

A Pedagogy for Planetary Health

Planetary health is aimed toward achieving the health of both the *Homo sapiens* species and the planet we depend on.



Williams, K. (2024, April 24). Devastating flooding in east Africa claims dozens of lives and displaces thousands. Sky News.
Dwayne Reilander. (2023, May 18). Downtown Calgary Alberta Canada Wildfire Smoke - 2023. Wikipedia; Wikimedia Foundation.

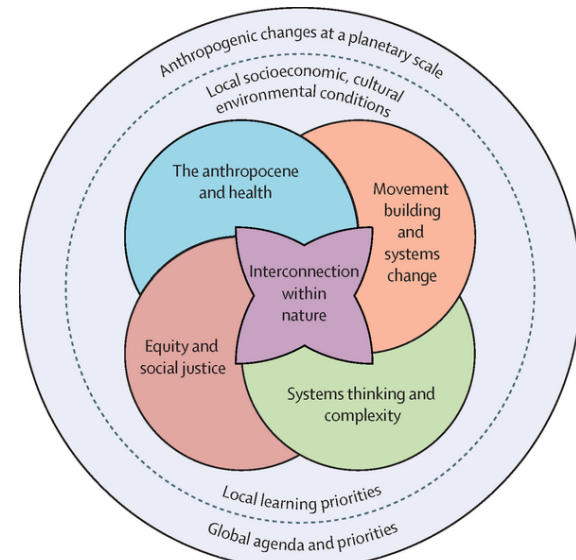
Our siloed educational system fails to address our current environmental crisis (Baena-Morales and Fröberg, 2023; Guzmán and Potter, 2021).

Building on the **Planetary Health Education Framework** (Guzmán et al., 2021) my research investigates the state of education for:

- **Systems thinking**: considering health-environment linkages at “different geospatial and temporal scales”.
- **Movement building**: building partnerships and skill sets for changing systems.

The course: Informed by the Planetary Health Education Framework, the course Planetary Health is co-developed by Moi University and the University of Toronto.

Over 12 weeks online, learners hear from guest lecturer experiences in movement building and reflect on their own abilities. Systems thinking is also incorporated.



(Guzmán et al., 2021)

Objectives:

1. Determine the impact of transnational planetary health higher education classrooms on student systems thinking and movement building.
2. Determine the pedagogies in planetary health higher education that effectively teach students systems thinking and movement building.

Methodology

Rapid Literature Review: Search developed with a public health librarian. Databases included:

- Ovid MEDLINE
- Education Source

Focus Groups and Key Informant Interviews:

- Student focus groups and educator interviews.
- Reflexive thematic analysis on NVivo.



1. Rapid Review: Key Results

Pedagogy for systems thinking and movement building skills include:

- *Simulations* can demonstrate student impact.
- *Critical engagement* is often prompted by discussion and problem solving.
- *Action learning* can teach students more sustainable skills in their professional roles.
- *Case studies* were an opportunity to include different discipline perspectives.
- *Learner centered learning* centers student autonomy (ie. student-educator co-creation).

Literature is lacking in perspectives from the social sciences and from Africa, Asia, and South America.

2. Student Focus Group and Interviews: Key Results

Key Systems Thinking Themes:

Relationality:
Learner relations with the land deepened.
Relations with each other sparked hope.

“I was with a group of people who had the same vision, or had at least similar visions or ideas about... what can be done [about climate change]. And so that really, really soothed, I guess, soothed a lot of my, a lot of my fears and a lot of my anxieties.” (Canadian Learner)

“I remember we had like a food and water journal that we had to do [...] there's larger drivers that are bigger than us, that have to do with more of the corporations and how we organize our economy, but also there are choices that we can take as individuals, in terms of our everyday. And that brings power back.” (Canadian Learner)

Learner power:
Systems thinking showed the power that individuals can have in systems.

Key Movement Building Themes:

Behaviour change:
Learners acted to reduce their environmental impact in personal and professional lives.

“I'm less likely to purchase it, because I recognize that the garbage and the waste from those products [...] might become another person's burden, and likely someone who is much less fortunate than I have ever been.” (Canadian Learner)

“I remembered, while you were studying the planetary health course, somebody just suggested, what if we do a topic on the... on food insecurity, and everybody went along with it. And I was like, if that was able to happen, if I bring out my idea, it might also work...” (Kenyan Learner)

Movement participation:
Learners led or joined projects and community organisations for planetary health.

Kenyan learner discusses what inspired them to start a recycling and environmental clean up group that educates the community on vertical gardening.

3. Educator Interviews: Key Results

Educator/Institution collaboration:
Educators introduced more hands-on opportunities and perspectives through meaningful and mutually beneficial collaboration.

“I've always felt that building relationships, and this very much aligns with indigenous ways of knowing and being about the importance of relationality, that building those relationships is really powerful.” (Canadian Educator)

“Why do you think it is changing? [...] Analyze the environment and see, that factory is there. That factory is there. That factory works 24 hours. That factory works 12 hours. [...] So you are able to gauge the source of the change in quality of the air at any given time...” (Kenyan Educator)

Critical engagement:
Educators used readings to teach critical engagement. Projects in the community also demanded critical thinking about planetary health factors.

Learning in community:
Addressing community health factors taught systems thinking and demonstrated learner impact. Land based learning transformed land relations.

“Being out and about in the city absolutely brings a perspective shift on the part of my students. I'll hear things like, I... I never thought of... [park] as being such an amazing center for native plant species. I didn't realize until we sat in [footpath] for 15 minutes how clear the bird calls are.” (Canadian Educator)

“The banana stem, they also found that some... there's some medicinal value, in that... in terms of healing of wound. So they made the pilot bandage [out of the banana stem]. And surely the results were good.” (Kenyan Educator)

Action learning:
Educators taught professional skills through projects and lab components.

Kenyan educator discusses their students' project. Capacity to complete projects like these are attributed to knowledge of laboratory experiments.

Conclusion

As one of few educational interventions that crosses national boundaries to provide a global educational experience in a globalised world, the Planetary Health course acted as a site where students expanded their viewpoint on how planetary health challenges play out around the world, what their own relationship with nature can look like, and the impact that they can have on their communities. Guest lectures, student discussion, reflective exercises, and projects played key roles this. The Planetary Health course is evidence that a transnational classroom can promote movement building and systems thinking for a more sustainably healthy world.

Further research on the student experience of other transnational classrooms is needed. Knowledge on movement building education is currently limited, and the specific pedagogies or activities that support systems thinking need further research.

Key References and Link to Full Report

Baena-Morales, S., & Fröberg, A. (2023). Towards a more sustainable future: Simple recommendations to integrate planetary health into education. *The Lancet Planetary Health*, 7(10), e868–e873. [https://doi.org/10.1016/S2542-5196\(23\)00194-8](https://doi.org/10.1016/S2542-5196(23)00194-8)
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