

Embedding Sustainable Development Goals in Teaching and Learning

EMBEDDING SUSTAINABLE DEVELOPMENT GOALS IN TEACHING AND LEARNING

ADITI GARG



Embedding Sustainable Development Goals in Teaching and Learning by Aditi Garg is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License](#), except where otherwise noted.

This guide is provided free for use and adaptation by educators. This version has been adapted by Aditi Garg at the Gwenna Moss Centre for Teaching and Learning and the University of Saskatchewan (USask) from the original by the Manitoba Council for International Cooperation. Users are free to download, copy, print and share this resource as needed, and adapt for their classroom or non-commercial use.

If you adapt or build on this work, please let MCIC or USask know!
gmctl@usask.ca

Sustainable Foundations: A Guide for Teaching the Sustainable Development Goals by the Manitoba Council for International Cooperation is licensed under CC BY-NC-SA 4.0. To view a copy of this license, visit <https://creativecommons.org/licenses/by-nc-sa/4.0>

Original document <http://mcic.ca/uploads/public/files-sf/SF-Full-FINAL-WEB-ISBN-2021-EN.pdf>

CONTENTS

Rationale	vii
Embedding the Sustainable Development Goals in Teaching and Learning	x
What is Learning for Sustainability?	xiii
What are the SDGs?	xvii
Mapping Your Course to the SDGs	xix
Writing Learning Outcomes with the SDGs	xxiv

Part I. Main Body

1. SDG 1 No Poverty	5
2. SDG 2 Zero Hunger	10
3. SDG 3 Good Health and Well-Being	15
4. SDG 4 Quality Education	21
5. SDG 5 Gender Equality	27

6. SDG 6 Clean Water and Sanitation	32
7. SDG 7 Affordable and Clean Energy	38
8. SDG 8 Decent Work and Economic Growth	42
9. SDG 9 Industry, Innovation, and Infrastructure	47
10. SDG 10 Reduced Inequalities	52
11. SDG 11 Sustainable Cities and Communities	56
12. SDG 12 Responsible Consumption and Production	61
13. SDG 13 Climate Action	66
14. SDG 14 Life Below Water	71
15. SDG 15 Life On Land	76
16. SDG 16 Peace and Justice, Strong Institutions	81
17. SDG 17 Partnerships for the Goals	86
Appendix	91

RATIONALE

Where

As an institution with a settler-colonial history, the University of Saskatchewan works through [nakaatayih taamoowin](#), protecting and honouring the wellness of all humanity and creation across Treaty 6 and the Homeland of the Métis. It is through relationships that we work towards all the SDGs. While this book is available to anyone, strategic references are made to actions on this land. You are encouraged to connect with [your land's own history and stories](#) to better reflect how local actions towards the SDGs can have global impact.

Why

To support the University of Saskatchewan (USask) [University Plan 2025](#) commitment to being “The University the World Needs”, USask will need to place a high priority on the SDGs. USask articulates that, “Only by addressing the interlinked social, economic and environmental challenges captured by the SDGs will it be possible to tackle climate change and protect the planet, while at the same time creating a prosperous, just and equitable society.”

How

This is a series around the [17 Sustainable Development Goals \(SDGs\)](#). Each page dives into one of the goals and how we as educators can strive to embed these into our own courses. It is in the author's opinion that any course or class can connect with one of the 17 goals or 169 sub-targets. By providing this book, we hope to elicit some ideas of how you might also integrate a global goal into your teaching. Please refer to the USask [Sustainability in the Curricula](#) website for further institutional information.

What

This content has been adapted from the original by Aditi Garg at the Gwenna Moss Centre for Teaching and Learning and the University of Saskatchewan from the Manitoba Council for International Cooperation. Users are free to download, copy, print and share this resource as needed, and adapt for their classroom or non-commercial use. If you adapt or build on this work, please let us know.

Sustainable Foundations: A Guide for Teaching the Sustainable Development Goals by the Manitoba Council for International Cooperation is licensed under CC BY-NC-SA 4.0. <http://mcic.ca/uploads/public/files-sf/SF-Full-FINAL-WEB-ISBN-2021-EN.pdf>

Who

Aditi Garg is an educational development specialist helping educators design courses and programs that allow students to develop competencies for [sustainability](#) and to help meet the [Sustainable Development Goals](#) through teaching and learning. She believes it is important to build reflective teaching practices based in [inclusive and responsive learning](#). Her background is in secondary French, mathematics, environmental ethics, and outdoor education. She is a first-generation settler living on the banks of the South Saskatchewan River, which has sustained the First Nations people of Treaty 6 Territory for time immemorial and is the Homeland of the Métis.

Thank you to Julie Maier, USask Instructional Designer, for their open educational resource developmental support. Thank you to the Gwenna Moss Centre for Teaching and Learning staff for reviewing this text and for supporting learning for sustainability initiatives with mind and heart.

EMBEDDING THE SUSTAINABLE DEVELOPMENT GOALS IN TEACHING AND LEARNING

Learning/Guiding Questions of this Book

- Which Sustainable Development Goals (SDGs) does your course address?
- Could you identify one or two specific goals and targets (indicators) your course helps work towards?
- How might you convey this to your students?
- What kind of alignment would they see?
- How would it help their learning?

This book is designed to help you:

- Identify the SDGs that are most pertinent to your course.
- Develop learning outcomes that will help students work towards the goal(s).

- Adapt methods of instruction for student engagement in sustainable development.

In future teaching & learning, how might we:

- Modify curricula to bring in relevant SDGs?
- Add new courses to expand students' knowledge, skills, attitudes related to the SDGs?
- Use interactive pedagogies such as enabling interaction with society?

Each SDG will feature a preamble and then sections in the following colour-coded boxes:

Outcomes

Ways you might be able to align your teaching to this SDG if you want your students to be able to develop specific knowledge, skills, attitudes.

Examples

Ways for students to reflect, share, and act, on each
SDG

Key Questions

Ways to engage students in learning through
thematic questions.

WHAT IS LEARNING FOR SUSTAINABILITY?

Also known as sustainability in teaching and learning, or education for sustainable development.

The deliberate construction of learning experiences, across disciplines, so that graduates can demonstrate proficiency in competencies for a sustainable future. Learning for sustainability is reflected in core competencies which encompass the knowledge, skills, and attitudes necessary to transform the systems required for a regenerative future. These are described through the six USask undergraduate competencies below.

Reliable learning for sustainability includes:

- Course outcomes that focus on competencies
- Instructional design that centres students' agency to reflect, share, act
- Progression in practice & feedback
- Assessment of students' competencies.

We must commit to deliberately designing courses and programs to systematically build sustainability competencies in our students. This resource focuses on the development of

learning outcomes and activities aligned with the SDGs. Please connect with the author for further discussions about course or program alignment, practice & feedback, or assessment.

Competency	What students know, do, believe for sustainability <ul style="list-style-type: none">· I can write or speak on sustainability in a way that is inclusive and persuasive.
Communicating Meaningfully	<ul style="list-style-type: none">· I can tailor my speaking or writing to the audience to further sustainability.<ul style="list-style-type: none">· I can listen and respond to alternate, divergent, or contradictory perspectives or ideas fully.· I can navigate cultural differences in verbal and nonverbal communication to negotiate a shared understanding towards sustainability.
Engaging in our intercultural society	<ul style="list-style-type: none">· I can apply knowledge and skills to meet global or local sustainability needs.<ul style="list-style-type: none">· I can use a diversity of perspectives and approaches to solutions for sustainability.· I can deal with conflicts in a group while problem solving.
Nurturing Successful Relationships	<ul style="list-style-type: none">· I can understand and respect the needs, perspectives, and actions of others regarding sustainability.· I can design new technology to address a sustainability challenge.
Leveraging Technology	<ul style="list-style-type: none">· I can select or leverage technology to address a sustainability challenge.<ul style="list-style-type: none">· I can consider the ethical implications for adopting or adapting technology to address a sustainability challenge.

**Adaptive Design
and Problem
Solving**

- I can adapt and apply skills, abilities, theories, or processes gained in one situation to new situations to address sustainability challenges in original ways.
- I can continually evaluate my motivations and actions to deal with my feelings and emotions regarding sustainability.

**Cultivating
Resilience**

- I can confidently try untested and potentially risky strategies to solve problems (regardless of failure or success).
 - I can extend a novel or unique idea, question, format, or product to create new knowledge or knowledge that crosses boundaries.

Competency Language adapted from

- AACU VALUE Rubrics <https://www.aacu.org/value-rubrics>
- Education for Sustainable Development Goals: learning objectives <https://unesdoc.unesco.org/ark:/48223/pf0000247444>
- Learning to transform the world: key competencies in education for sustainable development <https://unesdoc.unesco.org/ark:/48223/pf0000261802>

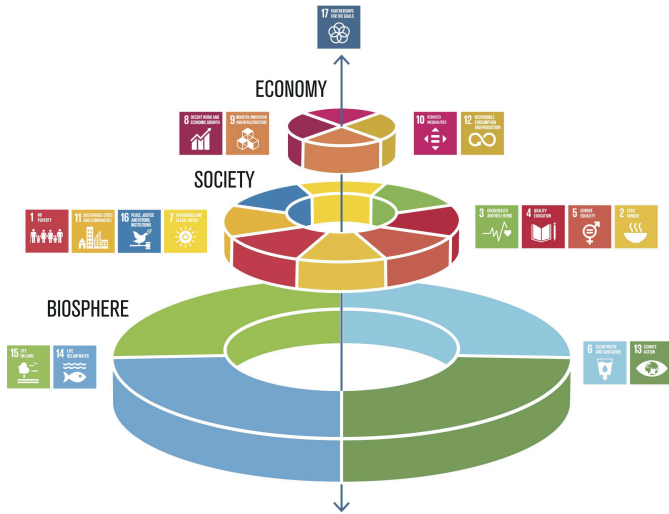
WHAT ARE THE SDGS?

What are the SDGs?



The 17 Sustainable Development Goals — also known as the SDGs or the Global Goals — came into effect on January 1, 2016 following an historic United Nations Summit in September 2015. The SDGs address complex and interlinked social and environmental challenges. All countries can mobilize efforts to end all forms of poverty, fight inequalities and tackle climate change, while ensuring that no one is left behind. These 17 goals also fit within the 5P Framework of People, Planet, Partnership, Peace, Prosperity. The Planet

provides a place for People to live in Prosperity through Partnership and Peace. This relationship and dependence is evident in [the Wedding Cake Model from Stockholm Resilience Centre, Stockholm University](#). Partnerships are needed throughout the three levels to advance the goals.



For each of the 17 goals, there is a list of specific targets we aim to reach. The targets discussed in this guide have been summarized for ease of reading. For a more detailed list of all the 169 targets, visit GlobalGoals.org

MAPPING YOUR COURSE TO THE SDGS

[This self-reflection tool](#) is designed for further integration of SDGs into your curriculum, assessments, learning outcomes, or other action-oriented pedagogies.

Look through the [list of SDGs](#) and [specific targets and indicators](#).

- To what degree and depth does your course address each SDG?
- Does your course have direct or indirect reference to an SDG?
- Do you talk/write about it while students listen/read?
- Do students use the SDG to make meaning of a concept?
- Are connections between SDGs and the discipline made?
- Are students assessed on SDG knowledge or skills?
- Are they expected to do something with the SDG and do they get feedback on it?
- Do students directly act towards addressing the SDG through community learning? Do they reflect upon their learning? Is it assessed?

- Do students' actions have impact beyond their own learning?

You can download [the spreadsheet template](#) to input your own scores for each SDG.

This provides a visualization map of how a single course addresses the SDGs.

Consider replicating this exercise with colleagues to reflect on how students experience learning for sustainability across their program of study.

Use this scale to score each SDG in your course:

0 = no coverage or unrelated SDG

1 = Indirectly related to the SDG

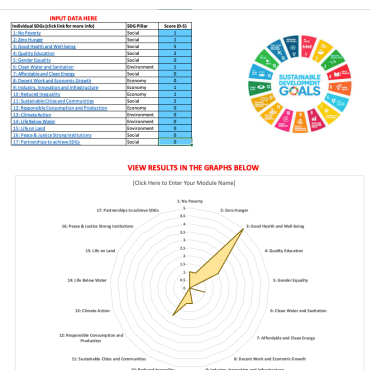
2 = Connects the SDG to one's own discipline

3 = Address at least one SDG [Target](#)

4 = Assesses SDG knowledge or skills in relation to learning outcomes

5 = Students act to address the SDGs with community or industry partners

The next step is reflection. This is important for seeking feedback and intentional, iterative course design. Consider



Here is an example of a completed spreadsheet.

answering these questions in the spaces provided below. You can download a copy of your reflection using the tab on the left.



An interactive H5P element has been excluded from this version of the text. You can view it online here:

<https://openpress.usask.ca/sdgs/?p=128#h5p-1>

Reflection Questions (for educators)

1 – Did you identify at least one SDG and/or SDG Target covered in your module? How is that topic introduced in the context of the wider discipline or societal need?

2- Do you inadvertently cover concepts expressed by the SDGs? If so, how could you signpost those topics to increase student understanding of the SDGs and sustainability literacy?

3 – Do you elaborate on the interconnected nature

of the SDGs? Was this used as a gateway to inter- or transdisciplinary discussion? What connections might you design in your course?

4 – Do you cover SDGs from more than one SDG Pillars (economic, social, environment) as displayed in the second graph (triangle)? If so, how do students perceive this relationship? What is valued in your discipline?

5 – How might you further enrich your course with the SDGs such as activities, discussions, group projects, assessments, etc to fulfil course learning outcomes?



Further, the mapping tool generates a summary of how the

course meets environmental, economic and societal needs. A reminder that not all three are equivalent – [the Wedding Cake Model from Stockholm Resilience Centre, Stockholm University](#) from the previous section demonstrates how environmental considerations are foundational for societal and economic development.

Once you are done mapping your course, it is time to start building the activities that will help students reflect, share, and act on your chosen SDGs – the next section outlines these options. Review the [Main Body](#) to navigate directly to a specific SDG.

This page was derived from the SDG Curriculum Toolkit by [John Barimo, Catherine O'Mahony, Gerard Mullally, John O'Halloran, Edmond Byrne, Darren Reidy, Maria Kirrane](#) licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](#) from <https://www.ucc.ie/en/sdg-toolkit/>.

WRITING LEARNING OUTCOMES WITH THE SDGS

There are already [learning objectives](#) written for the SDGs. However, you may wish to align these more closely with your own course or program outcomes. Consider using the outcomes provided in the following section of this resource to modify your own.

For example:

Original learning outcome: Support a position or decision relevant to self, family, or community by analyzing statistical data, as well as considering other factors. ([Math Foundations 20, Saskatchewan](#))



SDG Outcome: Learners will be able to communicate issues of health, including sexual and reproductive health, and preventative strategies. (Goal 3 Health and Well-being)



SDG + Math Outcome: Learners will be able to support a position regarding health to community by analysing and communicating statistical data.

Then, consider what students will **do** to demonstrate their knowledge, skills, abilities towards this outcome. The [Commonwealth Secretariat](#) provides tables which outlines primary through tertiary education examples of activities for each SDG. Use these to design activities which align with your

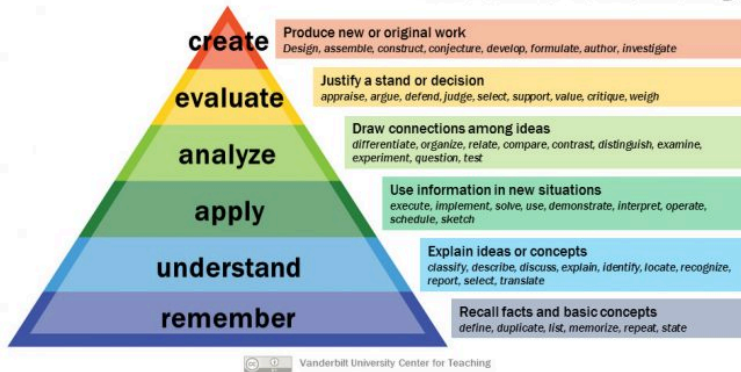
outcomes. Below is an example from the framework for SDG 13.

	Knowledge and understanding	Skills and applications	Values and attitudes
TVET	<ul style="list-style-type: none"> Understanding of climate and environment including human influence, environmental degradation, vulnerability, and interrelationship between human actions, climate change and secondary effects. Integrated assessment of the economic, environmental and social aspects of issues. Intergenerational and future dimensions. Green and blue economy. Understanding of climate change and agriculture/food supply, marine resources, energy production/consumption, etc. Mitigation and adaptation solutions. 	<ul style="list-style-type: none"> Workplace skills, e.g. ocean management, green-economy planning, energy and natural resources management, energy technology skills (e.g. installation of solar water-heating systems). Develop possible adaptation and mitigation strategies for communities. Systems innovation skills. Holistic approaches to climate change and climate-compatible development. Connection of local actions with global processes. Integrate current and future climate risks into planning and practice. 	<ul style="list-style-type: none"> Awareness raising and communication. Solutions-oriented. Corporate responsibility. Committed to sustainable production and consumption. Society, economy and environment are seen as interacting in an interrelated system. Climate-compatible focus.
Tertiary education	<ul style="list-style-type: none"> Research on governance, participation and social-ecological system change to inform policies on climate change, and the development of institutions for adaptation and mitigation, as well as for systemic integration of climate change. Research on adaptive and integrated governance systems to operate across multiple scales, including co-management and transboundary management arrangements for collective management of natural resources. Population, urbanisation, migration and conflict. Climate-resilient pathways. Expertise, understanding complexities, specialised research (e.g. gender-related vulnerabilities, impact and management of climate-related diseases). Research on social change and social vulnerability aspects of climate change. Climate and impact projections. Research on limits to adaptation and transformational approaches to adaptation. Understanding of various technological/economic models, including industrial ecology, agroecology, ecological engineering and social enterprise. 	<ul style="list-style-type: none"> Research to identify innovative and creative approaches to enhance national and regional responses to climate change. Climate-resilient pathways to development. Research for strengthened knowledge base and addressing gaps. Integrated research, and development of holistic approaches to sustainable development. Cross-scale, integral systems thinking. Capacity for dealing with complexity (e.g. inequitable impacts). Climate modelling, scenario building and methodological development for adaptation. Understanding and assessments of risks, impacts and vulnerability aspects. Understanding of social, cultural, economic and political dynamics and influences on social practices and society. Strengthening of climate information and climate services through knowledge and research, including modelling, downscaling and scenario development. Capacities to access and manage climate finance. Ability to create linkages between various technologies/economic models. 	<ul style="list-style-type: none"> Proactive engagement, and advocating open and transparent governance. Climate compatible and responsive development. Awareness raising, generating interest and developing capacity. Systemic, integrated perspectives on global change and climate-compatible development concerns. Need for collective action: mobilisation for wider change, greater resilience and improved quality of life. Climate ethics. Changes in social practice and habits, which in turn require new values and ethics, learning, social innovation and social learning. Ethical leadership in decision making. Appreciation for technologies/economic models in climate change.
Adult education	<ul style="list-style-type: none"> Impact of climate change on humans, including vulnerabilities and multiplier effect. Role of indigenous/traditional knowledge in scientific and social processes (e.g. agricultural practices, forecasting techniques). Understanding of processes of social and cultural change associated with climate change. Concepts of climate mitigation and adaptation, resilience, sustainable development, and sustainable livelihoods. 	<ul style="list-style-type: none"> Community-based climate change preparedness in coastal communities. Community research and outreach. Understanding of the role of climate ethics in decision making. Skills as to how to use climate change information. Use of indigenous/traditional knowledge to address climate change. Capacity to pursue sustainable livelihoods. 	<ul style="list-style-type: none"> Support awareness raising. Focus on building individual and community resilience. Commitment to sustainable livelihoods. Responsibility to take action. Positive role of local and traditional knowledge in building resilience to climate change. Behavioural and lifestyle changes for climate change actions. Campaign for climate justice.

Table is reproduced for educational purposes without resale and with full acknowledgement from “A Curriculum Framework for the Sustainable Development Goals, First Edition, July 2017”, by Amina Osman, Sultana Ladhani, Emma Findlater and Veronica McKay for the Commonwealth Secretariat.

Draw on higher cognitive order tasks (create/evaluate on [Bloom’s taxonomy](#)) which align with higher impact [instructional approaches](#). Finally, consider what evidence you will have of students’ learning and how it will be assessed. Use [an assignment guide](#) to align purpose, task, criteria for assessment, and other inclusive priorities. Review other [USask principles of assessment](#) and strategies during course design.

Bloom's Taxonomy



With this context of how the SDGs will fit within a course, we are ready to explore the 17 SDGs!

PART I

MAIN BODY

Navigate to a specific SDG by clicking on its icon







1.

SDG 1 NO POVERTY

SDG 1 calls for an end to poverty in all its forms by the year 2030. Achieving this goal means seeing a reduction in the number of people living on less than \$1.25 USD per day. The more people earn, the more they can spend on their basic needs. One of the ways the UN hopes to do this is by implementing social protection systems at the national level to support the poor and vulnerable. That is no easy task, especially given that not everyone experiences poverty the same way. [“Of all the provinces, Saskatchewan has the second-highest percentage of children living in poverty. For total numbers including adults, the province is third overall at 26.2 per cent.”](#) So while poverty is certainly defined differently globally, it is important for USask graduates to be empowered to act locally as well.

You might be able to align to this SDG if you want your learners to be able to:

- understand the concepts of relative and absolute poverty, while critically reflecting on their underlying cultural assumptions and practices.
- be aware of the local, national and international distribution of poverty and wealth, as well as a collection of poverty reduction strategies.
- collaborate with others to empower individuals and communities to affect change, raise awareness and encourage dialogue and solutions regarding poverty.
- evaluate, participate and propose solutions to systemic problems related to poverty.

Some curricular connections and questions for students might be:

Media – How does the media present poverty?
Locally? Nationally? Internationally?

Oppression and genocide – How is poverty a form of oppression?

Consumerism – Do our consumer habits impact the lives of others? If yes, how?

Health and biotechnology – What are the impacts of poverty on a person's health?

Environment – How do environmental concerns like climate change impact poverty?

Gender politics – How does gender impact a person's experience with poverty?

Poverty, wealth and power – How does access to power and wealth relate to poverty?

Social justice and human rights – What can we do to support people in poverty? Locally? Nationally? Internationally?

Indigenous peoples – In what ways do Indigenous people experience poverty uniquely?

Peace and conflict – What can be done to resolve poverty at different system levels?

You might consider having your students reflect, share, act in some of these ways:

Help students research a local effort to reduce poverty: foodbanks, school food programs, homeless shelters, local charities or the United Way. Have students contribute time to supporting and complete a reflection of their experiences. What did they notice? What do they wonder? How did the experience change their knowledge, skills, or attitudes?

Ask students to use global data on poverty such as [World Poverty Map](#) to describe nuances between different countries. This might be about policy, practices, cultural norms, historical contexts, or other factors.

Design solutions for Canada's poverty concerns by reviewing [Canada Without Poverty](#). Have students identify problems and design solutions within specific parameters.

2.

SDG 2 ZERO HUNGER

SDG 2 is all about ending hunger. This goal isn't just about making sure everyone has enough food to eat, it's also about making sure that food is safe and nutritious. Because the food we eat has to come from somewhere, this goal also directs attention to sustainable food production, resilient agriculture and local and global cooperation when it comes to investing in agricultural productivity. Over the past 15 years, the fight to end hunger has come a long way. The prevalence of hunger world wide has declined from 15 per cent in 2002 to 11 per cent in 2016. But, more than 790 million people still don't have regular access to nutritious food. This has far-reaching effects on people's health and well-being, making it an important goal to achieve. In Saskatchewan, the weekly cost of a '[nutritional food basket](#)' to feed a family of four varies between \$200-\$400 per week between urban and remote locations. [Policy North](#) – Kîwetinohk – Yathe at the Johnson Shoyama Graduate School of Public Policy identifies three As of food insecurity: [accessibility, availability, and affordability](#). Accessibility and availability in rural areas continues to affect affordability. Closing the loop between production, distribution,

consumption, and waste, is critical in ending hunger. Thus, the goal of ending world hunger and improving access to nutritious food will be measured by the prevalence of undernourishment, malnutrition and by child growth. As sustainable food production increases, this goal will look at the volume of food production by different kinds of agriculture and the average income of farmers based on their sex and Indigenous status.

You might be able to align to this SDG if you want your learners to be able to:

- communicate the difference between hunger, food security and malnutrition, and their main physical and psychological effects on human life.
- identify the drivers, causes and distribution of hunger and malnutrition locally, nationally and globally.
- apply the principles of sustainable agriculture and why it is needed to combat hunger and malnutrition.
- collaborate with, encourage and empower

others to combat hunger and promote sustainable agriculture.

- evaluate, participate and implement actions personally and locally to combat hunger and promote sustainable agriculture.

For example: Students in Environmental Sciences 401 Sustainability in Action, offered by the [School of Environment and Sustainability](#), took on the challenge of addressing food insecurity at the University of Saskatchewan by providing information about campus resources and food sustainability tips. Their website is an example of an [open resource](#) developed by students for their own learning and for the community <https://sustainability.usask.ca/programs/food-security.php#>

You might consider having your students reflect, share, act in some of these ways:

Volunteer at a local food bank. If you're in the Saskatoon area, you can check out Saskatoon Food Bank & Learning Centre [here](#). Help students find out what local organizations are in need of and how they might help address the needs through creative problem solving.

Discuss an advocacy campaign, such as the [Good Soil](#) campaign from the Canadian FoodGrains Bank where students send postcards to the Prime Minister to show support for increased aid for agriculture. They can research and formulate their own thoughts on specific issues. Summarizing these reports in the brief format of a postcard is a useful exercise in persuasive writing.

Some curricular connections and questions for students might be:

Media – How does the media present hunger and

food security? Locally? Nationally?

Internationally? Consumerism – Do our consumer habits impact other's access to quality food? Environment – How do environmental concerns like climate change impact food security? Poverty, wealth and power – How does access to power and wealth relate to food security?

Indigenous Peoples – In what ways do Indigenous people experience food insecurity uniquely?

Oppression and genocide – How is hunger a form of oppression?

Health and biotechnology – How is technology being used to improve food security?

Gender politics – How does gender impact a person's experience with hunger and food security?

Social justice and human rights – How can we enforce access to healthy food as a human right? Locally? Nationally? Internationally?

Peace and conflict- How does solving food security issues affect peace and conflict?

3.

SDG 3 GOOD HEALTH AND WELL-BEING

SDG 3 is ensuring good health and well-being for all at all ages. We all deserve to be healthy and able to achieve what we need in our lives. However, to ensure the health of everyone, we also need to address gaps in services, treatment and coverage for vulnerable populations too. We can do this by developing strategies to positively impact the mortality rates of mothers, children, substance users, the extremely poor and other minority groups who have difficulty addressing their health needs. Additionally, this goal seeks to improve access to universal health care, access to affordable medicines and sexual and reproductive health care services for everyone. Through improved access to health care around the world, strong research, health finance and early warning systems, we can address and reduce epidemics such as malaria, HIV/AIDS, mental health and cancer. We can measure how we're doing by looking at population mortality rates to see if the number of new cases or the number of people dying changes through intervention programs.

Health-related skills and abilities are particularly important

in Saskatchewan which has twice the national average of HIV cases, the highest in Canada. Canada also has the third highest youth suicide rate in the industrialized world and second highest rate of opioid use in the world[i]. An example of this is teaching first year nursing students about social determinants of health through exercises such as body-mapping, described by USask Assistant Professor Geoffrey Maina as “an artistic method of narrating experiences... where individuals can discuss personal, emotional, cultural, political and socio-economics dimensions of their lives” to “help students confront their own beliefs and values, and engage with PLHIV [people living with HIV] to gain new experiences.”[ii].

You might be able to align to this SDG if you want your learners to be able to:

- apply the concepts of health, hygiene and well-being.
- reflect on the importance of gender in health and well-being.
- describe the socio-political and economic dimensions of health and well-being as well as strategies to promote good health.

- develop positive health and well-being practices, strategies, or policies, including reproductive and sexual health.
- communicate issues of health, including sexual and reproductive health, and preventative strategies.
- apply health promoting behaviours in their daily routines.
- identify avenues of support when others or themselves need help.

Some curricular connections and questions for students might be:

Media – How are different health issues reported?
How are local stories covered versus international?

Health and biotechnology – What trends are
emerging in technological innovation and health?

Environment – How is our health connected to the health of our environment?

Poverty, wealth, and power – How are poverty and health linked? What are strategies to intervene?

Gender politics – How is health related to gender inequality?

Social justice and human rights – What do the experiences of people who are discriminated against within the health care system say about the system in general?

Indigenous Peoples – What are some opportunities for holistic healing in the health and well-being of Indigenous communities?

Peace and conflict – How do you rebuild a healthcare system in a post-conflict environment?

Oppression and genocide – How are oppression and discrimination related to health and well-being?

You might consider having your

students reflect, share, act in some of these ways:

Start a fundraising campaign. Support good health in your community or a community overseas. Show your students their actions matter and can make a difference around the world!

Support local and international organizations working to promote good health and well-being around the world. You can start locally with an organization like [Chep Good Food Box](#), or raise funds for international NGOs working to improve health around the world. A good starting point is [SCIC's list of member organizations](#) with links to their websites.

Get informed. Infectious diseases can spread quickly, but misinformation can spread even faster. When reports of outbreaks happen, help students check sources and get savvy on what the facts are and how to protect themselves and others.

[i] The power to make a difference at <https://makingthedifference.ca/> is a communications campaign effort by registered nurses on the frontline of the most significant health and social challenges impacting the people of Saskatchewan today.

[ii] Geoffrey Maina, Lynn Sutankayo, Raymond Chorney, Vera Caine. Living with and teaching about HIV: Engaging nursing students through body mapping. Nurse Education Today, Volume 34, Issue 4, 2014, Pages 643-647, ISSN 0260-6917, <https://doi.org/10.1016/j.nedt.2013.05.004>.
<https://www.sciencedirect.com/science/article/pii/S0260691713001676>

4.

SDG 4 QUALITY EDUCATION

SDG 4 is ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all. In many parts of the world, women, people with disabilities, Indigenous People and victims of conflict do not have access to quality education. Reflect on how, in Canada, “government-funded, church-run schools were set up to eliminate parental involvement in the intellectual, cultural, and spiritual development of Aboriginal children.”^[i] This goal aims to ensure that by 2030 everyone has access to equitable basic education so we can understand the world around us, critically reflect on what we see, do, and hear and make informed choices about our health and well-being. When people are able to access quality education, they are able to begin breaking the cycle of poverty, learn about sustainable living, make healthy choices and inform themselves and their communities about important issues. Education unlocks the potential for many other SDGs to be achieved. Improving the quality of education needs to include education about sustainability and our environment. Engaging students to think critically about

the world around us and how our practices and policies have an impact on the environment will help sustain the momentum for change. When we don't include aspects of environmentalism and sustainable development in education models and systems, we miss the opportunity to educate future generations on the important issues of our time. Our ability to pass on important knowledge to improve how we engage with our environment and resources is then limited, hindering future generations. Additionally, it is important to inform students about [their rights to accommodations](#) based on disability, religion, family status, and gender identity.

You might be able to align your teaching to this SDG if you want your students to be able to:

- embed sustainable development into education and lifelong learning (formal and informal)
- understand the value of education as a public good, fundamental human right, and also as a basis for empowerment.

- design educational experiences which help to create a more sustainable, equitable and peaceful world.
- raise awareness of the importance of quality education for all and find ways to motivate others to take action on this issue.
- understand, identify and promote gender equality in education.

**You might consider having your students
reflect, share, act in some of these ways:**

- Host a documentary screening. Find films that focus on an aspect of quality education in your discipline. Invite classmates, colleagues and community members to join in on a creative learning experience. An example might be [Picture a Scientist](#), a film about

women in science providing perspectives on how to make science more inclusive.

- Start an awareness campaign or initiative that focuses on educating others on the lack of quality education around the world or even at home.
- Work to achieve quality education in your own community. Focus on accessible supplies, accessible buildings and structures, sports equipment and educational opportunities for students. Consider connecting with agencies such as [SaskAbilities](#)
- Help others understand how a lack of quality education affects everyone. Design a campaign to give people the opportunity to explore their right to education and learn about others around the world who are denied this right. An example might be the [Malala Fund](#) which champions girls' secondary education around the world.

Some curricular connections and questions for students might be:

Media – What are the big issues being reported in your community about education?

Environment – How can we turn education about the environment into action?

Poverty, wealth, and power – How is access to education related to poverty?

Peace and conflict – What is peace and global citizenship education about?

Indigenous Peoples – What are the barriers and opportunities for Indigenous Peoples in education?

Oppression and genocide – How do conflict and oppression impact education?

Health and biotechnology – What can education do for health promotion?

Gender politics – How is education a gendered issue?

Social justice and human rights – How are social

justice opportunities and human rights impacted by education?

[1] Truth and Reconciliation Commission of Canada <http://www.trc.ca/about-us.html>

5.

SDG 5 GENDER EQUALITY

SDG 5 aims to achieve gender equality and empower all girls and women. This goal examines the ways women and girls are discriminated against in our world and how to put a stop to it. From ending violence and exploitation to empowering women, or protecting their mental, physical and sexual health, there are many areas to focus on if we are going to achieve this goal by 2030. Just like many of the other Sustainable Development Goals, gender equality is interconnected with the other goals —everyone's actions and support make the difference in achieving gender equality. Increased education on harmful practices, cultural norms and forms of marginalization will us to better understand the issues women and girls face, the rights they have and the responsibility of our government and institutions to protect them. Additionally, for society at large, learning how to dismantle sexist, violent and discriminatory language, attitudes and behaviours will contribute to changing our social and cultural understandings of discrimination and gender.

You might be able to align your teaching to this SDG if you want your students to be able to:

- Create solutions towards ending forms of discrimination against women and girls.
- Investigate (and work towards ending) forms of violence and exploitation against women and girls in both public and private spheres.
- Critique policies and practices affected by gender such as unpaid care and domestic work.
- Understand the importance of full and effective participation for women in leadership and decision-making.
- Analyze access to sexual and reproductive health and reproductive rights for all people.

You might consider having your students reflect, share, act in some of these ways:

- Challenge sexist language . We can make advances in gender equality when we challenge sexist and gender-biased language, especially in the classroom. Ask the speaker or writer how their comments reinforce gender stereotypes or what their intention might be ([more tips on challenging conversations here](#))
- Talk about health issues. Normalize women's hygiene and sexual health topics to help others see them as affairs that affect us all.
- Encourage your students to stand up to violence and bullying. Check in with people and ask if they need help.
- Be encouraging. Encourage female students to stay in school, and look for ways to empower female colleagues.

Some curricular connections and questions for students might be:

Media – How does the media report on gender issues? How do you think this impacts the ways we talk about gender issues in society

Environment – How is climate change a gender equality issue?

Poverty, wealth and power – How does the poverty cycle affect women uniquely? How does a lack of power or resources affect the lives of women?

Indigenous Peoples – What are gender equality barriers and opportunities within Indigenous communities?

Peace and conflict – How are women supporting peace and post-conflict reconstruction in our world?

Oppression and genocide – How are women and girls uniquely impacted by oppression and genocide?

Gender politics – What laws would you put in place to ensure gender equality? How would you monitor them?

Social justice and human rights – How have women's social justice and rights changed over the course of history?

Health and biotechnology – What are important

health issues facing women today? What policies and practices are needed to support them?

6.

SDG 6 CLEAN WATER AND SANITATION

SDG 6 aims to ensure availability and sustainable management of water and sanitation for all.

Improving access to clean drinking water, sanitation and hygienic facilities needs to be addressed for a large portion of our world, including here in Canada. As of November 2020, 41 First Nations communities are not able to get clean water out of their taps[\[i\]](#). Ongoing access to safe drinking water and adequate sanitation services are some of the most effective ways to prevent disease and improve human health. Identifying water scarcity and water pollution through education and awareness can help fight ignorance or passive positions on the issue.

**“No water, no life.
No blue, no
green.” – Sylvia
Earle**

This goal not only focuses on human consumption of water, but the quality and sustainability of water resources worldwide. Most

wastewater resulting from human activities is discharged into rivers or seas without any treatment, leading to various forms of pollution^[ii]. The Masters of Water Security^[iii] is a joint initiative between the School of Environment and Sustainability (SENS) and the Global Institute for Water Security (GIWS) which prepares students to work in water protection and development. Past student projects include researching flood events, lake water quality for fish species, soil temperature and moisture retention^[iv]. But you don't have to be a masters' level program at the top water resources research institute in Canada to embed this SDG into your teaching.

You might also be able to align your teaching to this SDG if you want your students to be able to:

- Describe the causes, effects and consequences of water pollution and water scarcity around the world.
- Evaluate inequities in water distribution and the lack of access to safe drinking water and sanitation facilities.

- Identify socio-economic differences and gender disparities in the access to safe drinking water and sanitation.
- Contribute to water resource management and reduce their water footprint at the local level.
- Develop and test strategies and activities that help reduce and prevent water pollution, ensure water access and implement water saving measures.

You might consider having your students reflect, share, act in some of these ways:

- Explore initiatives and kits developed by the Saskatchewan-based [Safe Drinking Water Foundation](#).
- The World's Largest Lesson page for Goal 6 has downloadable comics, posters and lesson plans [here](#).

- [Clean Water For All](#) is a lesson plan that addresses water pollution through brainstorming, group work and physical demonstrations.
- [AMANZI](#) explores water access issues, allowing students to take on the role of families who experience barriers in accessing clean water.
- Learn about water scarcity and water pollution issues in your community and explore how water insecurity, privatization, or pollution are impacting your community. Identify what needs to change and who you can ask to help change that.
- Talk to your students and let them know you care about water. Connect your curriculum to a cause like [World Water Day](#) or [World Toilet Day](#).

Some curricular connections and questions for students might be:

Media – How are water issues reported in the media? What angle do you think is important to focus on?

Environment – What are the main water sources in your community? What are the biggest challenges to water quality and quantity? What are the biggest threats to our world's water sources?

Poverty, wealth, and power – How is access to clean water a poverty issue? Locally? Nationally? Internationally?

Indigenous Peoples – What are the challenges for Indigenous People regarding access to safe and clean water? How are individuals and communities taking a stand?

Peace and conflict – How do people get clean water in times of conflict? What might some barriers be? What environmental impacts to water are caused by conflict?

Oppression and genocide – How has control over water been used as a tool of oppression? How have people resisted this oppression?

Gender politics – How is access, or lack of access, to water and sanitation a gendered issue?

Social justice and human rights – How are people around the world exercising their right to water?

Health and biotechnology – What technologies have helped ensure access to water? How have these advances helped efforts to get clean water?

Endnotes

[i] <https://www.cbc.ca/news/politics/auditor-general-reports-2021-1.5927572>

[ii] https://www.un.org/sustainabledevelopment/wp-content/uploads/2016/08/6_Why-it-Matters_Sanitation_2p.pdf

[iii] <https://water.usask.ca/mws/index.php>

[iv] <https://amireson.github.io/mws/projects.html>

7.

SDG 7 AFFORDABLE AND CLEAN ENERGY

SDG 7 aims to ensure access to affordable, reliable, sustainable, and modern energy for all. Energy is power: power to do, participate and build. Energy also powers our economy, transportation, health and livelihoods. However, not everyone has access to this kind of power. Harnessing and harvesting energy resources, like wind, solar, water, oil and gas, impacts our environment and the ability for future generations to do the same. Many Northern communities in Canada depend on electricity generated by diesel brought up from the South. This can create a problem of pollution from emissions and transportation. This goal seeks to establish sustainable energy systems that reduce our impact on the planet, and address energy inequalities that constrain human and economic development.

You might also be able to align your teaching

to this SDG if you want your students to be able to:

- Distinguish between different energy resources – both renewable and non-renewable – and their advantages and disadvantages regarding environmental, health, safety, and sustainability issues.
- Consider energy needs and uses in different regions of the world.
- Develop policies which can influence the development of energy production, supply, demand and usage.
- Communicate the need for energy efficiency and sufficiency.
- Evaluate energy efficiency and sufficiency.

You might consider having your students reflect, share, act in some of these ways:

- Explore the First Nations Power Authority, a non-profit Indigenous owned organization developing clean energy projects that bring economic and environmental benefits to First Nations communities. <https://fnpa.ca/>
- Discuss the Bridging the Gap report, a project to build understanding between coal workers (and coal-producing communities) and urban environmentalists.
<https://climatejusticesaskatoon.ca/future-of-coal/future-of-coal-bridging-the-gap/>
- Get involved with the Renewable Energy in Northern, Remote and Indigenous Communities Flagship Program driving research in that field.
<https://renewableenergy.usask.ca/>

Some curricular connections and questions for students might be:

Media – What do you need to know to be critical of media stories about energy usage and conservation?

Environment – What are the impacts of energy overconsumption on our environment?

Poverty, wealth, and power – How is energy usage related to the poverty cycle?

Indigenous Peoples – What are the experiences of Indigenous Peoples in relation to energy development?

Peace and conflict – What are some examples of conflict and resolution over energy resources?

Oppression and genocide – What happens to energy supplies during times of conflict?

Gender politics – How is energy usage a gendered issue?

Social justice and human rights – Should energy access become a human right?

Health and biotechnology – How are health and technology impacted by energy consumption?

8.

SDG 8 DECENT WORK AND ECONOMIC GROWTH

SDG 8 aims to promote sustained, inclusive, and sustainable economic growth, as well as full and productive employment and decent work for all. Employment can offer us a way to contribute to the economic prosperity of our families and others. Sometimes people can't find work or are discriminated against because of their identity or ability. In many impoverished areas, adults and children are exploited or forced to do work in dangerous and underpaid situations to support their families. Targets that will help meeting this goal includes generating creative work that motivates people to fulfill their potential, jobs that ensures natural resources are respected and protected, and that work is safe for people of all abilities and origins.

You might also be able to align your teaching to this SDG if you want your students to be able to:

- Describe concepts of sustainable economic development, productive employment and decent work.
- Explore the relationship between employment and economic growth.
- Articulate and address inequalities between labour force and management, owners and stakeholders can lead to poverty and civil unrest.
- Justify fair wages, equal pay for equal work and labour rights from their employers and government regulators .
- Reflect on their individual rights and clarify their needs and values related to work.
- Develop and evaluate ideas for sustainability-driven innovation and entrepreneurship.

You might consider having your students reflect, share, act in some of these ways:

- Learn about the cycle of poverty within your own community, province, country and internationally and understand the interconnected relationship of the global market and its workforce. Support an aspect of this by campaigning for equal rights, equal pay, smaller wage gaps and more. The [Saskatchewan dashboard](#) has current employment statistics for the province and [WorkSafe Saskatchewan](#) highlights statistics about safety in the workplace.
- Vote with your dollar. Support fair working conditions and workers' rights by supporting companies whose treatment of their workers is fair and just. A way to do this is buying fair trade products. Look for the label and ask the places that you buy from to support them too. Learn how and where products are made and if they use child labour or exploitative working conditions to source their raw materials.

- Learn the laws. Protect yourself and your community by learning about your rights as a worker. Share what you know with your community and find out more about labour inequalities in your community. Education is key to ensure safe working environments and decent work.

Some curricular connections and questions for students might be:

Media- How are labour issues reported in the media? Environment – How can we improve the impacts on our environment through the jobs we have? Poverty, wealth, and power – How does wage and employment relate to the poverty cycle?

Indigenous Peoples – What are the labour issues impacting Indigenous people and communities?

Peace and conflict – How can we address civil unrest

caused by unfair working conditions and low wages?

Oppression and genocide – In what ways can people exercise their right to work and fair pay?

Gender politics – How can we improve gender parity in employment?

Social justice and human rights – What are the rights of workers and how can we spread the word? How did the labour movement form in Saskatchewan and western Canada?

Health and biotechnology – How can people working in dangerous occupations improve their working conditions?

9.

SDG 9 INDUSTRY, INNOVATION, AND INFRASTRUCTURE

SDG 9 aims to promote the idea of decent work to the development of infrastructure, such as transport, irrigation, energy and information and communication technology, to achieve sustainable development and community empowerment around the world. Infrastructure is made up of two dimensions – the physical assets themselves and the services needed to maintain them. Project development and funding is strengthened when public and private groups work together to provide solutions. Investing in the research and development of technological progress, education and the empowerment of marginalized communities can help us achieve our environmental objectives of renewable resources and energy-efficiency. Given the role of infrastructure and industrial development as core drivers of a global development agenda, failure to improve this domain will make achieving the other goals more difficult. In late February 2023, there

were [three drinking water advisories](#) in Saskatchewan and 28 advisories cross Canada due to inadequate infrastructure.

You might also be able to align your teaching to this SDG if you want your students to be able to:

- Depict the concepts of sustainable infrastructure and industrialization.
- Analyze the local, national and global challenges to achieving resilient infrastructure and industrialization.
- Identify opportunities in their own culture and nation for greener and more resilient infrastructure, understanding their risks and overall benefits.
- Investigate examples of unsustainable development .

You might consider having your students reflect, share, act in some of these ways:

- Find ways that students can engage with stakeholders like non-governmental organizations (NGOs), governments, businesses and community members.
- Design projects which allow students to fairly critique government policies or processes, to address gaps in policies or processes, or develop innovative solutions to existing problems.
- Innovation comes from collaboration, so look for ways for students to learn, share and think critically with people in your community, or on the other side of the world, such as through [COIL](#).

Some curricular connections and questions for students might be:

Media – How can media keep industries accountable to their social, economic and environmental impact? Environment – What are the essential qualities of sustainable development regarding environmental protection? Poverty, wealth, and power – How can industrialization or innovation help end the poverty cycle?

Indigenous Peoples – How can infrastructure development and industrialization be more inclusive of Indigenous perspectives and rights?

Peace and conflict – How is industrial development impacted during times of conflict?

Oppression and genocide – How might government corruption affect infrastructure development and industrialization?

Gender politics – How can we ensure spaces for women in innovative technological sectors?

Social justice and human rights – What would happen if access to Internet became a human right? What would it look like?

Health and biotechnology – How can we ensure healthy working conditions amidst economic development?

10.

SDG 10 REDUCED INEQUALITIES

SDG 10 aims to promote all aspects of identity, including but not limited to age, sex, ability, race, ethnicity, origin, religion and socio-economic status. In many ways, our identity can impact our income, along with our political, social and economic participation in daily life. Goal 10 is all about reducing these inequalities to encourage prosperity and income growth within and between countries. We can achieve this by making sure our attitudes, policies and behaviours ensure equal opportunities, respect for human rights and inclusivity.

You might also be able to align your teaching to this SDG if you want your students to be able to:

- Recognize inequality, how to measure it, and its interrelation with other social problems.
- Analyze the local, national and international processes that promote and hinder equality, such as fiscal, wage and social protection policies or corporate activities.
- Investigate inequalities in their community and abroad.
- Evaluate inequalities in terms of quality and quantity, while identifying causes and strategies to reduce them.

Paulo Freire, author of [Pedagogy of the Oppressed](#), argues that only the oppressed can lead their liberation. Education can be oppressing or liberating. Educators can be oppressors and liberators. Consider how you enable students to [reflect, share, and act](#) based on their identities or which identities may be oppressing others. Help students utilize knowledge independently through their own problem posing/solving and decision-making. Freire believed that reducing the power and decision-making distance between teacher and learner would result in revolutionary change – this is also what the SDGs help us strive towards.

Some curricular connections and questions for students might be:

Media – How does the media report on inequalities?

Environment – How does environmental degradation unequally impact people or countries?

Poverty, wealth, and power – What are some contributors to the poverty cycle in your local community? How can we balance inequalities of power between nations?

Indigenous Peoples – How do Indigenous individuals and communities experience inequality and what is being done to address it?

Peace and conflict – How do inequalities result in conflict? How have people overcome these conflicts to address peace and equality?

Oppression and genocide – What are some examples of genocide that resulted from or have led to inequalities?

Gender politics – How has feminism addressed

inequalities of gender? What can be done in the future to address current gender inequalities?

Social justice and human rights – What are some historical events of inequality that have led to advances in social justice and human rights? How can we take action on social justice issues today?

Health and biotechnology – How is biotechnology addressing inequalities in health? What are the barriers to implementing these programs?

11.

SDG 11 SUSTAINABLE CITIES AND COMMUNITIES

SDG 11 aims to promote inclusive, safe, resilient, and sustainable cities and human settlements. This goal is all about managing urban development. Well-managed cities can be hubs of innovation and prosperity. Their management is a big cornerstone in sustainable development. As more people migrate to cities in search of better opportunities, access to affordable, safe and sustainable housing becomes a priority. Managing urban sprawl, waste management, and air pollution are essential to ensuring the well-being, health and prosperity of our population and our environment. The impact of poorly planned urbanization can be seen in the growing reality of tangled traffic, growing greenhouse gas emissions and sprawling suburbs all over the world. Ineffective cities are a burden on taxpayers, and can even lower life expectancy. Proper planning and governance can help reduce these detrimental effects. If we don't choose to act sustainably, we miss the opportunity to build cities where all citizens live a

decent quality of life, creating shared prosperity and social stability without harming the environment.

You might also be able to align your teaching to this SDG if you want your students to be able to:

- Identify and address basic physical, social and psychological human needs in relation to human settlements such as cities and towns.
- Apply basic principles of sustainable planning and building, and identify opportunities to make their community more sustainable and inclusive.
- Reflect on the role of local decision-makers and participatory governance and how to represent a sustainable voice in planning and policy for their community.
- Engage with community groups and local planning systems for sustainable future visions for their community.
- Plan, implement, and evaluate inclusive community-based sustainable projects.

**You might consider having your students
reflect, share, act in some of these ways:**

- Community-based learning has high impact when it engages students to retain and transfer knowledge. Collaborate with appropriate partners and plan an activity which allows students to grow outside the classroom. Find community/industry partners [at USask using the Riipen platform](#).
- Community-engaged learning (CEL) can be embedded in curricular, extra-curricular, and co-curricular experiences. Activities such as volunteering can help students make connections between learning and contextual application – evidence that can be used for career development. [Learn more about community learning in sustainability at USask.](#)
- The City of Saskatoon and the University of Saskatchewan have a joint Climate

Commitment and Call to Action. Connect with the [Research Junction at USask](#) if you'd like more information on partnerships in teaching and learning.

Some curricular connections and questions for students might be:

Media – What are the different perspectives needed to understand urban issues in the media?

Environment – What are some steps to make urban development more sustainable?

Poverty, wealth and power – How does the poverty cycle differ between rural and urban areas?

Indigenous Peoples – How are Indigenous communities impacted by urban settlement?

Peace and conflict – How can urban participation and inclusion promote peace?

Oppression and genocide – What are the impacts of oppression and segregation on urban development?

Gender politics – How does urbanization impact women uniquely?

Social justice and human rights – How can we strengthen our social support for the vulnerable?

Health and biotechnology – What are the health issues caused by urban expansion?

12.

SDG 12 RESPONSIBLE CONSUMPTION AND PRODUCTION

SDG 12 aims to promote resource and energy efficiency, sustainable infrastructure and jobs that provide access to basic services, decent work and a better quality of life for everyone. When we consume and produce sustainably, we are trying to do more with less. It involves consumers, producers, policy-makers, researchers and media making informed choices along the course of the supply chain. Reducing our waste, establishing environmental protection policies, supporting the development of sustainable businesses and educating the public are all ways we can help improve our consumption and production. At our current rate of consumption, we will need the resources of two Earths by 2030 to provide for our growing population. Overconsumption happens when our use of resources outpaces the sustainable capacity of our ecosystems. Growth in population, urbanization and wealth over the next decades will increase waste and pollution volumes. Electronic waste management is also a growing problem, locally and

internationally, with the rise of consumer electronics and computers. Where does waste go?

You might also be able to align your teaching to this SDG if you want your students to be able to:

- Describe how lifestyle choices influence social, economic and environmental development.
- Evaluate the roles, rights, and duties of different actors in production and consumption.
- Design sustainable strategies and practices regarding consumption and production such as lifecycle assessments.

You might consider having your students reflect, share, act in some of these ways:

- Learn about how stuff gets from raw materials to us in this series called the [Story of Stuff](#).
- Bring simulation activities into the classroom to help students understand the processes of production. One example (more suitable for junior years) is the [Illuminate: Climate change simulation game](#), an educational simulation game exploring greenhouse gas emissions, their impact, and climate risk.
- [This consumption tracker](#) is designed to calculate the mileage of everything we wear. The template is set to Winnipeg, but the location could be adjusted to anywhere accordingly.
- Embed low-consumption habits such as printing fewer papers, ask students for double-sided work, or find ways to reduce travel for students in your course. Be overt and explain to students why you chose these decisions.

Some curricular connections and questions for students might be:

Media – What is the role of the media in perpetuating overconsumption? How can we become more aware of, or change, this?

Environment – How can we influence our culture to value environmental sustainability?

Poverty, wealth, and power – How does wealth and power effect relationships between producers and consumers?

Indigenous Peoples- What is being done to support remote Indigenous communities to combat inflated prices of consumer goods?

Peace and conflict – How does consumption of certain goods support ongoing conflict? (e.g.: Mining and resource extraction in the Democratic Republic of Congo)

Oppression and genocide – How has consumption influenced oppression and marginalization?

Gender politics – How is consumption a gendered

issue? How are products marketed to people of different genders or identities?

Social justice and human rights – How are consumption patterns and social justice connected?

Health and biotechnology – What is overconsumption doing to our health?

13.

SDG 13 CLIMATE ACTION

“It’s Grim” is the title of an article from [the Atlantic](#) summarizing the findings of the Sixth Assessment Report from [The Intergovernmental Panel on Climate Change](#). Climate change is the biggest threat to our development and well-being, impacting all life on the planet. The poorest and most vulnerable populations face the undue burden of adapting to climate change while dealing with economic impacts. Increases in drought, flooding, and high temperatures have made agriculture one of the most susceptible sectors to climate change. Farmers play an important role in increasing food security, so building resilience is key to ensure they can handle the changes ahead. Due to the global nature of this problem, we need global cooperation to find solutions, adapt to its effects and develop low-carbon pathways to a cleaner future. We need to align our attitudes, behaviours, and activities with sustainable principles to change our climate course. Students need to understand the realities of climate change so that they may better address the needs of the planet and humanity tomorrow. Being what the world needs has never been so critical for our graduates and their future.

You might also be able to align your teaching to this SDG if you want your students to be able to:

- Describe the greenhouse effect as both natural and anthropogenic phenomena caused by insulating layers of greenhouse gases.
- Articulate the impact of human activities—on a global, national, local and individual level—on climate change.
- Identify social, environmental, economic, and ethical impacts of climate change.
- Create strategies for climate change mitigation or climate adaptation.
- Identify and promote climate-friendly policies and economic activities.

You might consider having your students reflect, share, act in some of these ways:

- A number of [resources and methods](#) have been collected by Learning For Sustainable Futures (LSF). Targeted toward educators, LSF helps educators engage their students in addressing the increasingly complex economic, social and environmental challenges of today's world.
- Explore UNICEF's [Get Real on Climate](#) page for a number of lesson plans and activities addressing climate change and exploring possible solutions.
- Run a workshop with the [En-ROADS global climate simulator](#) to explore climate policies.
- A simpler tool is the [The Climate Game](#) Created by The Financial Times in partnership with Infosys to see if students can reach net zero by 2050 based on emissions modelling.
- Try out some of the climate-focused games and activities on the [NASA website](#) or take on the [Games for Change Student Challenge](#), and play or create a climate change game.
- Track your ecological footprint using [Footprint Calculator](#), understand [Country Trends](#), and discover [case studies](#) from Global Footprint Network. These resources allow users to track

how natural resources are used and how consumption, populations and more combine to affect our planet.

Some curricular connections and questions for students might be:

Media – How does the media portray climate change?

Environment – What are ways we as citizens can protect the rights of our environment?

Poverty, wealth, and power – How does climate change relate to the poverty cycle? How does climate change uniquely affect the poor?

Indigenous Peoples – How are Indigenous communities being impacted by climate change?

Peace and conflict – How does climate change impact war and conflict around the world?

Oppression and genocide – How is climate change linked to oppression?

Gender politics – How is climate change a gendered issue?

Social justice and human rights – How are human rights affected by climate change?

Health and biotechnology – What are the biggest impacts of climate change on our health?

14.

SDG 14 LIFE BELOW WATER

SDG 14 aims to conserve and sustainably use resources from oceans, seas, and marine environments. Beyond humankind, oceans support over 200,000 identified species and countless other species that have yet to be discovered. Keeping our oceans clean and healthy is in our best interests because they help protect our drinking water, weather, climate, food and oxygen. Managing the impact of trade and transportation means increasing international cooperation to protect vulnerable habitats, invest in sustainable industry practices, and address wasteful habits. Targets include mitigating marine pollution by 2025 by reducing sources of pollution from human sources on land, enacting laws that protect our oceans from destructive fishing practices such as illegal fishing and overfishing, and offsetting the impacts of ocean acidification through enhanced scientific cooperation and action at all levels. By failing to take control of marine pollution, we will have negatively impacted the health and biodiversity of our oceans species and ecosystems. The spread of hypoxic dead zones will increase, ultimately impacting key marine industries

like tourism and fishing, and the livelihoods of many. USask ranked 38th in the 2020 Times Higher Education (THE) University Impact Rankings category for research on life below water and education on and support for aquatic ecosystems. Empowering students to be part of the research and learning regarding life under water will help meet the targets of this ambitious goal.

You might be able to align your teaching to this SDG if you want your students to be able to:

- Connect the basics of our marine ecosystem to threats to its well-being.
- Describe the role of climate change on our oceans, and the role oceans play in moderating the effects of climate change.
- Evaluate sustainable fishing practices and the impact humankind is having on the health of our oceans.
- Investigate a country's legal, political, informal relationships to the sea and debate improvements to sustainable methods of collecting natural resources.

- Identify and advocate for improved access to sustainably harvested marine life, marine conservation and the development of scientific marine research.

You might consider having your students reflect, share, act in some of these ways:

- Host a documentary screening. Show your class or community why protecting our life under water is crucial for our planet's survival. Watch films such as Mission Blue or Oceans and let the imagery speak for itself.
- [Bamfield Marine Sciences Centre](#) explores how networks of ecosystems and people are affected by the climate crisis, and highlights how climate action is an opportunity for positive change across different scales. They also offer [educational resources](#) for primary, secondary, and tertiary education.

- Review the themes and areas of expertise at the Global Institute for Water Security – connect your students with potential research or mentorship experiences.

<https://water.usask.ca/about/themes.php>

Some curricular connections and questions for students might be:

Media – What are some important considerations for reporting on stories of marine sustainability?

Environment – How does marine conservation differ from other environmental issues?

Poverty, wealth, and power – How are different populations affected when environmental protection is not a priority?

Indigenous Peoples – How are Indigenous communities protecting and advocating for our

ocean environments? How are they uniquely affected by its degradation?

Peace and conflict – What conflicts have occurred, or are ongoing, regarding the protection of our oceans and their resources?

Oppression and genocide – What happens to environmental protection during times of genocide and conflict?

Gender politics – How is the health of our oceans related to gender issues?

Social justice and human rights – How are people advocating for the protection and conservation of our oceans, seas and marine resources?

Health and biotechnology – How does the health of our ocean environments affect the health of all global citizens?

15.

SDG 15 LIFE ON LAND

SDG 15 aims to promote the sustainable management of forests, combat desertification, halt and reverse land degradation, and halt biodiversity loss. We are reminded that preservation is a verb and requires actions such as reducing deforestation, preventing the extinction of endangered species (plants and animals), appropriately valuing Indigenous insights and needs to the conservation of ecosystems. Instead of responding to issues on a case-by-case basis, taking an ecosystem approach to resource management and environmental protections considers the interrelationships of ecosystems into decision making. Working with decision-makers and diverse stakeholders like farmers, national parks staff, environmental groups and citizens helps introduce a collaborative approach to conservation and creates rich opportunities for experiential learning outside the classroom.

You might be able to align your teaching to this SDG if you want your students to be able to:

- Compare ecological systems and biodiversity, with reference to local and global ecosystems.
- Identify threats posed to biodiversity, such as habitat loss, deforestation, overexploitation and invasive species.
- Critique destructive environmental practices that cause biodiversity loss (or justify practices that minimize loss)
- Collaborate with local groups and advocate for a life in harmony with nature.

You might consider having your students reflect, share, act in some of these ways:

- Connect with governmental land management agencies to find ways to collaborate on learning activities.
- Check out Canadian Parks & Wilderness Society <https://cpaws-sask.org/> and the Canadian Wildlife Federation <https://cwf->

[fcf.org/en](https://www.fcf.org/en) . Learn more about campaigns within Saskatchewan to protect ecosystems and biodiversity. See what's happening within the province and choose an issue to work on.

- Learn which species and ecosystems are [endangered in Saskatchewan](#) and have students help find solutions to tracking or monitoring.
- The University of Saskatchewan and the [Meewasin Valley Authority](#) have a strategic Memorandum of Understanding on research, education and outreach projects – consider reaching out to connect classroom activities to their priorities.

Some curricular connections and questions for students might be:

Media – What important perspectives are needed for a story on environmental issues?

Environment – How is humanity a part of our natural environment and apart from it?

Poverty, wealth, and power – How does deforestation, and other forms of environmental degradation, relate to poverty?

Indigenous Peoples – How have Indigenous communities advocated for environmental protection?

Peace and conflict – How can we develop a program for peace that includes environmental protection?

Oppression and genocide – How does war impact environmental conservation?

Gender politics – How is access to land and land-use a gendered issue?

Social justice and human rights – How do vulnerable or marginalized populations experience environmental degradation and/or resource extraction uniquely?

Health and biotechnology – How does environmental degradation impact our health?

16.

SDG 16 PEACE AND JUSTICE, STRONG INSTITUTIONS

SDG 16 aims to promote peace, justice and the institutions that support and protect the rights of citizens which are the foundations of sustainable development. People need to be free of fear from violence and feel safe wherever they go, regardless of their ethnicity, faith or sexual orientation. Crime and violence threaten peaceful societies, and even in the world's greatest democracies, corruption, crime and human rights violations still occur. This goal is all about ensuring our communities, governments and institutions protect and promote inclusion and respect toward people of all backgrounds.

You might also be able to align your teaching to this SDG if you want your students to be able to:

- Interpret concepts of justice, inclusion and peace and their relation to law, both in their country and internationally.
- Discuss the importance of individuals and groups upholding justice, inclusion and peace in their country and internationally.
- Design processes which bring peace and justice to institutions in their country.
- Reflect on their role in issues of peace, and show solidarity for those suffering from injustice in their own country and abroad.
- Critique issues of peace, justice, inclusion and strong institutions in their region, nationally, and globally.

You might consider having your students reflect, share, act in some of these ways:

- Support local organizations which align with your learning goals. Find out what social

justice struggles are important to students and your community and find ways to support organizations doing this kind of work. Have students give time, talent and resources to help make a difference for people who have faced exploitation, violence, and discrimination.

- Explore the YMCA's [Peace Building Activity Guide](#). It includes activities for children, youth and adults.
- Connect with St. Thomas More College Centre, a USask federated college, for more about outreach in Catholic studies, Critical Perspectives on Social Justice and the Common Good, and Peace Studies at the Centre for [Faith, Reason, Peace, and Justice](#).

Some curricular connections and questions for students might be:

Media – Why is it important to be critical of media in relation to reporting conflict?

Oppression and genocide – How do genocides begin and what can be done at different levels to intervene?

Environment – How do peace and justice impact our environment?

Gender politics – How are justice systems impacting gender inequalities?

Poverty, wealth and power – How does extreme wealth and corruption contribute to the poverty cycle?

Social justice and human rights – What is the process of reporting a human rights abuse? How are they dealt with?

Indigenous Peoples – What is unique about Indigenous justice systems and what can Canada or other colonial systems learn from them?

Health and biotechnology – How does peace impact our health?

Peace and conflict – How has the idea of world peace changed over time? How are genocide, war crimes, and crimes against humanity prosecuted?

17.

SDG 17 PARTNERSHIPS FOR THE GOALS

SDG 17 aims to revitalize and enhance the ability for governments, civil society, the private sector, the UN and other stakeholders to mobilize the necessary resources. Improving effective support for developing countries, in particular the least developed countries and small island states, is essential to equal progress for all. Failing to leverage global partnerships will result in wasted money, wasted time and wasted lives. When governments, businesses and civil society focus on their areas of expertise and collaborate on solutions, we can improve efficiency and ensure everyone is aware of the priority actions they can take to address their areas of responsibility.

You might also be able to align your teaching to this SDG if you want your students to be able to:

- Address global issues, and the importance of global multi-stakeholder partnerships and the shared accountability for sustainable development.
- Articulate and measure indicators of progress on sustainable development.
- Create awareness campaigns about the importance of global partnerships for sustainable development.
- Collaborate to promote global partnerships for sustainable development and demand government accountability for the SDGs.
- Describe behaviours of active, critical, global and sustainable citizens.
- Design policies promoting global partnerships and sustainable development.

You might consider having your students reflect, share, act in some of these ways:

- Encourage students to find groups in your local community that seeks to mobilize action on the implementation of the SDGs.
- Partner with businesses for the implementation of the SDGs. Start making the links between research, teaching, industry, and public organizations.
- Stay connected on social media and tell people about your SDG work by using the hashtag #GlobalGoals. Keep track of how your country is doing to meet their commitments.
- Connect with schools in your community to implement a shared resource program or a combined activity day to encourage shared action and partnerships. Join together for a mini conference, a project fair or something else that gets everyone involved and engaged.

Some curricular connections and questions for students might be:

Media – How is development reported in the media? What role does the media play in ensuring the Global Goals are met?

Environment – How can development remain environmentally conscious?

Poverty, wealth, and power – How are “North-South” partnerships for poverty reduction changing development? Do wealthy countries have unique obligations to implement the Global Goals?

Indigenous Peoples – Why is Indigenous knowledge important in creating sustainable development policies and practices? How can Indigenous knowledge be incorporated into procedures?

Peace and conflict – How does war and conflict affect our ability to reach the Global Goals? How can we encourage peace and conflict mediation at a local, national, and international level?

Oppression and genocide – How does oppression

impact the distribution of social, economic, and political benefits of development?

Gender politics – What are important considerations for ensuring gender equality in international development?

Social justice and human rights – What basic human rights are affected by the Global Goals? How will achieving the Global Goals improve human rights around the world?

Health and biotechnology – How can we work together globally to ensure Goal 3: Good Health and Well-being for all? Can biotechnology play a role?

This is where you can add appendices or other back matter.