

Education for Living within the Earth's Carrying Capacity

About the project

Our knowledge synthesis project set out to provide scholars, activists, educators and policy-makers with a wide-ranging review of the current state of education for eco-social-cultural change. The starting point for our work was an acknowledgment that modern educational traditions, processes and institutions have played a key role in fostering the attitudes, discourse and behaviour driving the current ecological crisis, and thus learning to live within the Earth's carrying capacity implies far-reaching, systemic educational transformation.

The project had three main components:

- A review of contemporary philosophical and theoretical work that critiques damaging or limiting assumptions and practices in mainstream education systems and points towards ways of being, thinking, valuing, acting, learning and teaching that are more consonant with the goal of living in harmony with the Earth;
- A review of generative and transformative educational practices, scattered throughout both formal and informal educational systems, with the goal of bringing these disparate practices into conversation with each other in the context of a shared project of eco-social-cultural change;
- A review of current work on systemic social change and generative resilience, with a particular focus on how large-scale change in systems of formal schooling could be brought about.

The primary value of our work is in mapping out the scope and scale of the challenge, and identifying some promising directions for urgently needed educational innovation and research.

Key findings

- The literature on educational change is largely focused on incremental improvements in systems whose fundamental dynamics are hard to shift. On the other hand, the literature on social-technical and social-ecological change that deals with the emergence of new systems at various levels of scale has paid very little attention to educational change. This is a major gap in scholarship that needs addressing.
- The expanding field of systemic design offers one promising approach to developing innovative educational systems. Other species and natural systems (the more-than-human) need to be included in order for systemic design – as a practice of equity-centred, community-based non-formal education – to support a process of eco-social-cultural change.

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- Change at the interacting levels of individuals, communities and the broader culture is required for any emergent educational innovation to have the potential to catalyze system-wide shifts. Examples of such innovation can be found in the non-formal, informal, community and alternative education sectors; more studies of such innovations are needed, along with support for their dispersal and cross-fertilization.
- A wide range of practices, capacities and competencies relevant to eco-social-cultural change can be summarized in four key stances/positionalities, all of which can be cultivated and held simultaneously, but require somewhat different skill sets and aptitudes:
 - The community educator, who facilitates relationship-building and collective flourishing (with children, caregivers, knowledge holders, communities, the more-than-human);
 - The critical educator, who plays the roles of activist (critiquing existing relationships and norms), ally (walking alongside and opening space for voices and practices that have been marginalized), and advocate (articulating and advancing alternatives to the status quo);
 - The care educator, who supports and nurtures wellbeing (responding to trauma, depression and oppression, building capacity for self-care and resilience, connecting with the sacred);
 - The change educator, who guides processes of dealing with risk, uncertainty, discomfort and disruption (developing individual and collective strategies to respond to challenges and losses: grieve, adapt, rebuild, transform).
- At the philosophical/theoretical level, education for eco-social-cultural change implies fundamental shifts in the modern worldview, e.g., in ontology (understanding all beings as selves-in-relation), epistemology (nature as co-knower and co-teacher), axiology (ethical relationship as primary), cosmology (sacredness as earthly), and human development (deep relationship with the more-than-human as fundamental to human flourishing). In all these realms, Indigenous teachings and practices offer guidance, examples and inspiration.

Policy implications

While our research points to an educational change process taking place across system levels and in many arenas outside formal education, it also suggests a number of measures that policy-makers and leaders in formal education systems could take.

- Embed systemic design processes within educational policy, leadership and management systems, in which other species and natural systems (rivers, forests, wetlands, soil, etc.) are given an active voice along with a wide range of human stakeholders.
- Plan, or redesign, schools and communities to facilitate access to green spaces, wild spaces and outdoor learning spaces that are open to and used by other species.

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- Create protected spaces and budgets within educational systems and institutions for experiments in eco-social-cultural innovation, and build in ways of sharing successful stories and practices.
- Work with community organizations to develop shared educational initiatives that involve, empower and build the skills and capacities of community members, parents, teachers and administrators.
- Work with institutions and programs of teacher education to expand opportunities for pre-service and in-service professional education that builds capacity in the four key stances/positionalities defined above.

Further information

[Report link](#)

Principal investigator: Sean Blenkinsop, sblenkin@sfu.ca

Co-investigator: Mark Fettes, mtfettes@sfu.ca

Institutional affiliation: Faculty of Education, Simon Fraser University, Burnaby, BC