

DEVELOPING A CLIMATE JUSTICE EDUCATION COHORT IN TEACHER EDUCATION AT UBC

The escalating global climate crisis demands urgent evidence-based climate change education that integrates STEM education and climate justice. Universities, specifically Teacher Education units, must offer innovative and emerging programs to deliver a multidisciplinary and holistic climate change education.

BACKGROUND

Climate change education rarely mentions climate justice, and teachers are not properly trained to address the issue. This proposed B.Ed. cohort will inform and equip elementary teacher candidates with interdisciplinary perspectives on climate change & climate justice.

RESEARCH QUESTION

How is climate justice education conceptualized and implemented within contemporary teacher education programs?

PROJECT PLAN

- Phase 1: Literature Review
- Phase 2: Needs Assessment
- Phase 3: Open Resources & B.Ed. Curriculum Framework

Solutions Scholars

Balraj Rathod & Mahfida Tahniat

Mentors

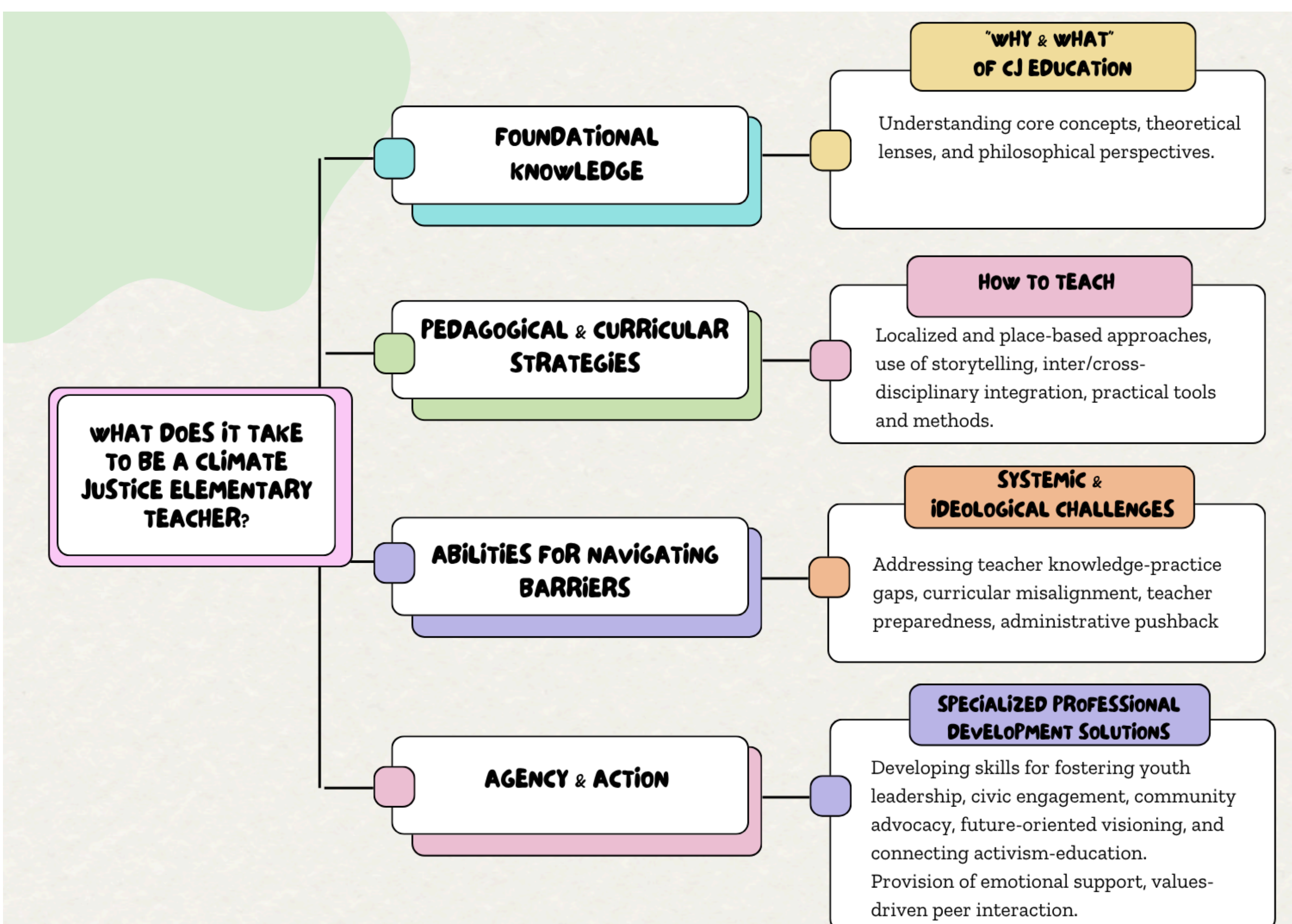
Dr. Douglas Adler, Dr. Kshamta Hunter, & Dr. Sandra Scott

UBC **UBC**
Climate Solutions Research Collective Education

PHASE 1

Literature review of climate justice education theory and teacher education programs (Sep to Dec, 2025)

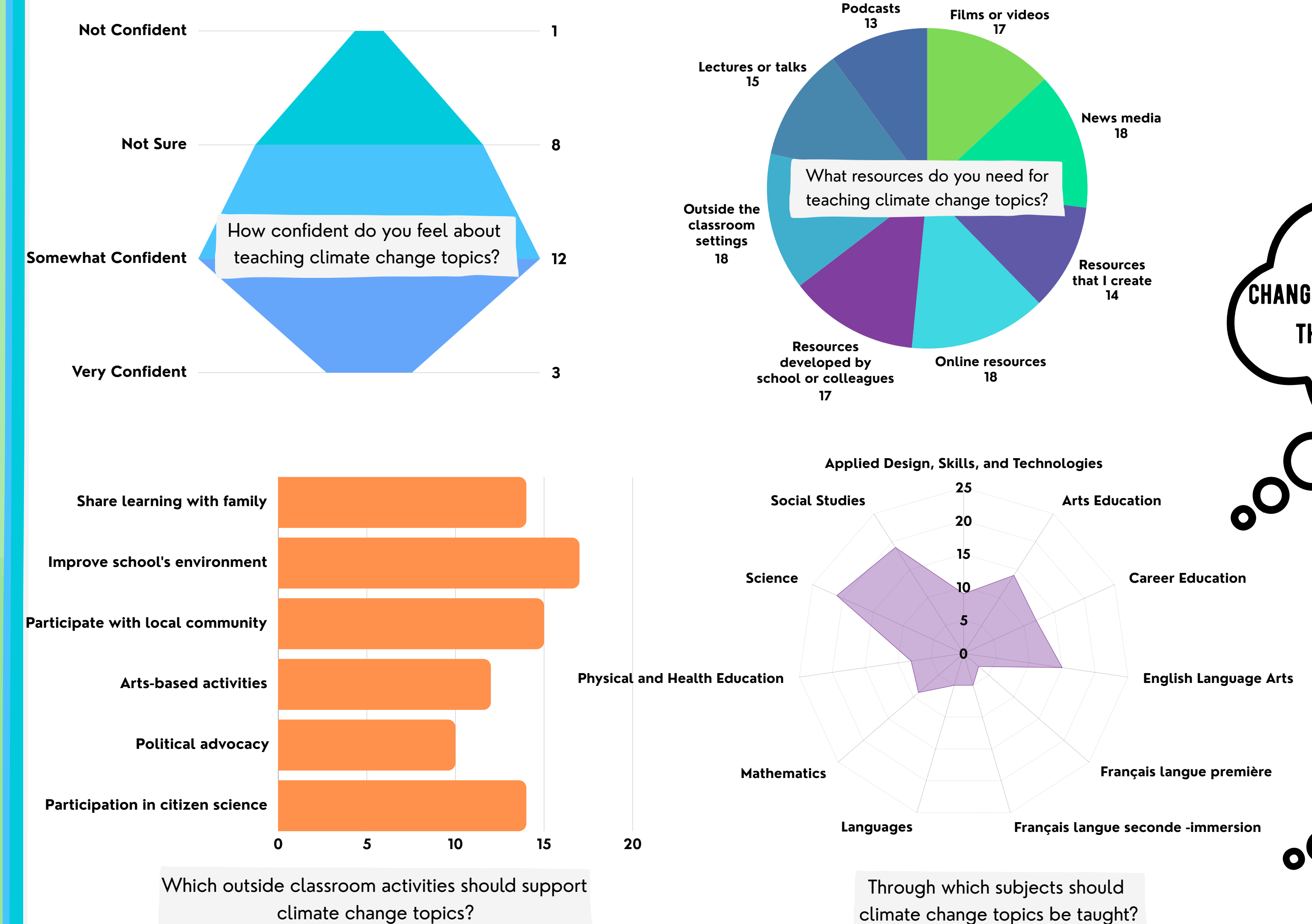
Findings:



PHASE 2

Climate justice-framed needs assessment (survey and interviews) with practicing teachers and teacher candidates (Jan to Apr, 2026)

Findings:



"IT'S JUST SO IMPORTANT TO BE INTRODUCED TO IT WHEN YOU'RE YOUNG, SO YOU CAN SEE HOW MUCH YOU NEED TO LEARN AS YOU GROW."

"I UNDERSTAND CLIMATE CHANGE IS, LIKE, A HUGE, MULTI-FACETED TOPIC THAT I FEEL LIKE I STILL DON'T KNOW EVERYTHING THAT I NEED TO KNOW AT THIS POINT."

"I FEEL LIKE CLIMATE JUSTICE CAN BE TAUGHT NOT IN A TRADITIONAL WAY."

PHASE 3

Creating open resources for climate justice education (Jan to Apr, 2026) and developing B.Ed. curriculum framework (May to Jun, 2026)

Findings:

Climate-Kind Pedagogy

Home About Climate-Kind Framework Projects Tools and Evaluation Strategies Presentation and Publications Toolkit Our Team

Home > Climate Justice Teacher Ed

Foundational Knowledge	Understanding core concepts, theoretical lenses, and philosophical perspectives.
Pedagogical and Curricular Strategies	Localized and place-based approaches, use of storytelling, inter/cross-disciplinary integration, practical tools and methods.
Systemic and Ideological Challenges	Addressing teacher knowledge-practice gaps, curricular misalignment, teacher preparedness, administrative pushback.
Professional Development Solutions	Developing skills for fostering youth leadership, civic engagement, community advocacy, future-oriented visioning, and connecting activism-education. Provision of emotional support, values-driven peer interaction.

elementary climate justice All Themes

Should We...? Embracing justice-oriented climate education in elementary science teacher preparation

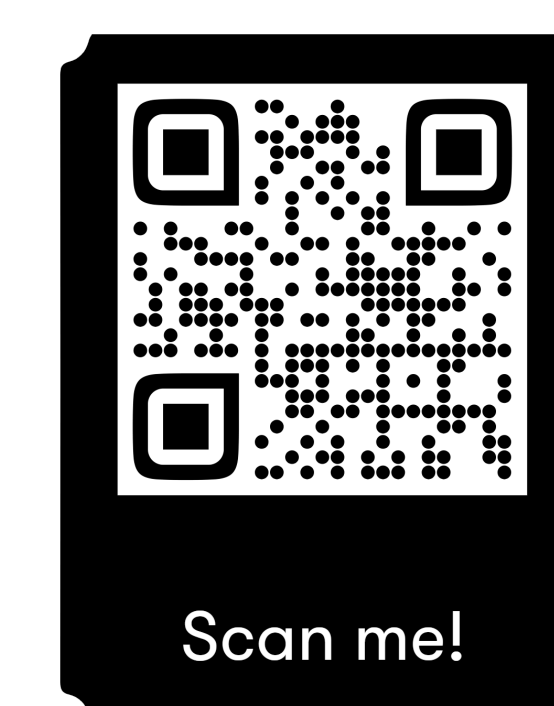
Category: [Specialized professional development solutions](#)

Abstract The article focuses on the teachers' learning, based on the mechanics and teaching of environmental justice, while their collective sensemaking in adapting an elementary science lesson is emphasized as...

Teaching STEM through Climate Justice and Civic Engagement

Category: [Pedagogical and Curricular Strategies](#)

Abstract This article provides a rationale and resources for teaching climate justice and civic engagement across the STEM curriculum in K-12 and higher education. It presents a culturally responsive approach to STEM...



<https://climateeducation.ca/climate-justice-teacher-ed/>

Climate-Kind Pedagogy

Home About Climate-Kind Framework Projects Tools and Evaluation Strategies Presentation and Publications Toolkit Our Team

Home > Should We...? Embracing justice-oriented climate education in elementary science teacher preparation

Should We...? Embracing justice-oriented climate education in elementary science teacher preparation

Abstract The article focuses on the teachers' learning, based on the mechanics and teaching of environmental justice, while their collective sensemaking in adapting an elementary science lesson is emphasized as...

Keywords: Teacher preparation program; professional development; K-2; NGSS; systems and system models; cooperative groups; field trips/field study; Earth and human activity; Earth systems/weather; environmental change; physical changes; scale; proportion; quantity

Core Idea: Lessons for preservice teachers on environmental justice, including climate justice, and climate change.

Link: <https://www.tandfonline.com/doi/full/10.1080/00368148.2025.2533888>

Reference: Bautista, J., & Davis, E. A. (2025). Should We...? Embracing justice-oriented climate education in elementary science teacher preparation. *Science and Children*, 62(5), 33-40. <https://doi.org/10.1080/00368148.2025.2533888>

FINAL OUTPUT

Proposed B.Ed. Curriculum Framework

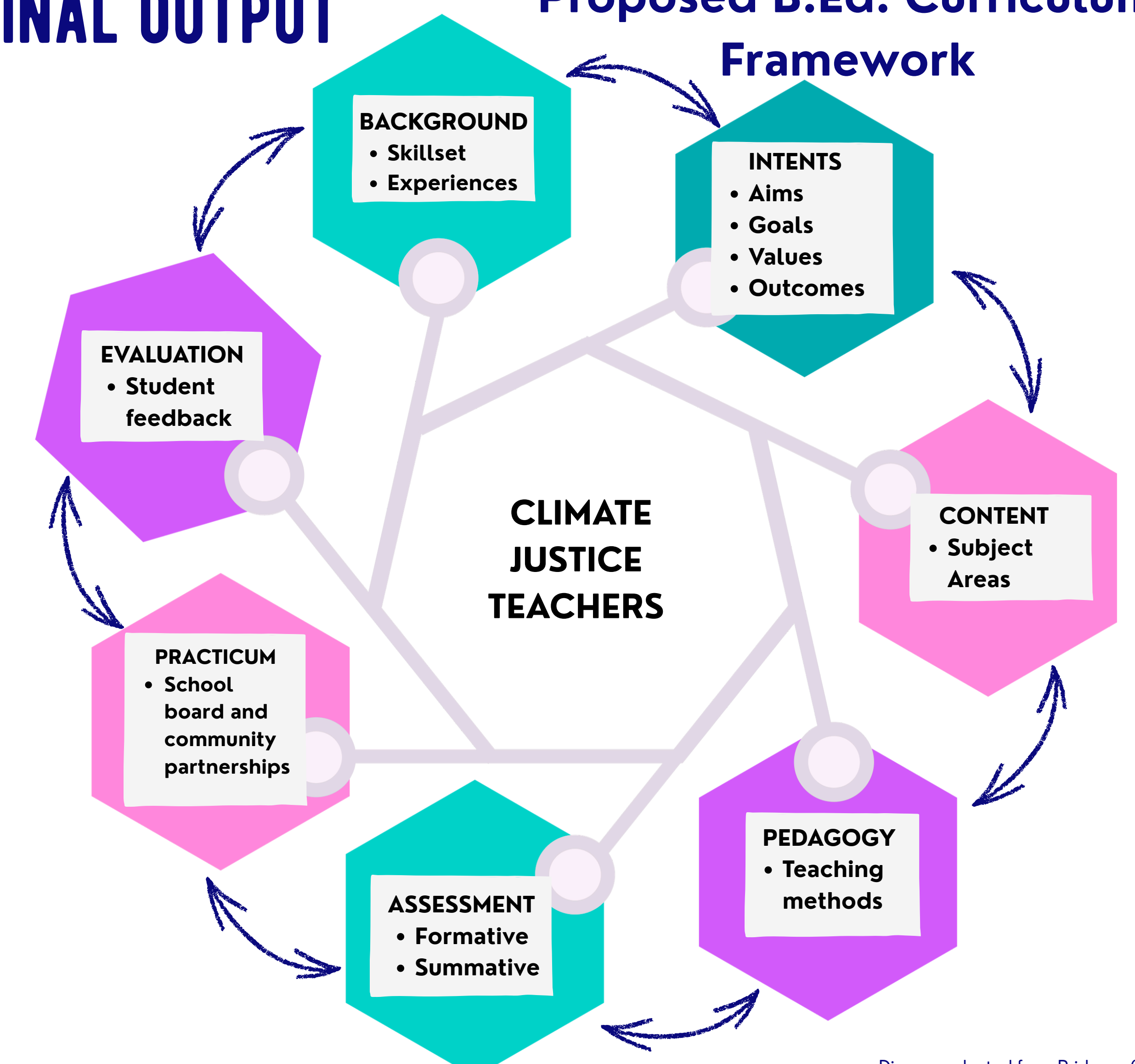


Diagram adapted from Prideaux (2003)