

The Role of Education in Self-Determined Sustainable Development in the Arctic

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Arctic Frontiers
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UAA Institute of Social
and Economic Research
UNIVERSITY of ALASKA ANCHORAGE



Overview of Talk

- Current thinking about education & sustainable development
- Rethinking role/definition of education for self-determined sustainable development
- Broadening concepts of knowledge transfer
- Our research & initial impressions





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Why rethink
the role of
education &
sustainable
development?

The Regional Northern European Arctic Partnership invites you to

**Sustainable development of the Arctic region
to the benefit of all of Europe**

14:30-16:00, 9 October 2018,
 Followed by a reception with an Arctic Award ceremony
 Scotland House, Rond-Point Schuman 6, Brussels, Belgium



Handbook of Research on

**International Collaboration,
Economic Development, and
Sustainability in the Arctic**



Vasilii Erokhin, Tianming Gao, and Xiuhua Zhang



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 (SPA), the Highlands and Islands of Scot
 workshop on **Sustainable Developme**
 Scotland Europa and the Scottish Gov

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ROUTLEDGE FOCUS

**ARCTIC SUSTAINABILITY
RESEARCH**

Past, Present and Future

Andrey N. Petrov, Shauna BurnSilver,
 F. Stuart Chapin III, Gail Fondahl,
 Jessica K. Graybill, Kathrin Keil

Routledge Research in Polar Regions

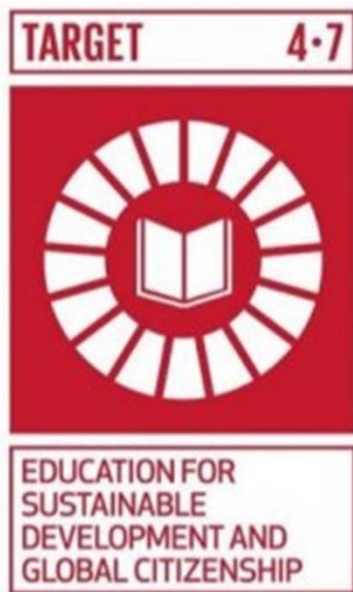
**RESOURCES AND
SUSTAINABLE
DEVELOPMENT IN THE
ARCTIC**

Edited by
 Chris Southcott, Frances Abele, David Natcher, and
 Brenda Parlee

Education is “the key that will allow many other Sustainable Development Goals (SDGs) to be achieved.”

“Achieving inclusive and quality education for all reaffirms the belief that education is one of the most powerful and proven vehicles for sustainable development. This goal ensures that all girls and boys complete free primary and secondary schooling by 2030. It also aims to provide equal access to affordable vocational training, to eliminate gender and wealth disparities, and achieve universal access to a quality higher education.”





Target 4.7: “By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development.



Goal/target

By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development

Indicator

Percentage of 15-year-old students enrolled in secondary school demonstrating at least a fixed level of knowledge across a selection of topics in environmental science and geoscience. The exact choice/range of topics will depend on the survey or assessment in which the indicator is collected.



Goal/target

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Indicator

Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in: (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment



Narrow definitions of the role education



EU initiative: Sustainable Development in the Arctic

Arctic research and science education

[EDU-ARCTIC](#) is an innovative educational programme which aims to encourage students to pursue further education in science, technology, engineering and mathematics (STEM) and polar research. EDU-ARCTIC focuses on using Arctic research as a vehicle to strengthen science education curricula all across Europe. The EDU-ARCTIC project uses a mix of different tools to bring a fresh approach to teaching STEM subjects.



“We see education as the essential element in building a sustainable future for northerners, strengthening their ability to determine their own futures, and develop new knowledge that benefits both the North and the world.”

--UARctic Congress 2018 Declaration



What is sustainable development?

- **Sustainable development** is “..development that meets the needs of the present without compromising the ability of future generations to meet their own needs“ (*Brundtland Commission, 1987, Arctic Sustainability Research White Paper, 2015*)
- **Sustainable Arctic development** is the development that improves health and well-being of Arctic communities and residents while conserving ecosystem structures, functions and resources (*Arctic-FROST, 2014*).



Sustainable development in the Arctic: what is the goal? (Arctic FROST)

- **Sustainable economies:** growing prosperity, jobs, economic diversification, access to capital, vibrant local businesses, energy efficient
- **Sustainable cultures:** ability to retain cultural identity, language, traditional activities and adaptation to changes, provide education
- **Sustainable communities:** communities that have a voice, affordable housing, low crime, water and food security
- **Sustainable environments:** sustainable ecosystem structures, processes and functions (preservation of natural habitats, wildlife, abundance of hunting resources)



Rethink the question: What is the role of education for self-determined sustainable development?

- What is the role of education, both formal and informal, in expanding the capacity of Arctic residents to respond to the challenges of rapid social, economic, cultural, environmental and climate change?
- What human capacity development is needed to enable Arctic residents to develop, implement and operate governance structures that move their communities toward greater self-determination?
- In what ways can education contribute to transforming the health, social services and economic systems of the North and move them toward less dependence on outside governments and economies?



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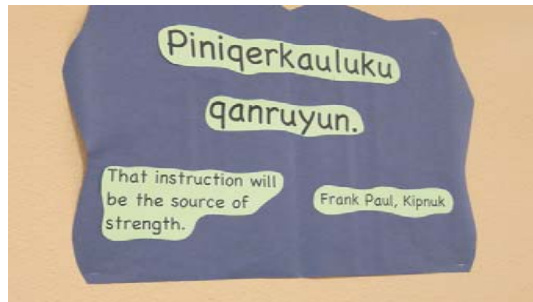


Rethink the question: What is the role of education for self-determined sustainable development?

- Community ability to achieve collective goals directly related to human capacity
- Resilient northern communities need residents with mix of expertise
 - Local knowledge, Indigenous knowledge, Western technical, political, social and legal knowledge
- The knowledge needed should be driven by what the community wants to do, not outside forces
- How do we shift the focus of education systems, formal and non-institutional, toward building knowledge & human capacity to achieve the goals of the community?



Expanding the definition of education, knowledge transfer & human capital



- Not just a concept attached to credentialing
- Needed because:
 - Local and Indigenous knowledge often not included in concepts of human capital
 - Formal schooling systems not meeting needs of many northern and Indigenous students



Expanding what is definition of education, knowledge transfer & human capital

- Formal schooling, especially when disconnected from community goals, a double-edged sword for some communities...
 - Direct link between educational attainment/literacy and health outcomes, economic well-being
 - But... higher educational attainment in north correlated with out-migration (esp for women)



Goal – changing who determines what needs to be taught/learned & why



- Changing the role of the formal education system to meeting needs as defined by community
- Co-construction of the knowledge transfer system like we discuss co-construction of knowledge



Our study

co-PI Dr. Charlene Stern, University of Alaska Fairbanks

- Initial consultation with tribal council & community leaders
 - Introduced concept and questions
 - Received buy-in, invitation to continue & ideas to explore
- Workshop with community members
 - Vision for self-determined sustainable development
 - Document theory of change
 - Identify who has what skills, knowledge & what are gaps
- Bring back findings to community and tribal council
 - Draft instrument/process communities might use independently
 - Incorporate feedback/corrections/additional ideas
- Share with regional tribal organizations & expand to other communities



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Knowledge bearers & knowledge needed



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Giitu!
Kiitos!
Thank you!

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#noaccesswithoutconse
#suohpanterror



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