



# Transform Schools Transform Truancy

Megan Bang

Northwestern university

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### Plan for Today:

1) Curriculum/Content Goals of Schooling

2) Power dynamics

- Educators and students
- Schools and families
- Students

3) Pedagogical Practices: The how of teaching and learning

We should move away from deficit mindsets and theories of change where the point of intervention is our children and families. We must understand the specific history and purposes of education with respect to Native peoples.

How can we transform the historical and relational conditions of schooling:

- So that schools deserve Native children?
- So that schools are places where Native children and families want to be?
- So that schools contribute to Native peoples thriving?



## Proposition 1:

Significantly rethink the learning goals of schooling in ways that reflect the present but also future needs of Native communities.

INCREASE STUDENT WELLBEING

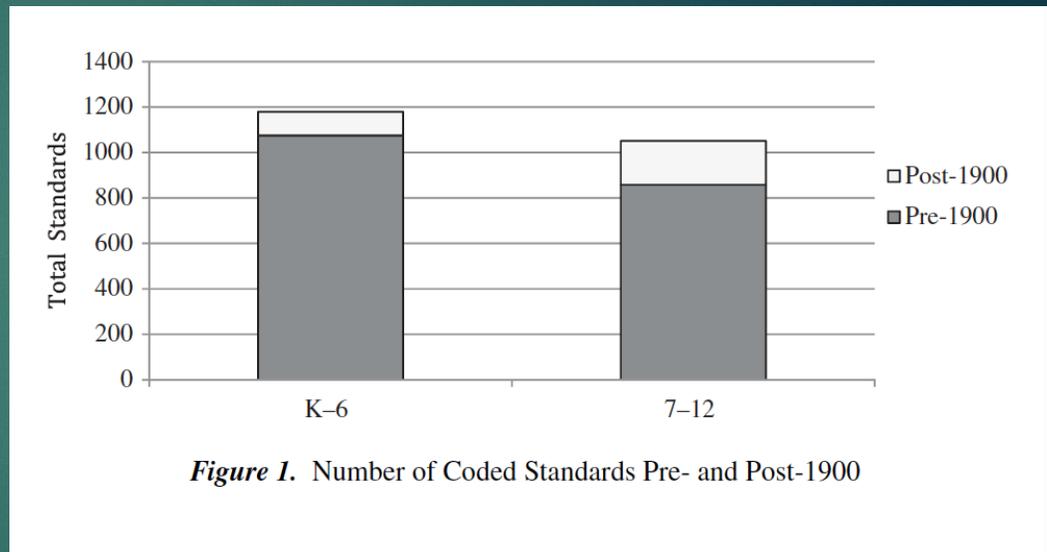
INCREASE STUDENT INTEREST, MOTIVATION, & ENGAGEMENT

DISCIPLINES ARE ALREADY TRANSFORMING – HOW LONG WILL IT TAKE FOR SCHOOLS TO CATCH UP?

# Attendance mirrors presence/absence in schools

Schools are largely built on Indigenous absence...

- ▶ Standards
- ▶ Teacher Preparation/Requirements
- ▶ Curricular Resources
  
- ▶ Schools today are the main drivers of Indigenous absence in peoples' knowledge enabling systemic racism and challenges for Native peoples.
- ▶ Indigenous youth face mental health challenges at a significantly different rate than other youth – A key issue is being able to imagine a present and future self (Elliot & Fryberg, 2020).



*Figure 1.* Number of Coded Standards Pre- and Post-1900

Only 50% of states require teaching about Indigenous peoples. 87% of US educational standards dictate the teaching of Indigenous peoples in the context of pre-1900 U.S. history (Shear et al. 2015).

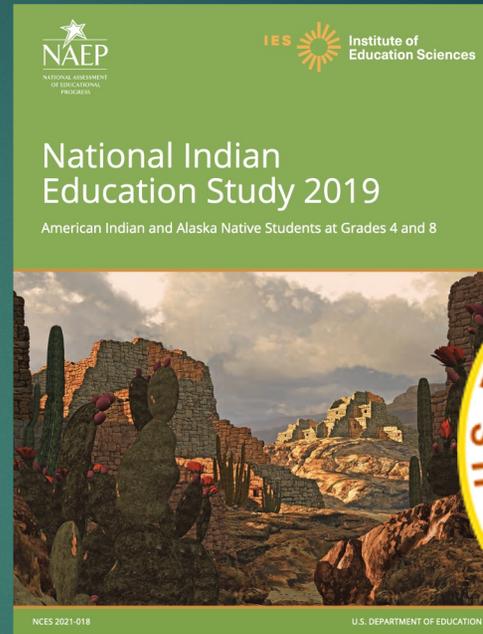
# Teachers Report Broad Absence or Minimal Presence of Native People & Communities...

## Language Arts/Social Studies

- ▶ 4<sup>th</sup> grade
  - ▶ Overall 52% say never or once a year
- ▶ 8<sup>th</sup> grade
  - ▶ Overall 73% say never or once a year

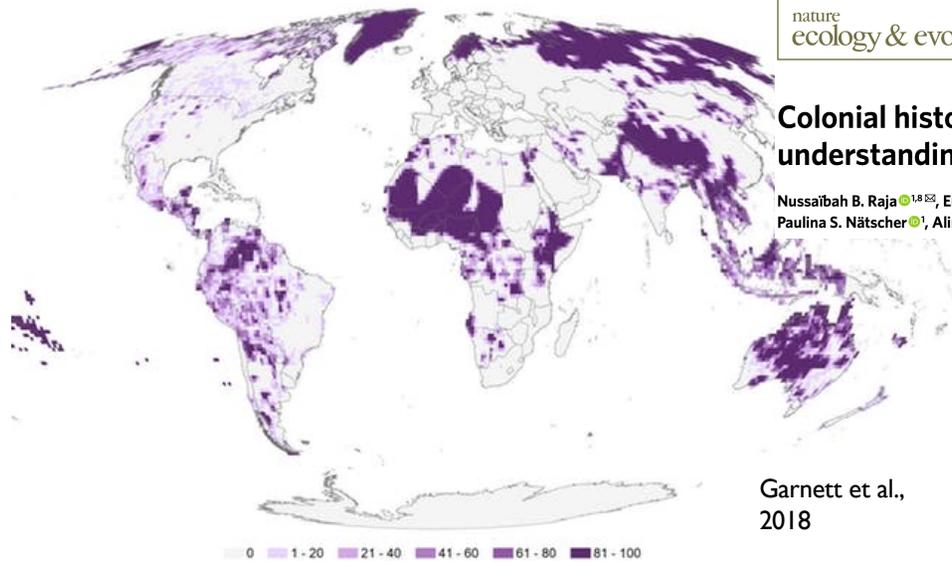
## Mathematics

- ▶ 4<sup>th</sup> grade
  - ▶ Overall 85% say never or once a year
- ▶ 8<sup>th</sup> grade
  - ▶ Overall 88% say never or once a year



**Department of the Interior Releases Investigative Report, Outlines Next Steps in Federal Indian Boarding School Initiative**

5/11/2022



nature ecology & evolution

ARTICLES

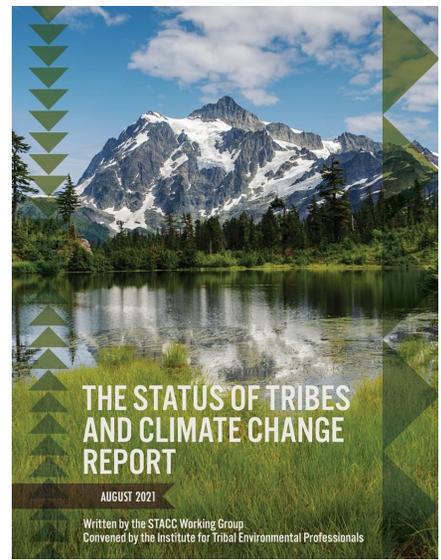
<https://doi.org/10.1038/s41559-021-01608-8>

Check for updates

### Colonial history and global economics distort our understanding of deep-time biodiversity

Nussaibah B. Raja<sup>1,8</sup>, Emma M. Dunne<sup>2,8</sup>, Aviwe Matiwane<sup>3,4</sup>, Tasnuva Ming Khan<sup>1,7</sup>, Paulina S. Nätscher<sup>1</sup>, Aline M. Ghilardi<sup>5</sup> and Devapriya Chattopadhyay<sup>6</sup>

Garnett et al., 2018



THE WHITE HOUSE



NEWS & UPDATES

### White House Commits to Elevating Indigenous Knowledge in Federal Policy Decisions

NOVEMBER 15, 2021 • PRESS RELEASES

*White House Office of Science & Technology Policy and Council on Environmental Quality release first-of-its kind memorandum to initiate new federal guidance on Indigenous Traditional Ecological Knowledge*

What do our children need to learn to ensure liveable, culturally thriving, and sovereign futures?

- Indigenous territories contain 80% of the world's biodiversity
- 1/4 of all land (outside Antarctica) is in Indigenous hands
- 95% of climate change hotspots are in Indigenous communities.

Frechette et al., 2018; Reynter et al., 2018; Brigitte et al, 2016; Olney & Viles, 2019



## a) Observed widespread and substantial impacts and related losses and damages attributed to climate change

### Water availability and food production

••	••	•	••
Physical water availability	Agriculture/crop production	Animal and livestock health and productivity	Fisheries yields and aquaculture production

### Health and well-being

••	•••	•••	•••
Infectious diseases	Heat, malnutrition and harm from wildfire	Mental health	Displacement

### Cities, settlements and infrastructure

•••	•••	•••	••
Inland flooding and associated damages	Flood/storm induced damages in coastal areas	Damages to infrastructure	Damages to key economic sectors

### Biodiversity and ecosystems

•••	•••	•••
Terrestrial ecosystems	Freshwater ecosystems	Ocean ecosystems

Includes changes in ecosystem structure, species ranges and seasonal timing

### Key

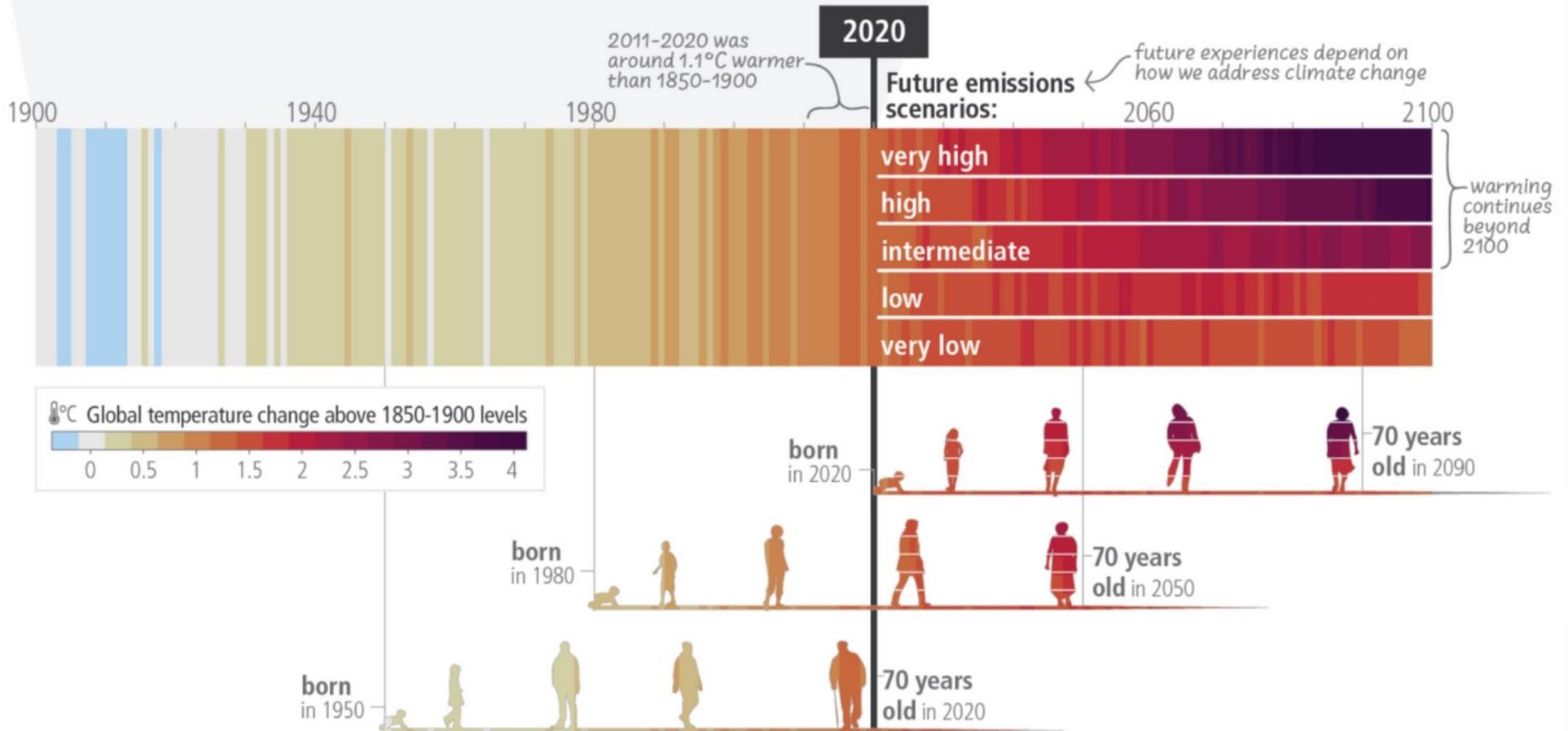
Observed increase in climate impacts to human systems and ecosystems assessed at **global level**

- Adverse impacts
- Adverse and positive impacts
- Climate-driven changes observed, no global assessment of impact direction

### Confidence in attribution to climate change

- *High or very high confidence*
- *Medium confidence*
- *Low confidence*

c) The extent to which current and future generations will experience a hotter and different world depends on choices now and in the near-term

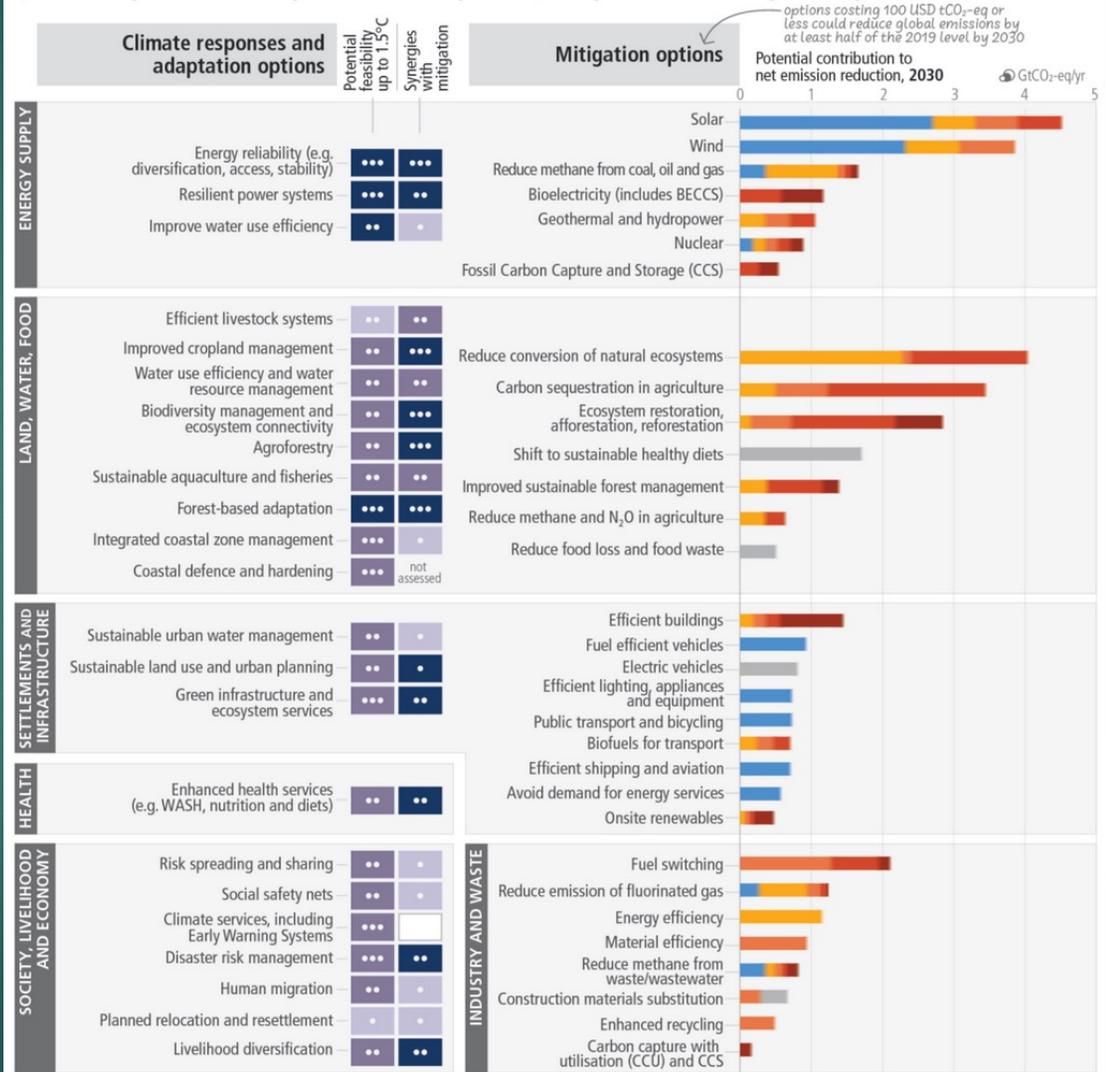


# Equity and Inclusion a UN Priority

Prioritising equity, climate justice, social justice, inclusion and just transition processes can enable adaptation and ambitious mitigation actions and climate resilient development. Adaptation outcomes are enhanced by increased support to regions and people with the highest vulnerability to climatic hazards. Integrating climate adaptation into social protection programs improves resilience. Many options are available for reducing emission-intensive consumption, including through behavioural and lifestyle changes, with co-benefits for societal well-being. (high confidence) {4.4, 4.5}

## There are multiple opportunities for scaling up climate action

### a) Feasibility of climate responses and adaptation, and potential of mitigation options in the near-term



# Youth know. Youth care. Can we create schools that support their interest & motivation?



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STUDENT WELL-BEING

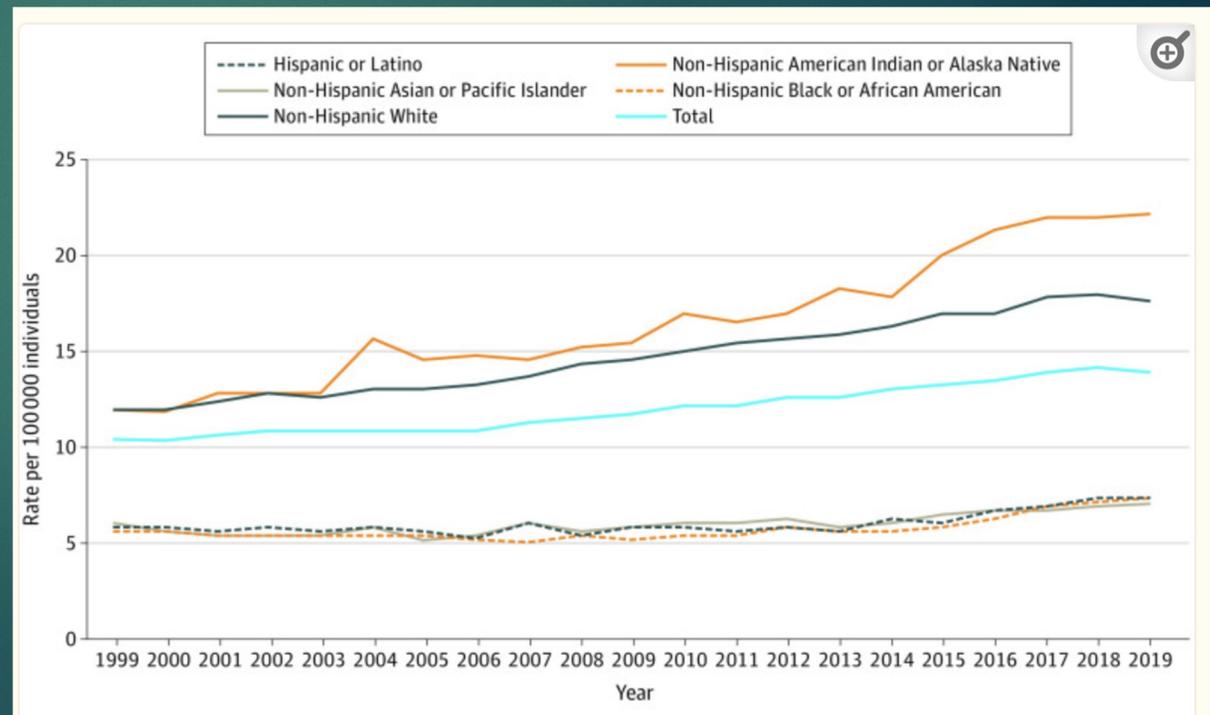
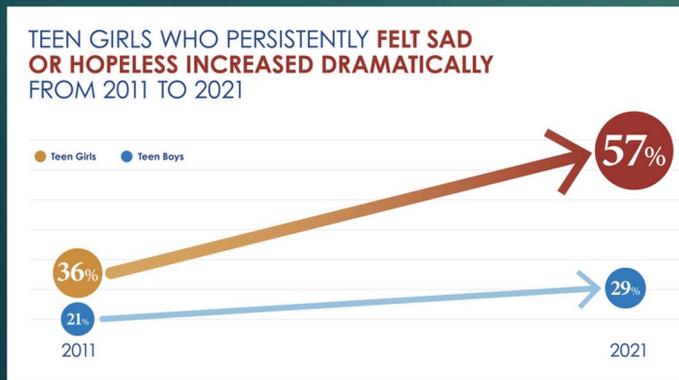
## Teens Are Struggling With Climate Anxiety. Schools Haven't Caught Up Yet

By Madeline Will — December 07, 2022 12 min read

# Growing Need for Learning Environments to Be Focused on Making Just and Sustainable Futures.

Tended to operationalize mental health as distinct from or in preparation for learning.

Need to understand that what and how we think & learn are intertwined.



# Concluding Recommendation



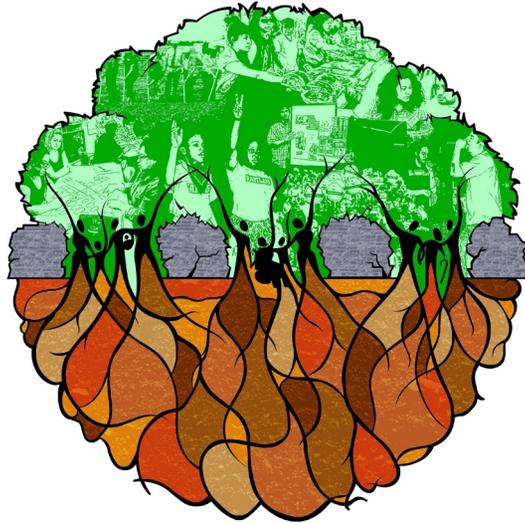
- ▶ Learning goals of schooling should reflect the present and future needs of Native communities. Require schools to include content about Native people past, present and future routinely and across content areas.



## Proposition 2:

Deliberately shift the historically accumulating power dynamics between student, families, communities and schools

- 1) ENGAGE LOCAL AND LIVED INDIGENOUS KNOWLEDGES – MEANS A TRANSFORMED UNDERSTANDING OF FAMILIES AND COMMUNITIES
- 2) ENGAGE FAMILIES AND COMMUNITIES AS CO-DESIGNERS OF EDUCATIONAL CHANGE
- 3) SCHOOLING SHOULD BE RESPONSIVE TO COMMUNAL RHYTHMS\*



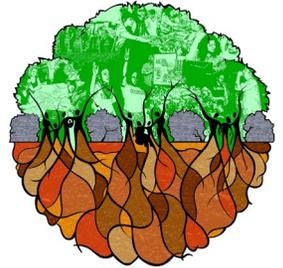
# Cultivating Relationships with Families & Communities Towards Education Justice & Community Wellbeing

*Findings from the Family Leadership Design Collaborative*



*A Partner With Communities Where Children Come First*

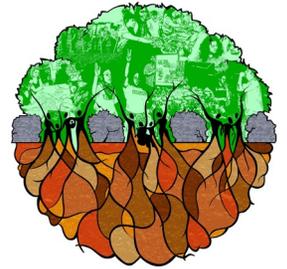
# Imagining New Possibilities for Equitable Processes of Partnering



- 1) Field has begun to recognize asymmetrical power dynamics and made strides beyond deficit based “fix parent” approaches (e.g. Baquedano-Lopez et al. 2013)
- 2) And yet in practice processes of partnering continue to operate within White, normative, and powered paradigms
- 3) So-called partnerships position families & communities outside of key decision making spaces, even when they seek their expertise (Auerbach, 2011)

Need to figure out how enact new partnerships and imagine new possibilities

# FLDC Core Design Principles



FLDC Vision of **community wellbeing and educational justice** seeks to cultivate, enact, and sustain:

- whole, healthy children in culturally thriving families & communities
- relational, communal, and collective approaches to change-making
- just institutions, policy, and practices
- Held 4 community circles in 10 communities- circles 2-3 hours each.

**Beginning with Family & Community Ecologies**

**Refusing and Disrupting Normative Power Dynamics**

**Enacting Solidarities in Collective Change-Making**

**Creating On-Going Transformative Possibilities**

# Theories/strategies for change emergent from families



Improving Parenting  
 Within Systems  
 Reclaiming Systems  
 Dreaming

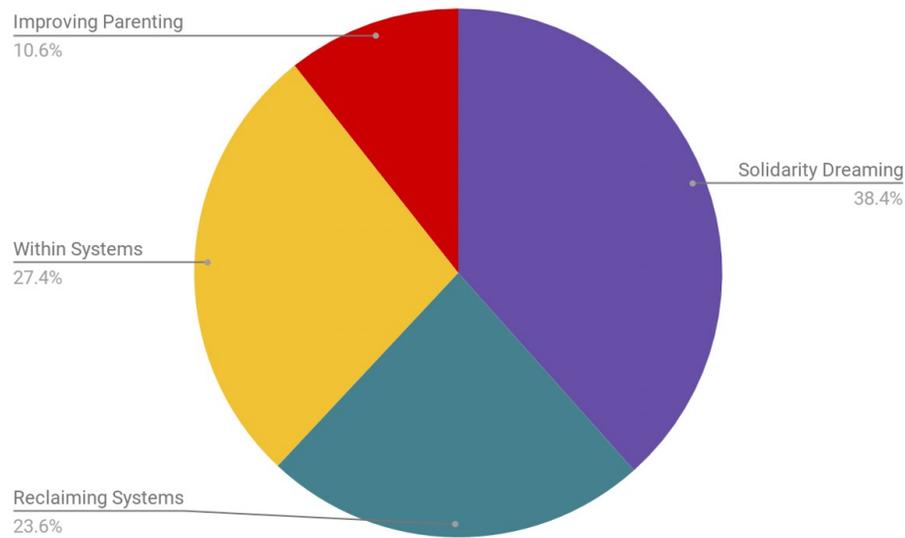


Figure 1. Distribution of theory of change “families”

Sustained conversation increase solution focus beyond family change itself. Single focus group approaches skew our understandings

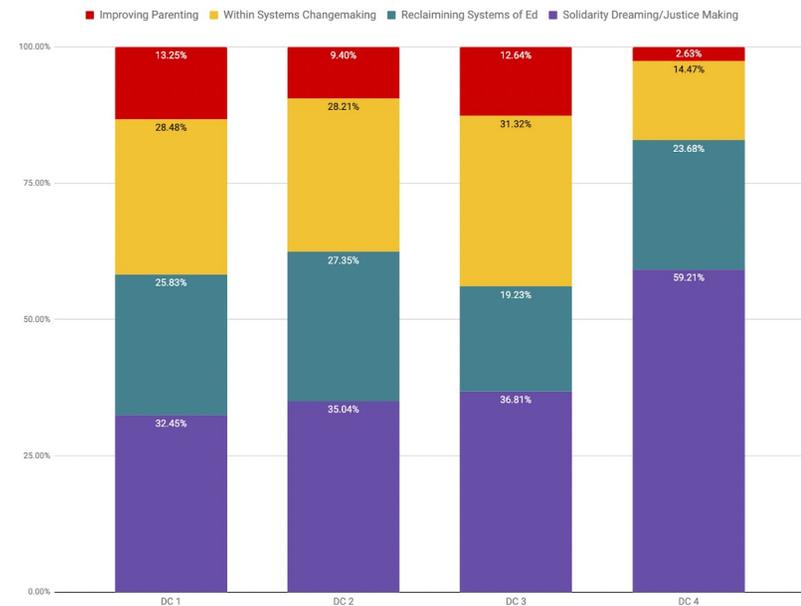
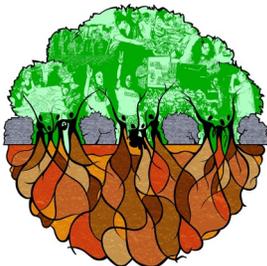
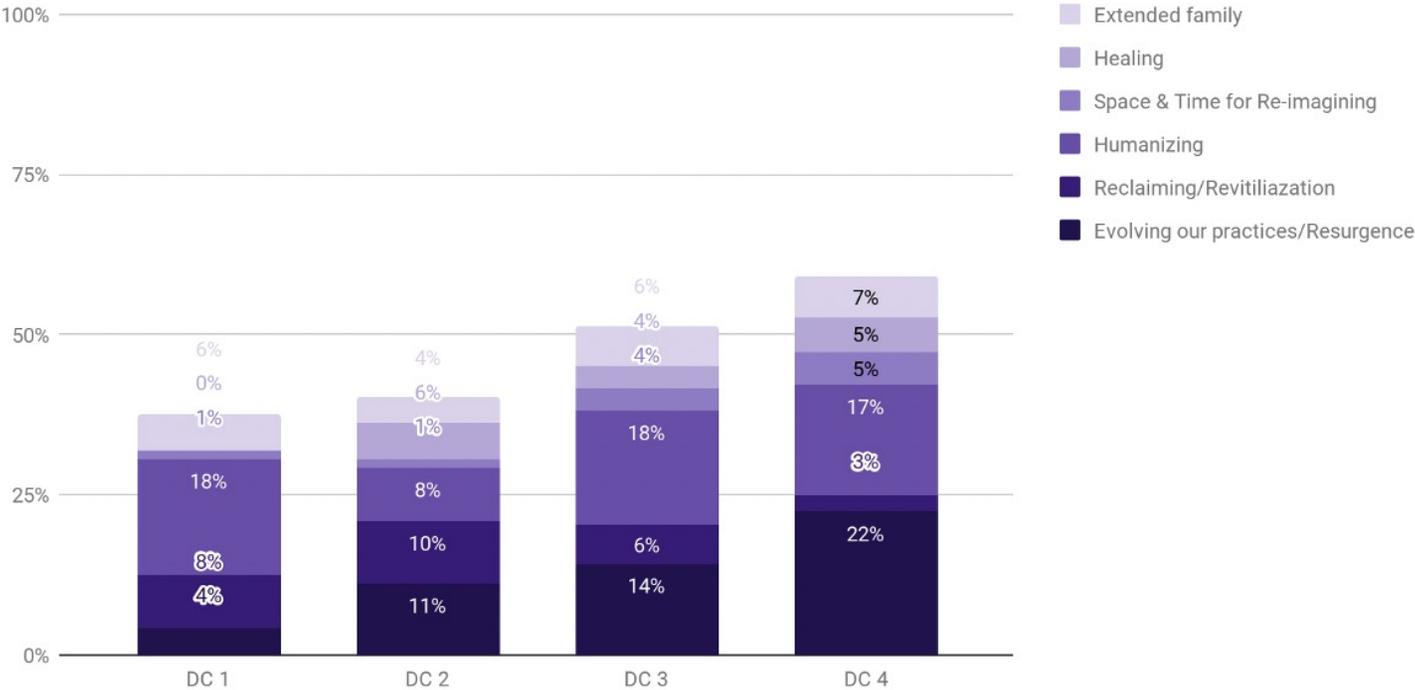


Figure 3. Percentage of theories of change discussed across all collaboratives, over time (DC=Design Circle)

# Healing Yes – And Future Making/Dreaming Most Prevalant



Design Collaboratives Completing 4 Design Circles - Shifts in Solidarity Dreaming



# Native, Black, and Iranian/Muslim Communities Most Likely to Think Change Making Must Be Community Centric

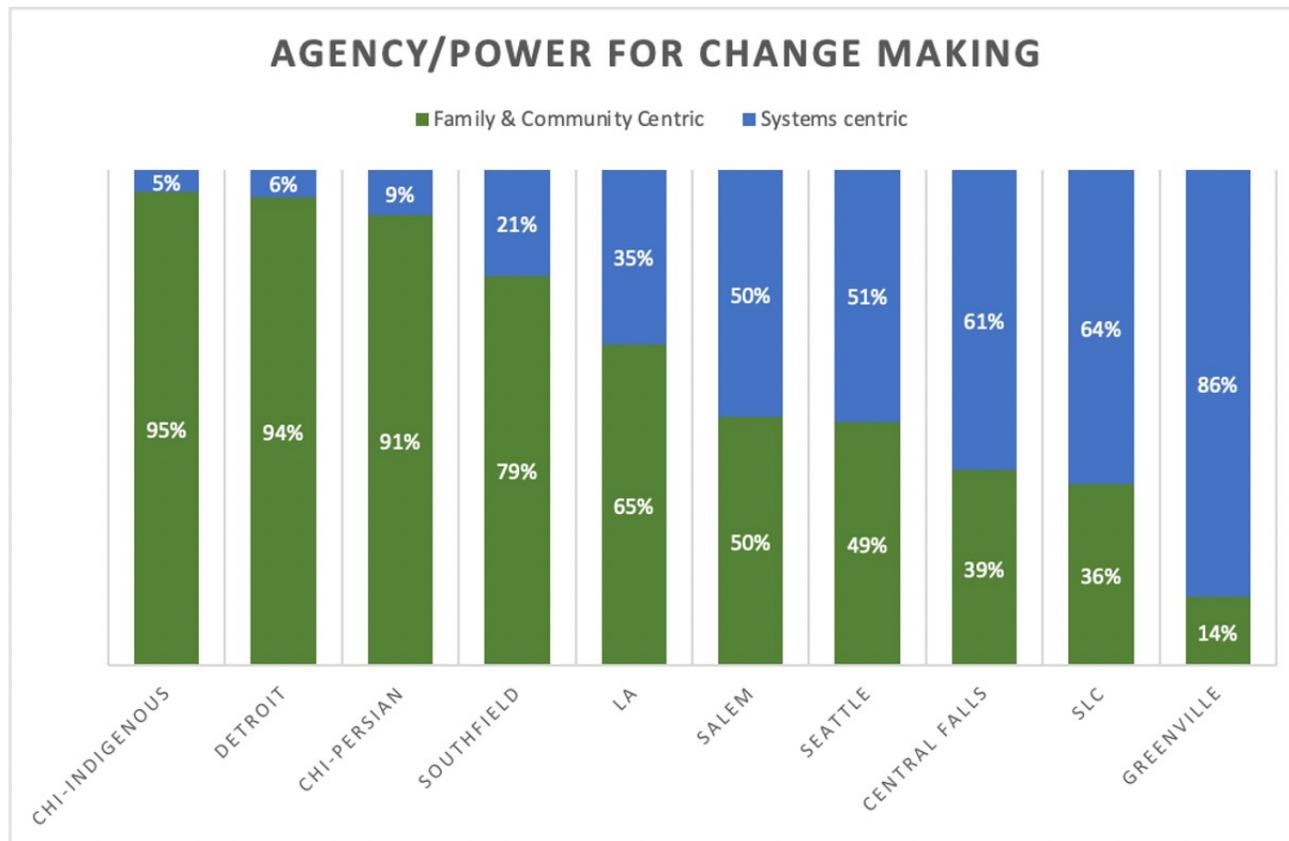
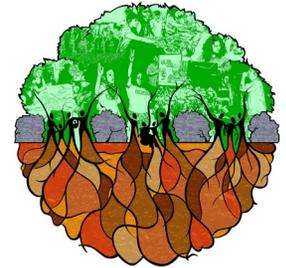


Figure 2. Percentage of codesign sessions focused on family and community-centric and systems-centric logics, by collaborative.

# Concluding Recommendation



- ▶ Create and support processes of co-design and leadership with families and communities in school change in ways that recognize historically accumulating power dynamics. This requires new forms of ongoing relationship building and sustainment. Ensure family engagement is collectively focused not singular. Do not do single listening sessions. It facilitates the least transformative thought and tends to replicate parenting interventions.

## Recommendation 3:

Teaching and Learning needs to be based in and with lands, waters, and communities. Schools should aim for at least 25% of learning to be outdoors.

- 1) NECESSARY TO ACCOMPLISHING ACTUAL CULTURALLY RESPONSIVE EDUCATION
- 2) SEASONALLY FOCUSED LEARNING WILL SUPPORT NEEDED ADAPTATION AND MITIGATION
- 3) "OUTDOOR LEARNING" HAS SIGNIFICANT PHYSICAL & MENTAL HEALTH BENEFITS AND SUPPORTS MORE RIGOROUS LEARNING

# Nature-Culture (Human) Relations are Foundational: “A part of“ or “apart from” models?

- ▶ Organizes human activity across developmental time
- ▶ Shapes knowledge systems, values, and practice
- ▶ Shaped by power and history
- ▶ Foundational to human development and cognition
- ▶ Centrally configures learning environments

## Part 1: Core Cognitive Models of Human Relationships with the Natural World

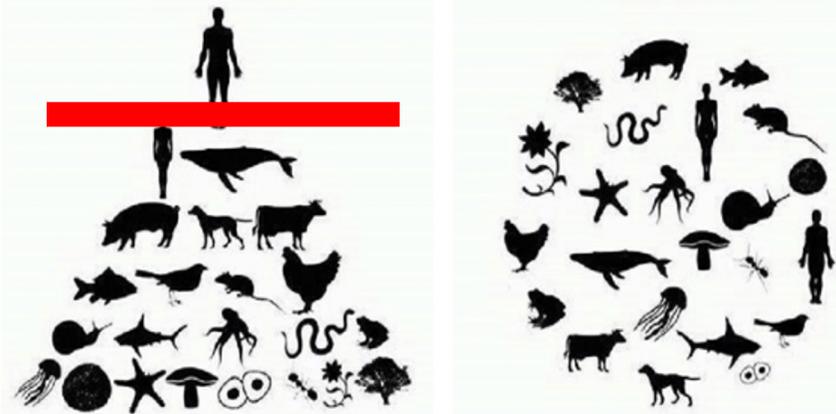


Diagram "Ego-Eco"-Humankind is part of the ecosystem, not apart from or above it. This diagram depicts this simple fact clearly (diagram: S. Lehmann, 2010).



These models shape core cultural, cognitive, and biological processes as well as everyday activity. “Apart from” models have been foundational to paradigms of “human supremacy & entitlement.” “A part of” models are associated with systems reasoning and more sustainable decision-making. There is a need to cultivate “a part of” models given climate change and adaptation demands of the 21<sup>st</sup> century.

Current forms of education are built on and teach “Apart from” models of nature-culture relations.

- ▶ Structure our “representational ecosystem” (e.g. books, media, diagrams) (Medin & Bang, 2014)
- ▶ Structures content learning (e.g. the US has invested in lab-based science infrastructure, not field based)
- ▶ Cultivate fragmented human centric reasoning (not whole systems) and unsustainable decision-making (e.g. Medin et al. 2012).
- ▶ Created systemic sedimentary bias and multiplying health impacts (e.g. stress & cortisol; microbiome diversity) including mental health (e.g. Beyer et al. 2018; Frumkin et al. 2017; Tillman et al. 2018)

I Spy an  
Ecosystem!





## Land- and Water-Based Education (A part of models)

“Indigenous education is not Indigenous or education from within our intellectual traditions unless it comes through the land, unless it occurs in an Indigenous context using Indigenous processes ...we should be concerned with re-creating the conditions within which this learning occurred, not merely the content of the practice itself” (Deloria, 2001, pp. 58-59; See also Smith, 2012; Simpson, 2014).

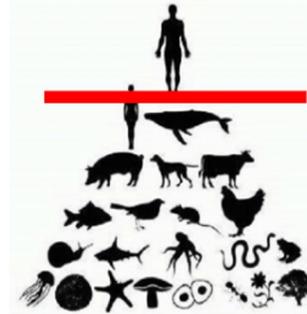
# Project Context

## Learning in Places

By developing new forms of teaching and learning to support sustainable relationships and socioecological well-being

- ▶ Transdisciplinary education with a focus on science, social-studies, and ELA.
- ▶ Co-designed with families, educators, administrators
- ▶ Engages in local inquiries connecting learning objectives with students lives.
- ▶ Focused on pk-5th grade but utilized pk-16
- ▶ Seasonal Storyline for school-based instruction

### Part 1: Core Cognitive Models of Human Relationships with the Natural World



**Apart from**



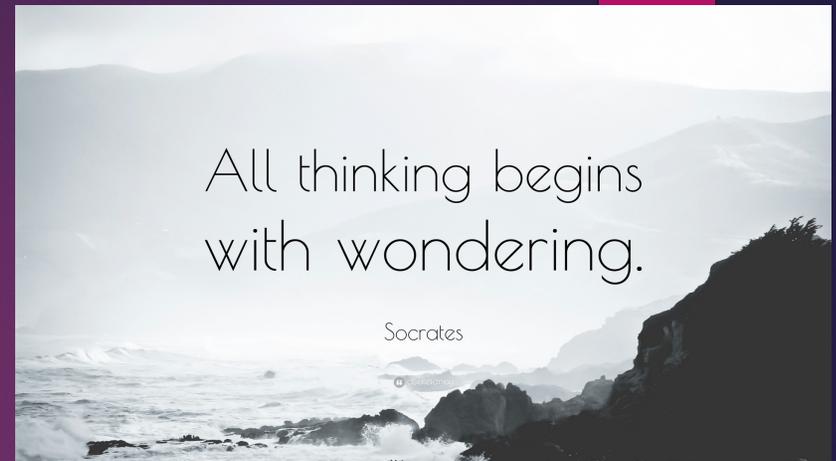
**A part of**

Diagram: 'Ego-Eco'-Humankind is part of the ecosystem, not apart from or above it. This diagram depicts this simple fact clearly (diagram: S. Lehmann, 2010).

- ▶ 98 hours of video data gathered from classroom implementation.
- ▶ Coded at 5-minute intervals for content learning and wondering practices.
- ▶ Differences between indoor and outdoor forms of teaching and learning studied.

# Wonder...key aspect social-emotional learning (Sherry-Wagner, 2023)

- ▶ Involves possibility thinking, navigation uncertainty, & perspective taking
- ▶ Has affective-emotional (feeling) and cognitive-motivational dimensions (knowing)
- ▶ “Preparing the ground” for affectively-rich socioecological sensemaking and possibility thinking via Learning in Places



Learners should **have a right** to **learning** landscapes characterized by **wonder** in ways that expand **affective possibilities** for **life & learning**

A key dimensions of wonder:

**“Wondering at”** (distinct from about) manifests in expressions of awe, joy, and “grandness” of unknown but also interest in understanding.

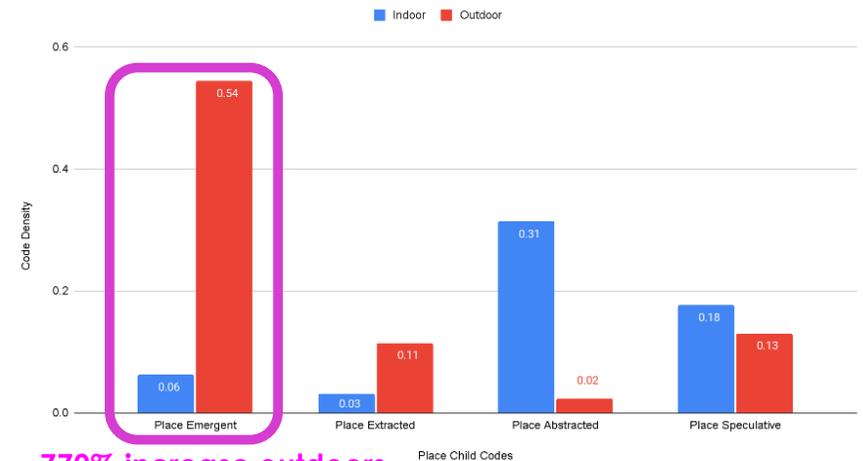
# Key Findings (Sherry-Wagner, 2023)

Being **outdoors** transforms the **emotional** & **cognitive** experience of learning

- ▶ Learning outdoors increases students' engagements with learning objectives as connected to their local places.
- ▶ Significant increase of expression of wonder and awe about phenomena: **being outdoors transforms the emotional experience of learning**

Learning  
in Places

Place Density x Indoor/Outdoor



~770% increase outdoors

Wonder Density x Indoor/Outdoor



~810% increase in 'wondering at' outdoors

# Learning outdoors also correlated with more rigorous content learning.

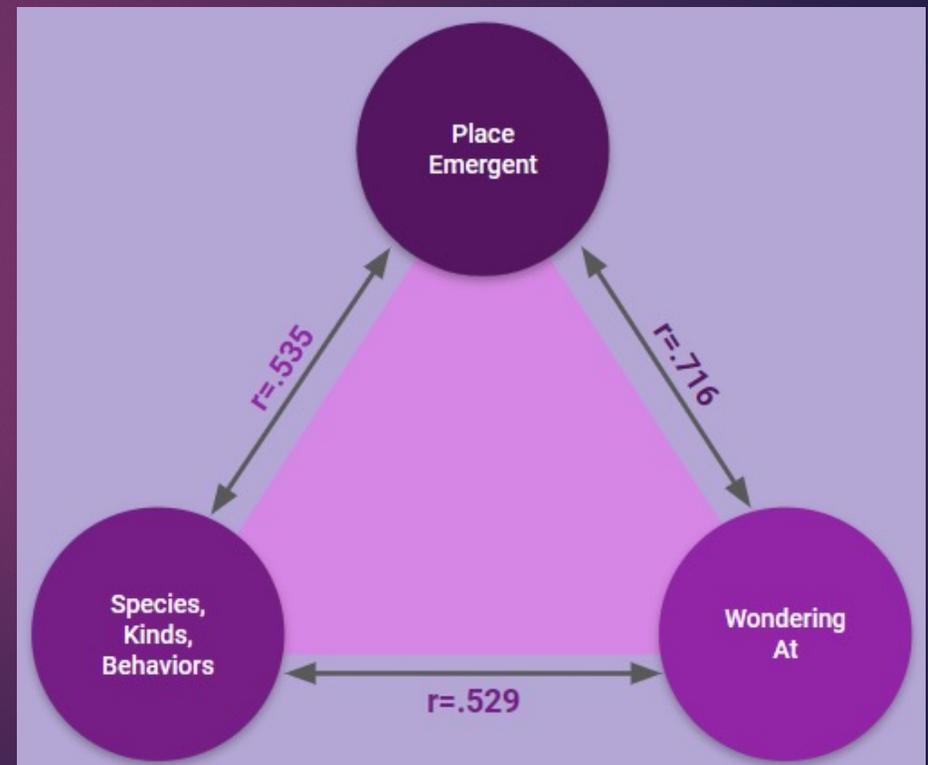
- ▶ Triangulation of significance between **place emergent**, **wondering at**, and **species, kinds, & behaviors**



Transforming the conditions & experiences of learning

**AND**

engaging rigorous content learning



# From a principal...

- ▶ “Not only is this more fun and improves academic outcomes but it moved things we just haven’t been able to. We have seen increased attendance, decreased behavioral issues and for the students who come from classrooms who do this we see far less summer learning loss.” –
- ▶ Tribal school principal

# Concluding Recommendation

- ▶ Support models of outdoor field/place-based education that are attuned to seasonal life and engage familial cultural practices and knowledges in ways that increase learning and support socio-emotional wellbeing.

# Overall Recommendations



1. Ensure learning goals of schooling reflect the present and future needs of Native communities. Require schools to include content about Native people past, present and future routinely and across content areas.
2. Create and support processes of co-design and leadership with families and communities in school change in ways that recognize historically accumulating power dynamics. This requires new forms of ongoing relationship building and sustainment. Ensure family engagement is collectively focused not singular. Do not do single listening sessions. It facilitates the least transformative thought and tends to replicate parenting interventions.
3. Support models of outdoor field/place-based education that are attuned to seasonal life and engage familial cultural practices and knowledges in ways that increase learning and support socio-emotional wellbeing.