



Educating for Responsible Consumption and Production and Transformative Technologies

Localizing the UN SDGs through Education, Training and Regional Collaboration

AASHE Course, Tuesday, April 4, 2023

2:00 - 4:00 pm EST

Agenda

- Welcome and Opening Remarks (8 min)
- Cast Study Presentations (10-15 min each)
 - 1) Rose Ramkat, Moi University (Kenya) “Community Initiatives on Responsible Consumption and Production”
 - 2) Aura Lee MacPherson, RCE Saskatchewan (Canada) “Blanket of Warmth Project for Our Nations Homes”
 - 3) Diana Carolina Páez, RCE Colombia “Education for Sustainable Lifestyles project”
 - 4) Roger Petry, RCE Saskatchewan “A Whole Region & Humanist Approach to SDG 12”
- Break (5 min)
- Opportunity for Questions of Presenters (15 min)
- Breakout Groups (25 min)
- Reporting Back and Final Reflection (10 min)

Note: All webinars are being recorded

Presenter Contact Information

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Roger Petry roger.petry@uregina.ca

Rose Ramkat chirose76@gmail.com

Write your name and organization in the chat so we know who is joining us today!



SUSTAINABLE DEVELOPMENT GOALS



SDG 4.7: Education for Sustainable Development (ESD)

4 QUALITY EDUCATION



Goal 4 - Ensure inclusive and equitable quality education and promote life-long learning opportunities for all.

4.7 - By 2030, ensure all learners acquire 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.

SDG 12: Responsible Production and Consumption

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Goal 12 - Goal 12 is about ensuring sustainable consumption and production patterns, which is key to **sustain the livelihoods** of current and future generations.

Unsustainable patterns of consumption and production are **root causes of the triple planetary crises of climate change, biodiversity loss and pollution**. These crises, and related environmental degradation, **threaten human well-being and achievement of the Sustainable Development Goals**

Governments and all citizens should work together to improve resource efficiency, reduce waste and pollution, and **shape a new circular economy**.



Defining Responsible/Sustainable Consumption and Production (SCP)

SCP (a widely accepted early definition): *“the use of services and related products, which respond to basic needs and bring a better quality of life while minimizing the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardize the needs of future generations”*

Norwegian Ministry of Environment, *Oslo Symposium on Sustainable Consumption and Production (SCP)*, 1994, cited in *UN Chronicle*, “Ensuring Sustainable Consumption and Production Patterns: An Essential Requirement for Sustainable Development,” Vol 51, no. 4 (April 2015). Available from: <https://unchronicle.un.org/article/goal-12-ensuring-sustainable-consumption-and-production-patterns-essential-requirement>

UN Targets for Responsible Consumption and Production (SDG 12)



1. Implement **10 Yr Framework Programme** on SCP
2. Sustainable management/use of **natural resources**
3. Halve **retail & consumer food waste** & food chain losses
4. Environmentally sound management of **chemicals**
5. Reduced **waste generation**

SDG 12 UN Targets (continued)



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6. **Corporate** sustainable practice and reporting
 7. SD in **public procurement**
 8. **Public awareness** of SD and Sustainable Lifestyles
 - A. Support **developing countries' science & tech** for SCP
 - B. Tools for monitoring **sustainable tourism**
 - C. Rationalize **inefficient fossil fuel subsidies** & mitigate adverse impacts

We will now hear from each of our SDG 12
Case Study Presentations (10-15 min each)
Case Study Presenters:

Rose Ramkat, Moi University (Kenya)

“Community Initiatives on Responsible
Consumption and Production”

Aura Lee MacPherson, RCE
Saskatchewan (Canada) “Blanket of Warmth
Project for Our Nations Homes”

Diana Carolina Páez, RCE Colombia
“Education for Sustainable Lifestyles
project”

Debra DeBruin, RCE Saskatchewan “A Whole



A Whole Region & Humanist Approach to SDG 12

**Dr. Roger Petry, Prof. of Philosophy, Luther College at the U. of Regina (Canada)
& Co-coordinator, RCE Saskatchewan**

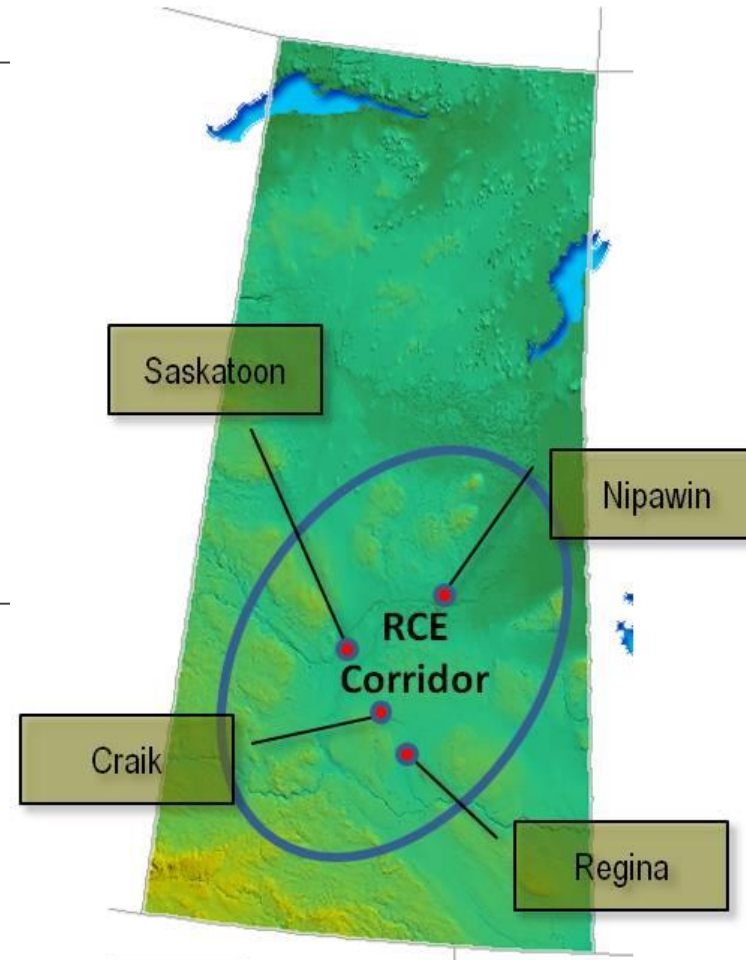
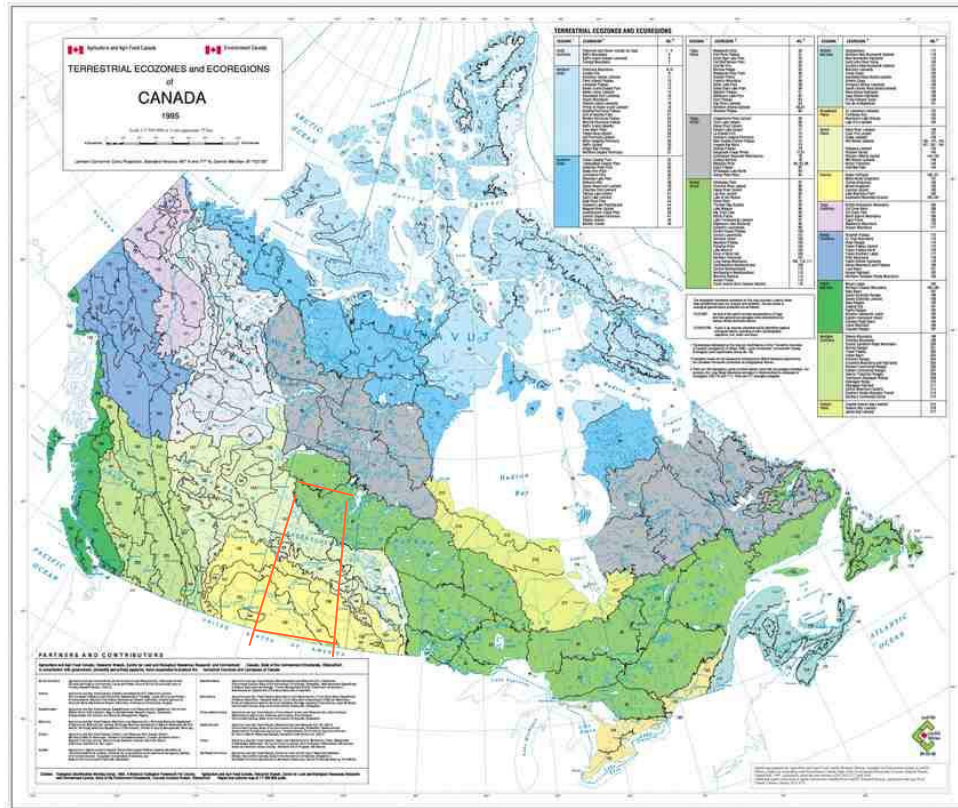
Educating for Responsible Consumption and Production and Transformative Technologies Workshop

Localizing the UN SDGs through Education, Training and Regional Collaboration, AASHE Course, Tuesday, April 4, 2023

Whole-Institution Approaches to the SDGs

- **Whole-institution approaches to Sustainable Development (SD):** encompass mainstreaming sustainability into all aspects of the learning environment. This includes embedding sustainability in curriculum and learning processes, facilities and operations, interaction with the surrounding community, governance and capacity-building” (UNESCO 2014, p. 30)
- **Whole-of-university approach to SD:** “explicitly links the research, educational and operational activities” of the university, “engag[ing] students in each, rather than confining their education solely to the classroom” (McMillan & Dyball 2009, p. 56).
- **Whole of Region Approach:** see universities *as classrooms* and region *as institutional setting*

RCE Saskatchewan Adapting Livelihoods for Sustainability: Respecting Existing Peoples & Ecosystems



RCE

SASKATCHEWAN

REGIONAL CENTRE
OF EXPERTISE
ON EDUCATION
FOR SUSTAINABLE
DEVELOPMENT

What Does a “Whole of Region Approach” to SDG 12 Look Like

- **Transform university** as part of regional living laboratory
- **Transform regulations** governing regional development: responsible consumption and production for all!
- **Transform organizations** in region to embed SDG 12 in governance (e.g. sustainable procurement, monitoring)
- **Transform the culture** of development within a region
 - SDG 12: “the way we do business”

Identifying Regional Consumption and Production Issues as a “Common Cause”



Wetland Loss and
Agricultural Drainage in
Saskatchewan

- Extreme temperatures
- Dry climate & climate change
- Primary production (vs. value added)
- Costly transportation
- Dependence on fossil fuels
- Loss of natural prairie
- Poverty, hunger, homelessness
- Historic social & cultural barriers (colonialism), academic barriers, & inequality

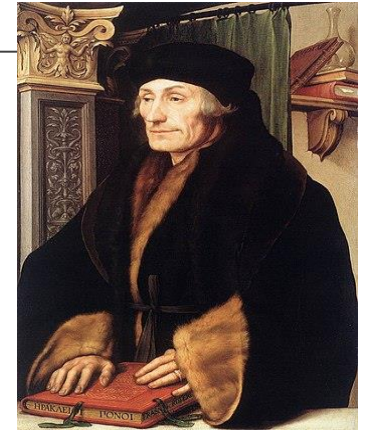
RCE Saskatchewan: A Whole Higher Education Sector and Whole Knowledge Approach

- Regionally uniting multiple Higher Education Institutions
- Engaging multiple knowledges:
 - Place-based Knowledge
 - Indigenous Knowledge
 - Theoretical Knowledge (**Humanities**, Social Sciences, Natural Sciences)
 - Applied/Professional knowledge (Engineering/TVET/Law)
 - Fine arts



The Humanities & Transformative Technology

- Early Humanist colleges: academic chairs established in Biblical languages of Hebrew, Greek, and Latin (Trilingual College 1517) & access to ancient literature
- Textual theory and history: close analysis of original sources to recover lost works & expose forgeries
- Publication of books & organization of libraries
- Humanizing ethic through study of classical works
- The art of letter writing & persuasive reasoning
- Humanities and administrative power: rise of towns and cities



Erasmus (1466-1536 CE);
Printing Press
(ca 1440)

RCE Saskatchewan and Letter Writing to Government Regulators on Responsible Consumption and Production

- **Scholarly authority:** (1) independent university faculty, (2) community sustainability practitioners, & (3) global scholarly networks (e.g. UN University)
- **Good governance:** citizen accountability of government authority & as signatories to SDGs
- **Timely interventions:** engage in administrative processes on specific project proposals
 - *Asking key questions* of projects using SDGs
 - Highlighting *other sustainable dev't options*
- **Providing recommendations** for action



UN University (Tokyo) &
RCE Initiative



UN Agenda 2030



Official RCE Correspondence

+ Provincial Reporting on SDG Targets and Indicators within Provincial Jurisdiction (2021-2022)
+ Youth Suicide in Saskatchewan and Saskatchewan Suicide Prevention Plan (2020)
+ Proposed modified clear-cutting of boreal forest (2019-2020)
+ Proposed construction of Perimeter Highway around the city of Saskatoon affecting Northeast Swale (2019)
+ Proposed construction of gravel road by Rural Municipality of Winslow on the finding of ancient artifacts (2019)
+ Proposed Quill Lakes Basin Water Diversion to Last Mountain Lake (2017-2018) & Drainage by Smith Creek Watershed Association (2019)
+ Proposed Construction of Yancoal Southey Potash Mine (2016)
+ Proposed Clear Cutting of Torch River Forests near Nipawin (2013)
+ Proposed Nuclear Power Development in Saskatchewan (2009)

<https://saskrce.ca/official-rce-correspondence/>

Achievements:

- Provincial consideration of diverse energy strategies (vs. just nuclear power)
- Preservation of provincial forest from clear cutting
- Prevention of diversion of salinated water across watersheds
- Conservation of natural grasslands near major urban centres
- Support for Indigenous communities (re. cultural artifacts; youth suicide prevention)
- Support for farm families (in mining dispute)

See: Petry, Roger Auguste. "Altering regional development for sustainability: Lessons learned from strategic communications of RCE Saskatchewan (Canada) with government." *Frontiers in Sustainability* 3:992939 (2023). doi: 10.3389/frsus.2022.99293.

Humanizing Equipment through Autonomous Equipment Libraries

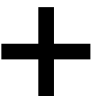


Humanizing Equipment

- **Increasingly autonomous equipment**; capable of independent action
 - Able to act with intentionality
 - Humanoid robotics: able to mimic human behaviours, features, etc.
- **Autonomy tied to equipment's function**: a lawnmower “wants” to cut grass

Libraries of equipment/repository of tools (e.g. tool libraries)

- Use Open Source library software to enable autonomy of tools (e.g. hammers, saws, etc.)
- Develop a **higher level of care/treatment** and **capacity**



Equipment as Fully Autonomous?

Equipment as Labourer/Worker

- **Self-ownership** a core value of citizenship
 - “...every man has a property in his own person; this nobody has any right to but himself. **The labour of his body and the work of his hands we may say are properly his.**” (John Locke, *Second Treatise of Government*)
- **Can equipment be viewed as having self-ownership of its own “labour” (i.e., a worker vs. an owned object/slave)?**
 - *Equipment earns wages for its own “labour”*
 - *Competes with other equipment (labour efficiency)*
 - *Keeps earnings yet pays for own upkeep in equipment repository*



John Locke

Transformative Impacts of Treating Equipment as Autonomous in Shared Respository

Re. Markets:

- **Use underutilized equipment** & minimize overall physical capital use
- **Reduce risks for SME's** (with little start-up capital) & increased competitiveness
- **Place-based “100 mile” production & local materials**

Re. Government: New tax base (requirement for **equipment to pay taxes as “workers”**)

Re. Voluntary Sector: equipment able to volunteer on projects proposed by communities/organizations alongside human volunteers

Consider the Historical Trajectory and Reinvention of Older Technologies:

Fire & Materials: bronze age, iron age, age of steel, age of steel alloys, age of conglomerates & natural heating (?)

Local flight: bow & arrow, crossbow, gun, drones for SCP(?)

Lighting: fire, candle/oil lamp, torch, gaslight, electric light, natural lighting/phosphorescence (?)

Currency: coinage, paper currency, cryptocurrency, digital currency for SD & lifelong learning (?)



Let's Take a 5 minute Break

- *Consider questions you might like to ask today's panelists on your return.*

Questions for Panelists

Place your questions for the panelists in the chat (include your name if you'd like to be called upon)

someone who can help moderate the session;

Decide who will report on 1 or 2; highlight from your group:

(1) What transformative technologies could be adopted in your local/regional context to make your consumption and production systems more sustainable? Who would need to be educated?

(2) What educational strategies (including those from the presenters today) might be employed in your situation? What organization(s) and/or collaborative partnerships could you use to

Reporting Back & Final Reflection: (10 minutes)

Each group:

have one person share one or two final reflections/
observations from your group (this might include examples
of transformative technologies or educational strategies
discussed)

Notetakers should send in their group notes to:

roger.petry@uregina.ca (subject line “AASHE SDG 12”) for
compilation

