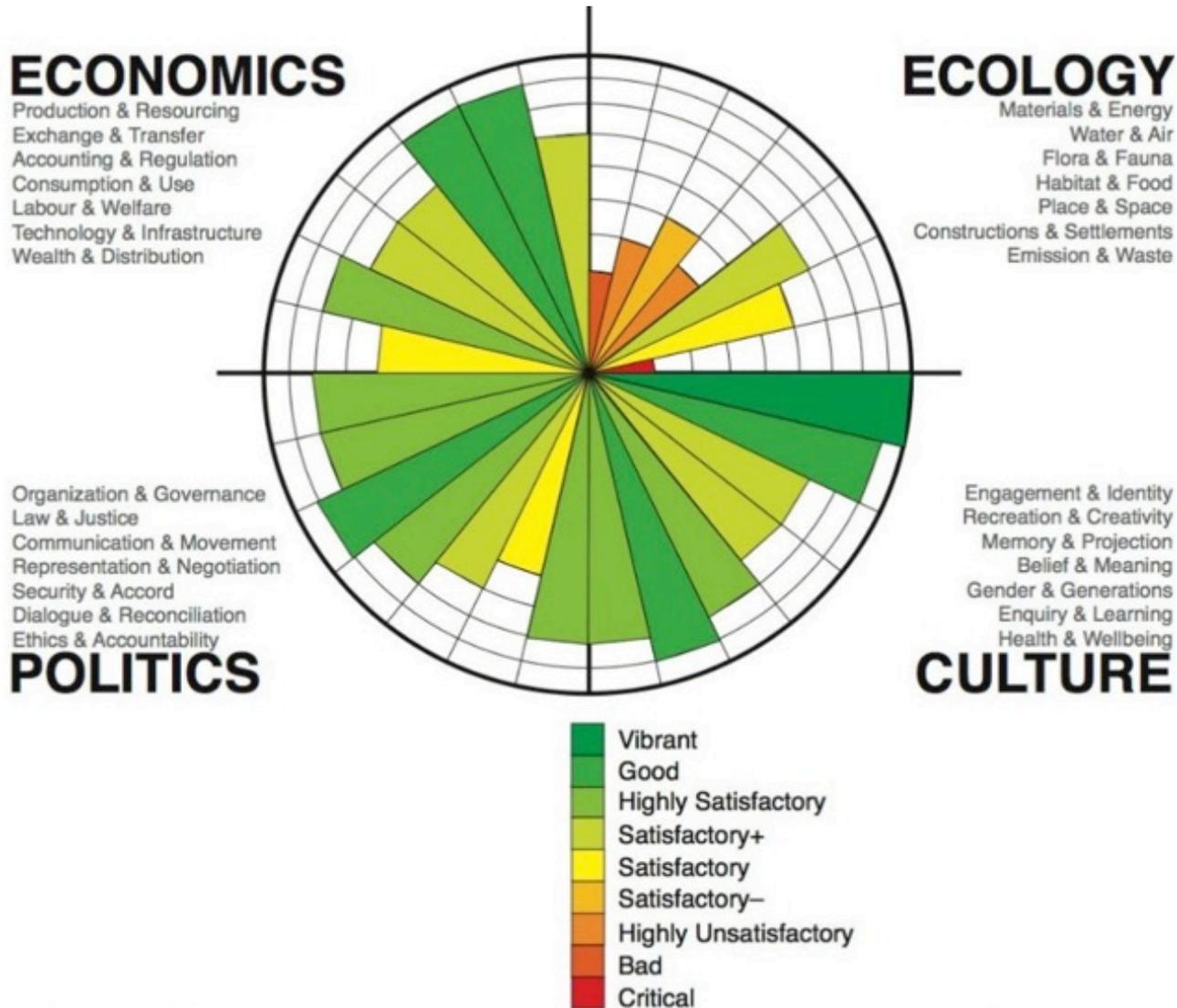
There are examples of resilience everywhere!

What is Community Resilience?

The ability of our communities to withstand disturbances and thrive in challenging times.



What makes communities resilient and sustainable?



CIRCLES OF SUSTAINABILITY

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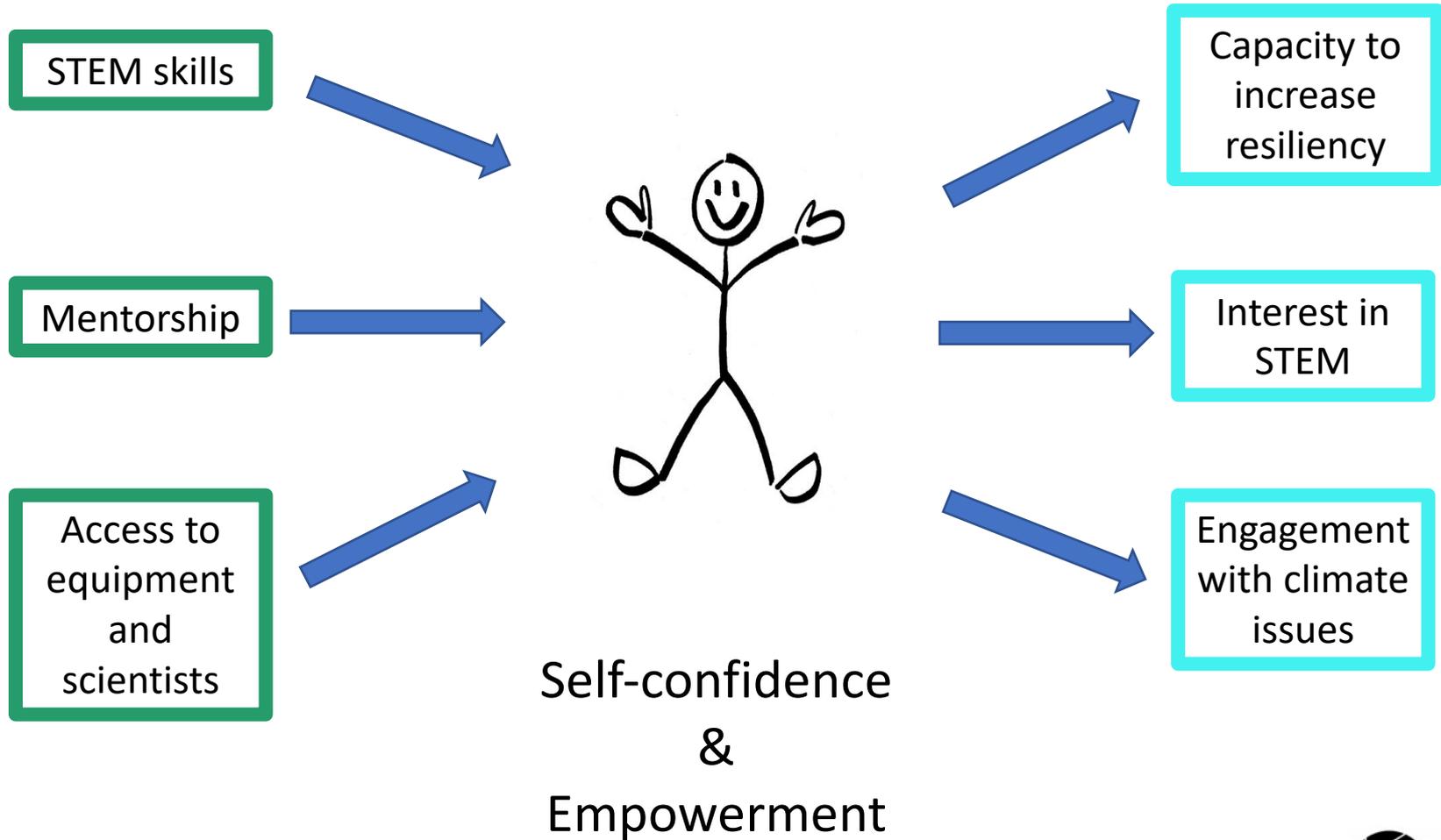
**Students examine
their own
community's hazards
and develop solutions**



Students select topics,
perform research, conduct
interviews and are in
control of filmmaking



Theory of change



Program Characteristics

- Place-based
- Storytelling & art emphasis
- Guidance from Mentors & Experts
- Flexible & Culturally adaptive structure
- Positive thinking/Resiliency emphasis

How do these characteristics impact students' experiences in the LOCC program?

Research Design

Mixed-methods assessment of effectiveness of key program components



Are student's ideas and perceptions transformed by participating in this program?

Illustrative Case: Coyote and the Drought Group

Sharing traditional stories:

One group chose to communicate with their target audience by telling personal memories and sharing an illustrated, Navajo story. These students were members of the Navajo and Zuni nations.

In collaboration with Dr. Jerome Clark (ASU, Diné).

We hoped to increase understanding of how digital storytelling is transforming how traditional stories are shared.

Illustrative Case: Follow-up Interviews

For you, what is the role of stories in learning and telling about you and your peoples' (Diné/Zuni) experiences?

- Shows people how they learn about the world, how everything came about
- Teach kids how to behave; moral lesson

How do you think that the Coyote and Water Monster story helps to communicate your message?

- Coyote as metaphor for how people behave– taking water, using it unwisely;
- Teaching a moral lesson about conserving water

Illustrative Case: Follow-up Interviews

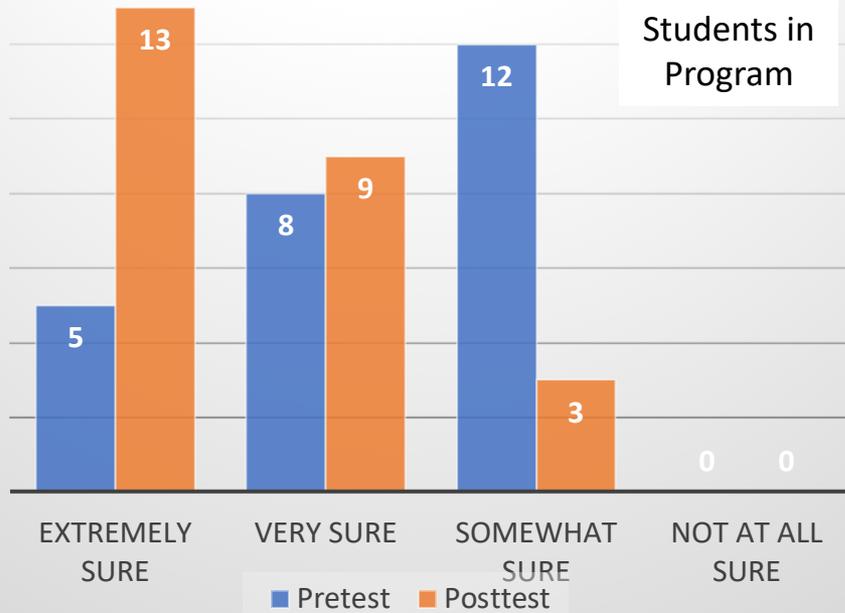
...From your perspective, how can technology be useful or not in telling your peoples' stories?

The group had mixed responses

- Positives:
 - teaches children valuable lessons
 - share Navajo stories with people who wouldn't typically hear them
- Negatives:
 - against tradition, with stories told at any time of year
 - Misinterpretation of stories

Research Outcomes

How sure are you that global warming is happening?



Participants were much more sure that global warming is happening after completing the program ($Z = -3.095$, $p = 0.002$).

Compared to Control Group students (Wilcoxon signed-rank test, $Z = -1.00$, $p = 0.317$)

Research Outcomes

Is the LOCC program transformative?

- Thinking about climate change in everyday situations
- Applying knowledge about climate change solutions
- Communicating knowledge about climate change with others



Higher **transformative experience** scores for LOCC participants compared to control students, across programs.

Questions for the community



How can researchers from outside of tribal communities ensure that we are asking questions and designing our programs to best support those communities?

Thanks to our partners



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<http://cires.colorado.edu/outreach/LOC>

