

# UN Sustainable Development Goals Open Pedagogy Fellowship



# UN Sustainable Development Goals Open Pedagogy Fellowship

*A toolkit for instructors and institutions*

*DEBORAH BAKER; CHRISTINE CREFTON; UROOJ NIZAMI; JAMIE  
WITMAN; JOSIE MILLIKEN; RAJIV JHANGIANI; ROBIN DEROSA;  
MICHAEL MILLS; AND CARLA GHANEM*

KWANTLEN POLYTECHNIC UNIVERSITY  
SURREY, B.C



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## How to Use this Resource

The *United Nations Sustainable Development Goals (UN SDG) Open Pedagogy Fellowship Toolkit* is meant as a resource for both instructors and institutions. Within this resource, readers will find examples of a wide variety of openly-licensed renewable assignments that can be assigned and applied to a variety of subject areas and disciplines. Of course, each assignment speaks directly to at least one UN SDG. Beyond that, this resource also serves as a guide for institutions who wish to adopt and adapt this program by bringing it to their home institution.

# About

Open educational resources (OER) increase equitable access to education and empower students in the learning process. Open pedagogy – an approach to teaching and learning that draws on OER – places the student at the centre of that learning process in a more engaging, authentic, and collaborative learning environment in order to achieve social justice in the community.

This global award-winning fellowship<sup>[1]</sup> provides faculty with an opportunity to work with their colleagues and students to impact change via open pedagogy and community engagement. Based on the conceptual framework of the United Nations Sustainable Development Goals (UN SDGs), a set of 17 goals that address a wide range of social issues, such as poverty, inequality, climate change, and peace and justice, this fellowship is committed to supporting social justice through an international partnership in which faculty can work across institutions to maximize global impact. The UN SDGs are designed to achieve and maintain social justice and a sustainable future, with a target of the year 2030 set for the attainment of each goal.

This fellowship is designed to assist faculty with creating renewable assignments<sup>[2]</sup>, all of which will carry a Creative Commons license, to help students become agents of change in their own communities. Each fellowship team is expected to design three renewable assignments over the summer. A minimum of two renewable assignments is expected to be deployed in the classes of each fellowship team in the Fall Semester. Faculty are expected to present on their proposed assignments prior to their deployment. A student showcase takes place during the Spring Semester in which a select number of students will present on how they improved their communities and achieved global justice through the UN SDG framework.

The United Nations Sustainable Development Goals Open Pedagogy Fellowship was launched by Shinta Hernandez and Michael Mills at Montgomery College (Maryland, USA) in 2018, and has grown each year as additional institutions join the fellowship. For a breakdown of the current and past institutional partners, see the [Organizational Structure](#) chapter.

In 2020, Montgomery College was recognized by the Open Education Global consortium (OE Global) for their innovative open pedagogy fellowship. The College was named winner in the Open Pedagogy category of the 2020 Open Education Awards for Excellence. OE Global is a global, non-profit organization supporting the development and use of open education around the world. More information about the award can be found at the [Open Education Awards for Excellence](#) website.

<sup>[1]</sup> The fellowship was awarded the Open Pedagogy Award for Excellence by Open Education Global (OE Global) in November 2020.

<sup>[2]</sup> Renewable assignments (also known as non-disposable assignments) are those that add value to a student's world, live outside of the boundaries and beyond the duration of the course, and are likely to have a lasting impact. Disposable assignments, on the other hand, are those that only the instructor and students will see and which students are likely to throw away once they have been graded ([Seraphin et al., 2019](#); [Wiley, 2013](#)).

# Fellows

## 2021-2022

Monica Affleck, Kwantlen Polytechnic University, Human Resource Management  
Kali Andrews, Maricopa / GateWay, Sociology  
Demelash Areda, Maricopa / Estrella Mountain, Biology  
Patricia Aroca-Ouellette, Langara College, Chemistry  
Peter Becskehazy, Pima Community College, Political Science  
Matthew Bloom, Maricopa / Scottsdale, English  
Sharon Brewer, Thompson Rivers University, Chemistry  
Dawne Bringeland, Thompson Rivers University, Business  
Anne Browning-Aiken, Pima Community College, Anthropology  
Lynn Brysacz, Maricopa / Glendale, Counseling  
Jamison Crabtree, Pima Community College, English Composition / Literature  
Comfort Davis Mingot, Montgomery College, English / WDCE  
Steve Earle, Thompson Rivers University, Earth Sciences  
Drew Egan, Langara College, Geography / Geology  
Lynnae F. Thandiwe, Pima Community College, Paralegal  
Kevin Gibbons, Montgomery College, Anthropology  
Rachelle Hornby, Pima Community College, Sustainable Landscape  
Roberto Hurtado, Montgomery College, Spanish  
Sarah Jansen, Pima Community College, Philosophy / Religion  
Kristopher Kohler, Montgomery College, Sociology  
Dan Krausz, Community College of Baltimore County, Wellness  
Michael Little Crow, Maricopa / Scottsdale, Mathematics  
Amanda McPherson, Pima Community College, Early Childhood Education  
Ann Merck MacLellan, Community College of Baltimore County, Sociology  
Emily Miller, Maricopa / Mesa, English  
Jeanie Moon, Montgomery College, ELAP  
Nicholas Mowad, Maricopa / Chandler-Gilbert, Philosophy  
Kim Naqvi, Thompson Rivers University, Geography  
Bala Nikku, Thompson Rivers University, Social Work  
Casiana Pascariu, Maricopa / Mesa, Anthropology  
Carl Pavetto, Montgomery College, Business / Paralegal  
Rebecca Portis, Montgomery College, English / Literature  
Darian Qureshi, Pima Community College, Political Science  
Patricia Rhea, Community College of Baltimore County, Wellness  
Alicia Rose Lammie, Maricopa / Rio Salado, WDCE  
Patricia Ruppert, Montgomery College, Women's Studies / Philosophy  
Ingrid Sabio-McLaughlin, Community College of Baltimore County, Women's Studies / History  
James Sheldon, Pima Community College, Mathematics  
Mike Smith-Cairns, Langara College, Geography / Geology  
Cathy Thwing, Pima Community College, English Composition  
Danielle Truskowski, Community College of Baltimore County, Mathematics

Nancy Van Wagoner, Thompson Rivers University, Geology / Volcanology  
Cora Varas-Nelson, Pima Community College, Biology  
Reynold Vaz, Kwantlen Polytechnic University, Business  
Courtney Webb, Pima Community College, Student Success / Counseling  
Erin Woodford, Thompson Rivers University, Journalism

## 2020-2021

Dorothy Barenscott, Kwantlen Polytechnic University, Art  
Roxanne Beckstrom-Sternberg, Maricopa/Gateway Community College, Reading  
Alisa Beyer, Maricopa/Chandler-Gilbert Community College, Psychology  
Emily Bogusch, Maricopa/Phoenix College, Physics  
Becky Bradley, Maricopa/Scottsdale Community College, English  
Andrae Brown, Montgomery College, Psychology  
Amy Carattini, Montgomery College, Anthropology  
Cristin Cash, Montgomery College, Art  
Albert Celozza, Maricopa/Phoenix College, Political Science  
Megan DeJarnett, Maricopa/Chandler-Gilbert Community College, Music Humanities and Performance  
Roxanna Dewey, Maricopa/Glendale Community College, English  
Brian Dille, Maricopa/Mesa Community College, Political Science  
Gadis Effendi, Montgomery College, (TPSS) Sociology  
Charlene Estrada, Maricopa/South Mountain Community College, Geology  
Heather Ganginis Del Pino, Montgomery College, (RV) Psychology  
Stephanie Green, Maricopa/Phoenix College, Nutrition  
Emerald Jones, Montgomery College, Sociology  
Trisha Lavigne, Maricopa/Glendale Community College, Psychology  
Julie Lazzara, Maricopa/Paradise Valley Community College, Psychology  
Rebecca Linton, Maricopa/Scottsdale Community College, Biology  
Sharon McLaughlin, Maricopa/Mesa Community College, Health  
Eli Moore, Montgomery College, Philosophy  
Stacy Moreno, Maricopa/Gateway Community College, Social Work  
Jamie Murphy, SUNY Delhi Nursing  
Hoa Nguyen, Montgomery College, Economics 5: Gender Equality  
Andrea Niosi, Kwantlen Polytechnic University, Marketing  
Melanie Ohm, Maricopa/Chandler-Gilbert Community College, Music Humanities and Performance  
Nicola Plowes Maricopa/Mesa Community College, Biology  
Filippo Posta Maricopa/Estrella Mountain Community College, Math  
Rebecca Razavi, Montgomery College, (GT) Management  
Amelia Rodriguez, Maricopa/Mesa Community College, Reading  
Constanza Rojas-Primus, Kwantlen Polytechnic University, Spanish  
David Sadoway, Kwantlen Polytechnic University, Geography  
Karl Smith, Montgomery College, Political Science  
Stacy Smith, Maricopa/Paradise Valley Community College, Business  
Paulette Stevenson, Maricopa/Mesa Community College, English  
Tara Tetrault, Montgomery College, (RV) Anthropology  
Mitch Tropin, Montgomery College, (RV) English

Fern Van Vliet, Maricopa/Glendale Community College, Math  
Lori Walk, Maricopa/Glendale Community College, English  
Sean Whitcomb, Maricopa/Mesa Community College, Biology

## **2019-2020**

Zev Cossin, Montgomery College RV/GT, Anthropology  
Kathy Dunster, Kwantlen Polytechnic University, Urban Ecosystems  
Michelle Franklin, Kwantlen Polytechnic University, Sustainable Horticulture  
James Furgol, Montgomery College GT, History  
Jennifer Hardwick, Kwantlen Polytechnic University, English  
Candy Ho, Kwantlen Polytechnic University, Education Studies  
Pamela Ip, Kwantlen Polytechnic University, Marketing  
Mary Beth Johnson, Montgomery College TPSS/Hybrid, Education  
Geetha Kada, Montgomery College TPSS/DL, Nursing  
Michelle Prendergast, Montgomery College GT, English  
Mitchell Tropin, Montgomery College GT, Communications  
Mary Wall, Montgomery College GT, Math  
Nathan Zook, Montgomery College RV/Hybrid, Political Science

## **2018-2019**

Ali Alavi, Montgomery College, TPSS, Business  
Glenda Baca, Montgomery College RV, Education  
Andree Betancourt, Montgomery College RV, Communications  
Andrea Foster, Montgomery College TPSS, Business  
Christina Gentile, Montgomery College RV, Spanish  
Vedham Karpakakunjaram, Montgomery College RV, Biology  
Naliyah Kaya, Montgomery College TPSS, Sociology  
Amanda Lebleu, Montgomery College TPSS, ELAP  
Maria-Elvira Luna, Montgomery College TPSS, World Languages  
Alison Melley, Montgomery College GT, Psychology  
Cory Newman, Montgomery College TPSS, Chemistry  
Mary Robinson, Montgomery College GT, English  
Emily Rosado, Montgomery College RV, English  
Katya Salmi, Montgomery College TPSS, Sociology  
David Torain, Montgomery College GT, Math

# United Nations Sustainable Development Goals

JAMIE WITMAN AND JOSIE MILLIKEN



One or more interactive elements has been excluded from this version of the text. You can view them online here:

<https://kpu.pressbooks.pub/unsdgtoolkit/?p=386#oembed-1>

In 2015, all United Nations Member States adopted the [2030 Agenda for Sustainable Development](#) (United Nations, 2015). At the core of the 2030 Agenda are five main themes: People, Planet, Prosperity, Peace, and Partnership. Through these five themes, 17 goals, known as the [United Nations Sustainable Development Goals \(UN SDGs\)](#), were created to provide actionable steps to meet the Agenda for Sustainable Development. The UN SDGs address a wide range of social issues, such as poverty, inequality, climate change, and peace and justice (Montgomery College, n.d.).

Below are the 17 UN SDGs:

1. No Poverty
2. Zero Hunger
3. Good Health and Well-Being
4. Quality Education
5. Gender Equality
6. Clean Water and Sanitation
7. Affordable and Clean Energy
8. Decent Work and Economic Growth
9. Industry, Innovation, and Infrastructure
10. Reduced Inequalities
11. Sustainable Cities and Communities
12. Responsible Consumption and Production
13. Climate Action
14. Life below Water
15. Life on Land
16. Peace, Justice, and Strong Institutions
17. Partnerships for the Goals



One or more interactive elements has been excluded from this version of the text. You can view them online here:

<https://kpu.pressbooks.pub/unsdgtoolkit/?p=386#oembed-2>

The SDGs are designed to achieve and maintain social justice and a sustainable future, with attainment of each goal by the year 2030 as set by the Agenda. Each goal consists of specific targets and indicators used to track the global progress achieved. These benchmarks also guide the actions and policies developed by the Member States through the use of measurable data and outcomes.

The UN SDG Open Pedagogy Faculty Fellowship marries the guiding principles of equity, community, and

sustainability from the world of open education and open pedagogy with the UN SDGs. This connection allows faculty and students the opportunity to engage with and become advocates for the UN SDGs while also creating meaningful and significant contributions to both their local and the global community through the lens of open educational practices, namely renewable assignments. Faculty Fellows will build their assignments around one or two of the UN SDGs, using the targets and indicators to help guide their student learning outcomes. This process gives students a greater sense of agency over the work they produce and imparts skills and knowledge that go beyond the classroom.

As we are all stakeholders in the future of our planet and people, this partnership and fusion of ideals hopes to empower faculty and students to create positive lasting change at home and beyond.

#### References:

Montgomery College. (n.d.). UN SDG pedagogy fellowship. United Nations Sustainable Development Goals Open Pedagogy Fellowship. Retrieved May 20, 2021, from <https://www.montgomerycollege.edu/offices/elite/unesco/>

United Nations. (2015). Transforming our world: The 2030 agenda for sustainable development. Transforming our world: The 2030 agenda for sustainable development. <https://sdgs.un.org/2030agenda>

# Open Pedagogy & Renewable Assignments

RAJIV JHANGIANI AND ROBIN DEROSA

There are many ways to begin a discussion of “Open Pedagogy.” Although providing a framing definition might be the obvious place to start, we want to resist that for just a moment to ask a set of related questions: What are your hopes for education, particularly for higher education? What vision do you work toward when you design your daily professional practices in and out of the classroom? How do you see the roles of the learner and the teacher? What challenges do your students face in their learning environments, and how does your pedagogy address them?

“Open Pedagogy,” as we engage with it, is a site of praxis, a place where theories about learning, teaching, technology, and social justice enter into a conversation with each other and inform the development of educational practices and structures. This site is dynamic, contested, constantly under revision, and resists static definitional claims. But it is not a site vacant of meaning or political conviction. In this brief introduction, we offer a pathway for engaging with the current conversations around Open Pedagogy, some ideas about its philosophical foundation, investments, and its utility, and some concrete ways that students and teachers—all of us learners—can “open” education. We hope that this chapter will inspire those of us in education to focus our critical and aspirational lenses on larger questions about the ideology embedded within our educational systems and the ways in which pedagogy impacts these systems. At the same time we hope to provide some tools and techniques to those who want to build a more empowering, collaborative, and just architecture for learning.

“Open Pedagogy” as a named approach to teaching is nothing new. Scholars such as [Catherine Cronin](#),<sup>1</sup> [Katy Jordan](#),<sup>3</sup> [Vivien Rolfe](#),<sup>4</sup> and Tannis Morgan have traced the term back to early etymologies. [Morgan cites a 1979 article](#)<sup>7</sup> by the Canadian Claude Paquette: “Paquette outlines three sets of foundational values of Open Pedagogy, namely: autonomy and interdependence; freedom and responsibility; democracy and participation.”

Many of us who work with Open Pedagogy today have come into the conversations not only through an interest in the historical arc of the scholarship of teaching and learning, but also by way of Open Education, and specifically, by way of Open Educational Resources (OERs). OERs are educational materials that are openly-licensed, usually with Creative Commons licenses, and therefore they are generally characterized by the [5 Rs](#)<sup>9</sup>: they can be reused, retained, redistributed, revised, and remixed. As conversations about teaching and learning developed around the experience of adopting and adapting OERs, the phrase “Open Pedagogy” began to re-emerge, this time crucially inflected with the same “open” that inflects the phrase “open license.”

In this way, we can think about Open Pedagogy as a term that is connected to many teaching and learning theories that predate Open Education, but also as a term that is newly energized by its relationship to OERs and the broader ecosystem of open (Open Education, yes, but also Open Access, Open Science, Open Data, Open Source, Open

1.<sup>2</sup>

2. [1]

3.<sup>5</sup>

4.<sup>6</sup>

5. [2]

6. [3]

7.<sup>8</sup>

8. [4]

9.<sup>10</sup>

10. [5]

Government, etc.). David Wiley, the Chief Academic Officer of [Lumen Learning](#),<sup>11</sup> was one of the first OER-focused scholars who articulated how the use of OERs could transform pedagogy. He wrote in 2013 about the tragedy of “[disposable assignments](#)”<sup>13</sup> that “actually suck value out of the world,” and he postulated not only that OERs offer a free alternative to high-priced commercial textbooks, but also that the open license would allow students (and teaching faculty) to contribute to the knowledge commons, not just consume from it, in meaningful and lasting ways. Recently, Wiley has revised his language to focus on “[OER-Enabled Pedagogy](#),”<sup>15</sup> with an explicit commitment to foregrounding the 5R permissions and the ways that they transform teaching and learning.

As Wiley has focused on students-as-contributors and the role of OERs in education, other Open Pedagogues have widened the lens through which Open Pedagogy refracts. Mike Caulfield, for example, [has argued](#)<sup>17</sup> that while OER has been driving the car for a while, Open Pedagogy is in the backseat ready to hop over into the front. Caulfield sees the replacement of the proprietary textbook by OERs as a necessary step in enabling widespread institutional open learning practice. In that post, Caulfield shorthands Open Pedagogy: “student blogs, wikis, etc.” We might delve in a bit deeper here. Beyond participating in the creation of OERs via the 5 Rs, what exactly does it mean to engage in “Open Pedagogy?”

First, we want to recognize that Open Pedagogy shares common investments with many other historical and contemporary schools of pedagogy. For example, constructivist pedagogy, connected learning, and critical digital pedagogy are all recognizable pedagogical strands that overlap with Open Pedagogy. From constructivist pedagogy, particularly as it emerged from John Dewey and, in terms of its relationship to technology, from Seymour Papert, we recognize a critique of industrial and automated models for learning, a valuing of experiential and learner-centered inquiry, and a democratizing vision for the educational process. From connected learning, especially as it coheres in work supported by the [Digital Media and Learning Research Hub](#),<sup>19</sup> we recognize a hope that human connections facilitated by technologies can help learners engage more fully with the knowledge and ideas that shape our world. And from [critical digital pedagogy](#),<sup>21</sup> as developed by Digital Humanities-influenced thinkers at Digital Pedagogy Lab out of educational philosophy espoused by scholars such as Paulo Freire and bell hooks, we recognize a commitment to diversity, collaboration, and structural critique of both educational systems and the technologies that permeate them.

If we merge OER advocacy with the kinds of pedagogical approaches that focus on collaboration, connection, diversity, democracy, and critical assessments of educational tools and structures, we can begin to understand the breadth and power of Open Pedagogy as a guiding praxis. To do this, we need to link these pedagogical investments with the reality of the educational landscape as it now exists. The [United Nations Universal Declaration of Human Rights](#)<sup>23</sup> asserts that “higher education shall be equally accessible to all.” Yet, even in North America in 2017, “the

- 11. <sup>12</sup>
- 12. [6]
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likelihood of earning a college degree is tied to family income” (Goldrick-Rab).<sup>25</sup> For those of us who work in higher ed, it’s likely that we have been casually aware of the link between family income and college enrollment, attendance, persistence, and completion. But for those of us who teach, it’s also likely that the pedagogies and processes that inflect our daily work are several steps removed from the economic challenges that our students face. Even though [67% of college students in Florida and 54% of those in British Columbia](#)<sup>27</sup> cannot afford to purchase at least one of their required course textbooks, we more readily attribute their inability to complete assigned readings to laziness and entitlement than to unaffordability. This is precisely why the push to reduce the high cost of textbooks that has been the cornerstone of the OER movement has been a wake-up call for many of us who may not always have understood what we could do to directly impact the affordability of a college degree.

When faculty use OERs, we aren’t just saving a student money on textbooks: [we are directly impacting that student’s ability to enroll in, persist through, and successfully complete a course](#).<sup>29</sup> In other words, we are directly impacting that student’s ability to attend, succeed in, and graduate from college. When we talk about OERs, we bring two things into focus: that access is critically important to conversations about academic success, and that faculty and other instructional staff can play a critical role in the process of making learning accessible.

If a central gift that OERs bring to students is that they make college more affordable, one of the central gifts that they bring to faculty is that of agency, and how this can help us rethink our pedagogies in ways that center on access. If we do this, we might start asking broader questions that go beyond “How can I lower the cost of textbooks in this course?” If we think of ourselves as responsible for making sure that everyone can come to our course table to learn, we will find ourselves concerned with the many other expenses that students face in paying for college. How will they get to class if they can’t afford gas money or a bus pass? How will they afford childcare on top of tuition fees? How will they focus on their homework if they haven’t had a square meal in two days or if they don’t know where they will be sleeping that night? How will their families pay rent if they cut back their work hours in order to attend classes? How much more student loan debt will they take on for each additional semester it takes to complete all of their required classes? How will they obtain the credit card they need to purchase an access code? How will they regularly access their free open textbook if they don’t own an expensive laptop or tablet?

And what other access issues do students face as they face these economic challenges? Will they be able to read their Chemistry textbook given their vision impairment? Will their LMS site list them by their birth name rather than their chosen name, and thereby misgender them? Will they have access to the knowledge they need for research if their college restricts their search access or if they don’t have Wi-Fi or a computer at home? Are they safe to participate in online, public collaborations if they are undocumented? Is their college or the required adaptive learning platform collecting data on them, and if so, could those data be used in ways that could put them at risk?

OERs invite faculty to play a direct role in making higher education more accessible. And they invite faculty to ask questions about how we can impact access in ways that go beyond textbook costs. At the very least, they help us see the challenges that students face in accessing higher education as broad, as severe, and as directly related to their academic success, or lack thereof.

So one key component of Open Pedagogy might be that it sees access, broadly writ, as fundamental to learning and to teaching, and agency as an important way of broadening that access. OERs are licensed with open licenses, which reflects not just a commitment to access in terms of the cost of knowledge, but also access in terms of the creation of knowledge. Embedded in the social justice commitment to making college affordable for all students is a related

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belief that knowledge should not be an elite domain. Knowledge consumption and knowledge creation are not separate but parallel processes, as knowledge is co-constructed, contextualized, cumulative, iterative, and recursive. In this way, Open Pedagogy invites us to focus on how we can increase access to higher education and how we can increase access to knowledge—both its reception and its creation. This is, fundamentally, about the dream of a public learning commons, where learners are empowered to shape the world as they encounter it. With the open license at the heart of our work, we care both about “free” and about “freedom,” about resources and practices, about access and about accessibility, about content and about contribution. This is not a [magical thinking](#)<sup>31</sup> approach to digital pedagogy. It’s an honest appraisal of the barriers that exist in our educational systems and a refusal to abdicate responsibility for those barriers.

To summarize, we might think about Open Pedagogy as an access-oriented commitment to learner-driven education AND as a process of designing architectures and using tools for learning that enable students to shape the public knowledge commons of which they are a part. We might insist on the centrality of the 5 Rs to this work, and we might foreground the investments that Open Pedagogy shares with other learner-centered approaches to education. We might reconstitute Open Pedagogy continually, as our contexts shift and change and demand new, site-specific articulations. But if we want to begin “open” our courses, programs, and/or institutions, what practical steps can we take to get started?

OEP, or Open Educational Practices, can be defined as the set of practices that accompany either the use of OERs or, more to our point, the adoption of Open Pedagogy. Here are some simple but profoundly transformative examples of OEPs:

- Adapt or remix OERs with your students. Even the simple act of adding problem sets or discussion questions to an existing open textbook will help contribute to knowledge, to the quality of available OERs, and to your students’ sense of doing work that matters. The adaptation of the open textbook [Project Management for Instructional Designers](#)<sup>33</sup> by successive cohorts of graduate students at Brigham Young University provides an excellent example of this approach.
- Build OERs with your students. Though students may be beginners with most of the content in your course, they are often more adept than you at understanding what beginning students need in order to understand the material. Asking students to help reframe and re-present course content in new and inventive ways can add valuable OERs to the commons while also allowing for the work that students do in courses to go on to have meaningful impact once the course ends. Consider the examples of the open textbook [Environmental Science Bites](#)<sup>35</sup> written by undergraduate students at the Ohio State University or the [brief explainer videos](#)<sup>36</sup> created by Psychology students around the world and curated by the NOBA Project.
- Teach your students how to edit Wikipedia articles. By adding new content, revising existing content, adding citations, or adding images, students can (with the support of the [Wiki Education Foundation](#)<sup>39</sup>) make direct contributions to one of the most popular public repositories for information. Indeed, more than 22,000 students

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already have, including [medical students at the University of California San Francisco](#).<sup>41</sup> More than developing digital literacy and learning how to synthesize, articulate, and share information, students engage with and understand the politics of editing, including how “truth” is negotiated by those who have access to the tools that shape it.

- Facilitate student-created and student-controlled learning environments. The Learning Management System (Canvas, Moodle, Blackboard, etc.) generally locks students into closed environments that prevent sharing and collaboration outside of the class unit; it perpetuates a surveillance model of education in which the instructor is able to consider metrics that students are not given access to; and it presupposes that all student work is disposable (as all of it will be deleted when the new course shell is imported for the next semester). Initiatives such as [Domain of One's Own](#)<sup>43</sup> enable students to build “[personal cyberinfrastructures](#)”<sup>44</sup> where they can manage their own learning, control their own data, and design home ports that can serve as sites for collaboration and conversation about their work. Students can choose to openly license the work that they post on these sites, thereby contributing OERs to the commons; they can also choose not to openly license their work, which is an exercising of their rights and perfectly in keeping with the ethos of Open Pedagogy. If students create their own learning architectures, they can (and should) control how public or private they wish to be, how and when to share or license their work, and what kinds of design, tools, and plug-ins will enhance their learning. It is important to point out here that open is not the opposite of private.
- Encourage students to apply their expertise to serve their community. Partner with nonprofit organizations to create [opportunities for students to apply their research or marketing skills](#).<sup>47</sup> Or [ask them to write \(and submit for publication\) op-ed pieces](#)<sup>49</sup> to share evidence-based approaches to tackling a local social problem. Demonstrate the value of both knowledge application and service by scaffolding their entry into public scholarship.
- Engage students in public chats with authors or experts. Platforms such as Twitter can help engage students in scholarly and professional conversations with practitioners in their fields. This is another way that students can contribute to—not just consume—knowledge, and it shifts learning into a dialogic experience. In addition, if students are sharing work publicly, they can also use social media channels to drive mentors, teachers, peers, critics, experts, friends, family, and the public to their work for comment. Opening conversations about academic and transdisciplinary work—both student work and the work of established scholars and practitioners—is, like contributing to OERs, a way to grow a thriving knowledge commons.
- Build course policies, outcomes, assignments, rubrics, and schedules of work collaboratively with students. Once we involve students in creating or revising OERs or in shaping learning architectures, we can begin to see the syllabus as more of a collaborative document, co-generated at least in part with our students. Can students help craft course policies that would support their learning, that they feel more ownership over? Can they add or revise course learning outcomes in order to ensure the relevancy of the course to their future paths? Can they develop

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assignments for themselves and/or their classmates, and craft rubrics to accompany them to guide an evaluative process? Can they shape the course schedule according to rhythms that will help maximize their efforts and success?

- Let students curate course content. Your course is likely split into a predictable number of units (fourteen, for example) to conform to the academic calendar of the institution within which the course is offered. We would probably all agree that such segmenting of our fields is somewhat arbitrary; there is nothing ontological about Introduction to Psychology being fourteen weeks long (or spanning twenty-eight textbook chapters, etc.). And when we select a novel for a course on postcolonial literature or a lab exercise for Anatomy and Physiology, we are aware that there are a multitude of other good options for each that we could have chosen. We can involve students in the process of curating content for courses, either by offering them limited choices between different texts or by offering them solid time to curate a future unit more or less on their own (or in a group) as a research project. The content of a course may be somewhat prescribed by accreditation or field standards, but within those confines, we can involve students in the curation process, increasing the level of investment they have with the content while helping them acquire a key twenty-first century skill.
- Ask critical questions about “open.” When you develop new pathways based on Open Pedagogy, pay special attention to the barriers, challenges, and problems that emerge. Be explicit about them, honest about them, and share them widely with others working in Open Education so that we can work together to make improvements. Being an open educator in this fashion is especially crucial if we wish to avoid [digital redlining](#),<sup>51</sup> creating inequities (however unintentionally) through the use of technology. Ask yourself: Do your students have access to broadband at home? Do they have the laptops or tablets they need to easily access and engage with OERs? Do they have the supports they need to experiment creatively, often for the first time, with technology tools? Do they have the digital literacies they need to ensure as much as is possible their safety and privacy online? Do you have a full understanding of the terms of service of the EdTech tools you are using in your courses? As you work to increase the accessibility of your own course, are you also [evaluating the tools and technologies](#)<sup>53</sup> you are using to ask how they help or hinder your larger vision for higher education?

These are just a few ideas for getting started with Open Pedagogy. Most important, find people to talk with about your ideas. Ask questions about how OERs and the 5 Rs change the nature of a course or the relationships that students have to their learning materials. Look to programs and colleges that are widely accessible and which serve a broad variety of learners and ask questions about how their course designs are distinct or compelling. Ask your students about meaningful academic contributions they have made, and what structures were in place that facilitated those contributions. Try, explore, fail, share, revise.

Open Pedagogy is not a magical panacea for the crises that currently challenge higher ed. That being said, we both feel that Open Pedagogy offers a set of dynamic commitments that could help faculty and students articulate a sustainable, vibrant, and inclusive future for our educational institutions. By focusing on access, agency, and a commons-oriented approach to education, we can clarify our challenges and firmly assert a learner-centered vision for higher education.

A portion of this article was remixed from “Open Pedagogy and Social Justice” by Rajiv Jhangiani and Robin DeRosa, available under a CC-BY 4.0 license at <http://www.digitalpedagogylab.com/open-pedagogy-social-justice/>.<sup>55</sup>

**Robin DeRosa** is director of interdisciplinary studies at Plymouth State University, part of the university system of

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New Hampshire. Her current research and advocacy work focuses on Open Education, and how universities can innovate in order to bring down costs for students, increase interdisciplinary collaboration, and refocus the academic world on strengthening the public good. She is also an editor for [Hybrid Pedagogy](#), an open-access, peer-reviewed journal that combines the strands of critical pedagogy and digital pedagogy to arrive at the best social and civil uses for technology and new media in education.

**Rajiv Jhangiani** is the University Teaching Fellow in Open Studies and a faculty member in the Department of Psychology at Kwantlen Polytechnic University. He also serves as an Open Education Advisor with BCcampus and an associate editor of *Psychology Learning and Teaching*. Previously he served as an OER Research Fellow with the Open Education Group, a faculty fellow with the BC Open Textbook Project, a faculty workshop facilitator with the Open Textbook Network, and the associate editor of NOBA Psychology.

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1. Catherine Cronin, "Opening Up Open Pedagogy," Catherine Cronin's professional website, April 24, 2017, <http://catherinecronin.net/research/opening-up-open-pedagogy/>. ↵
  2. Katy Jordan, "The History of Open Education", *shift+refresh* (blog), June 19, 2017, <https://shiftandrefresh.wordpress.com/2017/06/19/the-history-of-open-education-a-timeline-and-bibliography/>. ↵
  3. Vivien Rolfe, "OER18 Open to All," Vivien Rolfe's professional website, <http://vivrolfe.com/books-and-publications/>. ↵
  4. Tannis Morgan, "Open Pedagogy and a Very Brief History of the Concept," *Explorations in the EdTech World (blog)* Tannis Morgan's professional website, December 21, 2016, <https://homonym.ca/uncategorized/open-pedagogy-and-a-very-brief-history-of-the-concept/>. ↵
  5. David Wiley, "Defining the Open in Open Content and Open Educational Resources," *Opencontent.org*, <http://opencontent.org/definition/>. ↵
  6. *Lumenlearning.com*, <http://lumenlearning.com/about/mission/>. ↵
  7. David Wiley, "What is Open Pedagogy," *iterating toward openness*, October 21, 2013, <https://opencontent.org/blog/archives/2975>. ↵
  8. David Wiley, "OER-enabled Pedagogy," *iterating toward openness*, May 2, 2017, <https://opencontent.org/blog/archives/5009>. ↵
  9. Mike Caulfield, "Putting Student-Produced OER at the Heart of the Institution," *hapgood*, Mike Caulfield's professional website, Sept. 7, 2016, <https://hapgood.us/2016/09/07/putting-student-produced-oer-at-the-heart-of-the-institution/>. ↵
  10. Digital Media and Learning Research Hub, <https://dmlhub.net/>. ↵
  11. Jesse Stommel, "Critical Digital Pedagogy: A Definition," *Digital Pedagogy Lab*, Nov. 18, 2014, <http://www.digitalpedagogylab.com/hybridped/critical-digital-pedagogy-definition/>. ↵
  12. "Universal Declaration of Human Rights," UN.org, <http://www.un.org/en/universal-declaration-human-rights/>. ↵
  13. Sara Goldrick-Rab, *Paying the Price: College Costs, Financial Aid and the Betrayal of the American Dream* (Chicago: The University of Chicago Press, 2016). ↵
  14. Rajiv Sunil Jhangiani, Surita Jhangiani, "Investigating the Perceptions, Use, and Impact of Open Textbooks: A Survey of Post-Secondary Students in British Columbia," *The International Review of Research in Open and Distributed Learning* 18, no 4 (2017). ↵
  15. John Hilton III, Lane Fischer, David Wiley, and Linda Williams, "Maintaining Momentum Toward Graduation: OER and the Course Throughput Rate." *International Review of Research in Open and Distributed Learning* 17, no. 6 (December 2016), <http://www.irrodl.org/index.php/irrodl/article/view/2686/3967>. ↵
  16. Nicole Mirra, "What Do We Mean When We Talk About 21st Century

- Learning?" *dmlcentral*, <https://dmlcentral.net/mean-talk-21st-century-learning/#.WSb0VJg29TQ.twitter>. ↴
17. Wiley, et al., *Project Management for Instructional Designers* (2016). <https://pm4id.org/>. ↴
  18. Kylie A. Clark, Travis R. Shaul, and Brian H. Lower, eds., *Environmental ScienceBites* (Columbus: The Ohio State University, 2015). ↴
  19. "2016-17 Noba + Psi Chi Student Video Award Recipients," NOBA, <http://nobaproject.com/student-video-award/winners>. ↴
  20. "Teach With Wikipedia," *Wiki Education Foundation*, <https://wikiedu.org/teach-with-wikipedia/>. ↴
  21. Eryk Salvaggio, "For Wikipedia, the Doctor Is in ... Class," *WikiEdu*, April 5, 2016, <https://wikiedu.org/blog/2016/04/05/medical-students-wikipedia/>. ↴
  22. *Domain of One's Own*, <http://umw.domains/>. ↴
  23. Gardner Campbell, "A Personal Cyberinfrastructure," *EduCause Review* 44, no. 5 (September 4, 2009), <http://er.educause.edu/articles/2009/9/a-personal-cyberinfrastructure>. ↴
  24. Lori Rosenthal, "Research for Community Action," *Action Teaching*, <http://www.actionteaching.org/award/community-action>. ↴
  25. "Assignment Type: Op-Ed," *Kent State Online*, [http://onlineteaching.kent.edu/library/online\\_assignments/OpEd\\_Handout.pdf](http://onlineteaching.kent.edu/library/online_assignments/OpEd_Handout.pdf). ↴
  26. Chris Gilliard, "Pedagogy and the Logic of Platforms," *Educause Review*, July 3, 2017, <http://er.educause.edu/articles/2017/7/pedagogy-and-the-logic-of-platforms>. ↴
  27. Jesse Stommel, "Critically Evaluating Digital Tools," *Digital Studies* 101, <https://dgst101.com/activity-critically-evaluating-digital-tools-3f60d468ce74>. ↴
  28. Rajiv Jhangiani and Robin DeRosa, "Open Pedagogy and Social Justice," *Digital Pedagogy Lab*, June 2, 2017, <http://www.digitalpedagogylab.com/open-pedagogy-social-justice/>. ↴

# Interdisciplinary Collaboration

MICHAEL MILLS AND CARLA GHANEM

The United Nations Sustainable Development Goals (UNSDG) Open Pedagogy Faculty Fellowship was from the beginning built on the idea of interdisciplinary collaboration. It was believed that faculty working as part of a team with someone from outside their own area of expertise, though centered around a common theme, in this case a common SDG, would create assignments through a different lens. Additionally, this form of work generates a connection between disciplines and their relationship to the real world. Faculty would view any renewable assignments holistically and through the eyes of a student, who is not taking courses in simply one discipline, but may in fact be taking courses in as many as five disciplines in any given semester.

At the surface level, one might assume that faculty working across disciplines is any easy task. Using their best collaboration skills, for example, faculty should be able to find common ground. In reality, however, it is not easy. Faculty working in interdisciplinary teams are out of their comfort zone; they are 'forced' to partner with someone who is outside their department and who, in fact, they may not even know. Abbott (2001) says disciplines put boundaries on what is 'real' and what is relevant. Crossing those boundaries is a challenge (Frickel, 2016). Bendix (2017) suggests that what often happens in this interdisciplinary work are moral panics, status tensions and communication breakdowns.

By requiring faculty to work in teams as part of the open pedagogy fellowship, faculty must look beyond themselves and their own comfort. They have to look beyond the conflict and any disciplinary strife. When they do – and they do – the results are incredible collaborations fortified in the exceptional student projects.

## References

Abbott, Andrew. 2001. *Chaos of Disciplines*. Chicago: University of Chicago Press

Bendix, Regina, et al. *Sustaining Interdisciplinary Collaboration: A Guide for the Academy*. University of Illinois Press, 2017. Project MUSE. [muse.jhu.edu/book/51744](https://muse.jhu.edu/book/51744).

Frickel, Scott, et al. *Investigating Interdisciplinary Collaboration: Theory and Practice across Disciplines*. Rutgers University Press, 2016. Project MUSE. [muse.jhu.edu/book/49340](https://muse.jhu.edu/book/49340).

# MAIN BODY



# Organizational Structure

The fellowship is coordinated by a cross-institutional leadership committee made up with representation from each institution. This committee meets regularly to:

1. Promote the UN SDG Open Pedagogy Fellowship and put out a call for faculty fellows
2. Determine faculty fellow group assignments
3. Plan events and workshops around open pedagogy for faculty fellows
4. Plan the student showcase
5. Innovate the UN SDG Open Pedagogy Fellowship

## Leadership Team:

### **Montgomery College:**

*Current*

Dr. Michael Mills, Vice President of ELITE: [Michael.Mills@montgomerycollege.edu](mailto:Michael.Mills@montgomerycollege.edu)

Professor Shinta Hernandez, Department Chair of Sociology, Anthropology, and Criminal Justice: [Shinta.Hernandez@montgomerycollege.edu](mailto:Shinta.Hernandez@montgomerycollege.edu)

Ms. Christine Crefton, Project and Planning Analyst: [Christine.Crefton@montgomerycollege.edu](mailto:Christine.Crefton@montgomerycollege.edu)

### **Kwantlen Polytechnic University:**

*Current*

Dr. Rajiv Jhangiani, Associate Vice President, Teaching and Learning: [Rajiv.Jhangiani@kpu.ca](mailto:Rajiv.Jhangiani@kpu.ca)

Urooj Nizami, Open Education Strategist: [Urooj.Nizami@kpu.ca](mailto:Urooj.Nizami@kpu.ca)

### **Maricopa County Community College District:**

*Current*

Ms. Deborah Baker: [Deborah.Baker@domail.maricopa.edu](mailto:Deborah.Baker@domail.maricopa.edu), Instructional Designer, Maricopa Center for Learning and Innovation

Dr. Carla Ghanem: [Carla.Ghanem@gatewaycc.edu](mailto:Carla.Ghanem@gatewaycc.edu), Instructional Designer, GateWay Community College

Dr. Lisa Young, [lisa.young@scottsdalecc.edu](mailto:lisa.young@scottsdalecc.edu), Director, Center for Teaching and Learning, Scottsdale Community College

*Former*

Dr. Sian Proctor: [Sian.Proctor@southmountaincc.edu](mailto:Sian.Proctor@southmountaincc.edu), Geoscience Faculty, South Mountain Community College

Mr. Matthew Bloom: [Matthew.Bloom@scottsdalecc.edu](mailto:Matthew.Bloom@scottsdalecc.edu), English Faculty, Scottsdale Community College

### **Community College of Baltimore County:**

Ms. Cynthia Roberts-Whitelock, Senior Librarian: [croberts@ccbcmd.edu](mailto:croberts@ccbcmd.edu)

Ms. Jamie Witman, Librarian: [jwitman@ccbcmd.edu](mailto:jwitman@ccbcmd.edu)

### **Pima Community College:**

Dr. Josie Milliken, Department Chair and Instructional Designer: [jmilliken@pima.edu](mailto:jmilliken@pima.edu)

### **Langara College:**

Ms. Lindsay Tripp, Librarian: [ltripp@langara.ca](mailto:ltripp@langara.ca)

Dr. Alena Buis, Department Chair: [abuis@langara.ca](mailto:abuis@langara.ca)

### **Thompson Rivers University:**

Ms. Brenda Smith, Librarian: [brsmith@tru.ca](mailto:brsmith@tru.ca)

Dr. Michelle Harrison, Instructional Designer: [mharrison@tru.ca](mailto:mharrison@tru.ca)

Mr. Ken Monroe, Instructional Designer: [kmonroe@tru.ca](mailto:kmonroe@tru.ca)

# Leadership Team Responsibilities

This fellowship begins in the Spring semester of one academic year and culminates in the Spring semester of the following academic year. It is a 4-semester commitment by members of the leadership team to carry the fellowship through a complete cycle.

Leadership team responsibilities include:

## Academic Year 1

### Spring Semester

- Participate in monthly 1-hour leadership meetings
- Promote the fellowship within your institution (announcements, institution website, etc.)
- Update the application with institution-specific information
- Collect applications
- Select finalists to participate in the fellowship
- Meet with the leadership team to develop the fellowship faculty teams
- Contribute to developing common resources for the fellowship faculty teams.
- After the selection of the fellows, each institution meets with their respective groups of fellows prior to summer meetings to provide an introduction, get to know one another, set expectations, etc.

### Summer Semester

- Participate in 4 3-hour meetings with the new cohort.
- Participate in at least 1 leadership meeting (one on June 2nd). (I say at least because it is very likely that we will need more than one meeting with the leadership group)
- Assist fellowship faculty teams and individuals as needed. (answer questions, provide consultations, assist with resources, etc. This varies depending on the individual faculty fellow and the dynamics of the faculty team)

### Fall Semester

- Participate in monthly 1-hour leadership meetings
- Assist fellowship faculty teams and individuals as needed. (answer questions, provide consultations, assist with resources, etc. This varies depending on the individual faculty fellow and the dynamics of the faculty team)
- Check-in with faculty fellows from your institution on a regular (monthly or bi-weekly, depending on the needs of the individuals in the fellowship) basis.
- Facilitate collecting final deliverables from faculty fellows at your institution (assignments, course data, reflections, faculty/student videos, faculty/student testimonials, etc.)
- Potentially recruit additional institutional partners

- Plan Faculty/ Student Showcase.

## Academic Year 2

### Spring Semester

- Participate in the Faculty/Student Showcase.
- Participate in monthly 1-hour leadership meetings.
- Discuss logistics for the summer 2022 cohort, including call for applications during Open Ed Week (early March), selecting finalists (early April), planning summer meetings, etc.

# Fellowship Timeline & Deliverables

## Timeline

EVENT	DATE
Begin promotion	Late February
Applications due	Late March
Adjudication ends, fellows informed	Early April
<a href="#">First fellows' meeting</a>	Late May
<a href="#">Second fellows' meeting</a>	Early June
<a href="#">Third fellows' meeting</a>	Mid June
<a href="#">Fourth fellows' meeting</a>	Early August
Renewable assignments due	Late August
Course data due	Early October
Faculty reflection due	Mid December
Student video due	Mid December
Faculty/student showcase	February

## Deliverables

In order to complete the fellowship, each fellow is responsible for completing the following deliverables by the due date or, in the case of the student video, facilitating its completion.

### *Three Renewable Assignments*

- Renewable assignments (also known as non-disposable assignments) are those that add value to a student's world, live outside of the boundaries and beyond the duration of the course, and are likely to have a lasting impact. Disposable assignments, on the other hand, are those that only the instructor and students will see and which students are likely to throw away once they have been graded ([Seraphin et al., 2019](#); [Wiley, 2013](#)).
- Assignments are interdisciplinary and emphasize one or more of the United Nations Sustainable Development Goals.

### *Course Data*

In an effort to sustain a culture of evidence, data is collected on the various components of the fellowship and tracked each year. Faculty fellows are asked to respond to the following prompts for courses in which these renewable assignments are being deployed:

- Which courses and in how many sections are you deploying your assignments?
- How many courses are face-to-face and/or online?
- How many total students are in your courses?
- Which UN SDG are you targeting?

### *Faculty Reflection*

Each faculty fellow is asked to submit a reflection of their experience in the fellowship. Faculty fellows are asked to respond to the following reflection prompt:

- Submit a brief description (1-2 paragraphs) of what this fellowship has meant to you, including your experience deploying your interdisciplinary renewable assignments, working with students, collaborating across institutions, and anything else you'd like to share. These reflections/testimonials may be used to help us promote this now award-winning fellowship.

### *Three-Minute Student Video*

Students are at the heart of this fellowship, and each faculty fellow is asked to work with a student to complete a 3-minute video about the student experience through the completion of the open pedagogy assignments. Faculty fellows are given the following prompt:

- Start thinking about that one stellar student who you believe would be a phenomenal partner in the Faculty/Student Showcase. This student will highlight one of your interdisciplinary renewable assignments. As you think about your options, here are some details you should know:

- For the institutional websites and other repositories, each faculty fellow should have one student prepare a 3-minute video recording to address the following:
  - At the beginning of the recording, the faculty member will briefly explain the renewable assignment, emphasizing the disciplines represented and how the disciplines were incorporated into this one assignment.
  - Then, the student will describe the project, focusing on what the outcome is and what the assignment meant to them.
  - Be sure that your renewable assignments are openly licensed for distribution, as this is the requirement of the fellowship. Be sure that the videos are provided as an mp4 file and is recorded in landscape mode. If possible, it is encouraged to have your video also openly licensed.

*Faculty-Student Showcase (optional)*

- Each year the fellowship concludes with faculty-student showcase where participants (faculty and student) have an opportunity to share their assignments as well as their experiences.

# I: NO POVERTY

## END ALL POVERTY IN ALL ITS FORMS EVERYWHERE



### Targets & Indicators

**1.1** By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day

**1.1.1** Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)

**1.2** By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions

**1.2.1** Proportion of population living below the national poverty line, by sex and age

**1.2.2** Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions

**1.3** Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable

**1.3.1** Proportion of population covered by social protection floors/systems, by sex, distinguishing

children, unemployed persons, older persons, persons with disabilities, pregnant women, newborns, work-injury victims and the poor and the vulnerable

**1.4** By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance

**1.4.1** Proportion of population living in households with access to basic services

**1.4.2** Proportion of total adult population with secure tenure rights to land, with legally recognized documentation and who perceive their rights to land as secure, by sex and by type of tenure

**1.5** By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters

**1.5.1** Number of deaths, missing persons and persons affected by disaster per 100,000 people

**1.5.2** Direct disaster economic loss in relation to global gross domestic product (GDP)<sup>a</sup>

**1.5.3** Number of countries with national and local disaster risk reduction strategies

**1.a** Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions

**1.a.1** Proportion of resources allocated by the government directly to poverty reduction programmes

**1.a.2** Proportion of total government spending on essential services (education, health and social protection)

**1.b** Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions

**1.b.1** Proportion of government recurrent and capital spending to sectors that disproportionately benefit women, the poor and vulnerable groups

# UNSDG Intervention

JENNIFER HARDWICK

Cohort 2019-2020

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of English; at least one UN SDG to achieve SDG #01: No Poverty

## Learning Objectives

## Purpose/Rationale

This assignment invites you to make an intervention by using your knowledge and skills to improve outcomes, processes, and/or relationships. Scholarly and/or creative, your intervention uses digital media to engage in one or more of the United Nations Sustainable Development Goals. Please note that these goals are not mutually exclusive!

The goals are very broad, so you will want to think about the who/what/where/when/why in order to focus your assignment. More details about the goals can be found here: <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

## Instructions

There are three parts to your final project:

1. A 3-4 page project proposal. Consider this your “pitch.” What are you trying to accomplish, and how do you expect to accomplish it? Your proposal should have the following sections:

- Background (What dialogues are you intervening in? Why is this needed?)
- Overview (What are you creating? What tools and scholarly sources will be necessary?)

- Timeline/Methodology (How will you create what you intend to create? How will you be mindful of issues such as copyright, privacy, and Ownership/Control/Accesses/ Possession?)
- Outcomes (What do you seek to accomplish? Who are you trying to reach? What rhetorical appeals are you making to reach them?)
- Works Cited/Bibliography

Due:

Weight: 15%

2. Workshop. After I provide feedback on your proposals I will be placing you into groups of 3-4 members based on your project goals for an in-class workshop. This is your opportunity to share your knowledge with (and get feedback from) the classroom community. What have you learned through the process of researching and writing/creating? What are the strengths and weaknesses of your approach? Are there any challenges you are facing? Your workshop will be guided by Prof. Hardwick and it will include both discussion and editing. You will be given a list of materials to bring in advance.

Due:

Weight: 5%

3. Final Project and Reflection. Your project should be polished and complete. Sources should be properly cited using MLA and/or digital (ie: links) guidelines. You must hand in a final reflection with your project. Due: (via Moodle, unless otherwise indicated)

Weight: 30%

## Format Requirements

Your assignment can take several different forms: it can be a learning resource such as a podcast, multimedia essay, or video that calls attention to particular issues; a digital tool for organizing, documenting, or archiving such as a timeline or map; or something entirely different! As you plan your approach, think carefully about your audience and goals, and consider the confines of your time and skills. Remember that simple can be very effective!

*Attribution*

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## 2: ZERO HUNGER

### END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION AND PROMOTE SUSTAINABLE AGRICULTURE



#### Targets & Indicators

**2.1** By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations including infants, to safe, nutritious and sufficient food all year round.

**2.1.1** Prevalence of undernourishment

**2.1.2** Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)

**2.2** By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons

**2.2.1** Prevalence of stunting (height for age  $< -2$  standard deviation from the median of the World Health Organization (WHO) Child Growth Standards) among children under 5 years of age

**2.2.2** Prevalence of malnutrition (weight for height  $> +2$  or  $< -2$  standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age, by type (wasting and overweight)

**2.3** By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment

**2.3.1** Volume of production per labour unit by classes of farming/pastoral/forestry enterprise size

**2.3.2** Average income of small-scale food producers, by sex and indigenous status

**2.4** By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality

**2.4.1** Proportion of agricultural area under productive and sustainable agriculture

**2.5** By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed

**2.5.1** Number of plant and animal genetic resources for food and agriculture secured in either medium or long-term conservation facilities

**2.5.2** Proportion of local breeds classified as being at risk, not-at-risk or at unknown level of risk of extinction

**2.a** Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries

**2.a.1** The agriculture orientation index for government expenditures

**2.a.2** Total official flows (official development assistance plus other official flows) to the agriculture sector

**2.b** Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round

**2.b.1** Producer Support Estimate

**2.b.2** Agricultural export subsidies

**2.c** Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility

**2.c.1** Indicator of food price anomalies

# Mapping Food Access in Our Neighbourhoods

KATHY DUNSTER; MICHELLE FRANKLIN; AND ZEV COSSIN

Cohort 2019-2020

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Anthropology; Urban Ecosystems; Sustainable Horticulture to achieve SDG #02: Zero Hunger Target 2.1: By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.

## Learning Objectives

Identify similarities, differences, challenges, and creative opportunities provided by a local food desert, food mirage, or food swamp.

Explain social and health effects of a food desert, food mirage, or food swamp in the local community.

## Purpose/Rationale

To create a document that can be distributed in and around the community to help others seeking affordable and nutritional sources of food.

## Instructions

Introduction:

Imagine you are living in an urban food desert, far from a farm where you can purchase healthy, affordable, locally grown produce (vegetables and fruit). We all need to eat but you do not have the money to take transit to the supermarket where you have the most choices. One time you walked past the local farmer’s market and you could not believe what you were seeing: fresh, delicious-looking vegetables and fruit from nearby organic farms, but \$5.00 for

a head of lettuce was not in your wallet, and never would be: that the market was not accessible to people like you and was a food mirage. You moved to a new neighbourhood and found various grocery store options within walking distance, but along the way you are inundated with the temptation to spend your money on fast food or fancy beverages (food swamp).

There is a large and growing body of research noting that food deserts and food swamps can lead to malnourishment, undernourishment, and obesity. With obesity comes costs to human health, society, and the economy. While some consume too much for their needs, others suffer from hunger.

The 2018 Global Nutrition Report tracks country progress against the following targets: child overweight, child wasting, child stunting, exclusive breastfeeding, diabetes among women, diabetes among men, anaemia in women of reproductive age, obesity among women, and obesity among men.

- Canada is listed as meeting one target.
- The USA is listed as not meeting any targets. Further, in Appendix 3 the USA is one of 11 countries noted as being malnourished or undernourished because of obesity.

Instructions:

**Map:** For this assignment, you will be mapping food access around your campus in order to explore local food security or insecurity. You will inventory all food sources within the municipal boundaries of the community in which your campus is located. This includes, but is not limited to grocery stores, restaurants, convenience stores, and free food sources such as food banks, places of worship, and community gardens and kitchens. You will locate them on a Google Map that is shareable with your classmates.

**Discuss:** After the map is compiled you and your classmates will discuss and determine whether (and why) your campus is located in a food desert, food mirage, or food swamp from the perspective/reality of being a post-secondary student that is affected by access (or lack of) to healthy food. We will compare the maps produced by students at both KPU and MC to discover similarities, differences, challenges, and creative opportunities. How might others in your community have differential access to these food sources? What might some of the social/health effects be of them?

**Create:** After individually reflecting and then collectively discussing what we have learned, the class will look for practical solutions to the food problems surrounding the campus. The final task in this assignment is to create a document that can be distributed in and around the community to help others seeking affordable and nutritional sources of food.

*Attribution*

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# Finding Free Food

KATHY DUNSTER; MICHELLE FRANKLIN; AND ZEV COSSIN

Cohort 2019-2020

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Urban Ecosystems; Sustainable Horticulture; Anthropology to achieve SDG #02: Zero Hunger; 2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round

## Learning Objectives

Weeds could provide fresh greens loaded with essential nutrients for free, helping achieve SDG#2, Zero Hunger by 2030, but first we need to identify the plant species that we call weeds.

## Purpose/Rationale

Plants grow in even the most concrete of inner-city urban jungles. As you walk through the city, if you open your eyes and look at the ground around your feet, you will see many plants growing wildly in nooks and crannies, sidewalk cracks, and open spaces of every type. Most people refer to these plants as weeds because they are growing in undesirable locations. However, these plants could be edible or have medicinal properties that could benefit humans. Weeds could provide fresh greens loaded with essential nutrients for free, helping achieve SDG#2, Zero Hunger by 2030, but first we need to identify the plant species that we call weeds.

## Instructions

iNaturalist is a citizen-based science app that can be used to help identify plant and animal species and map their distribution. Horticulture students from Kwantlen Polytechnic University in Langley BC are partnering with

Anthropology students from Montgomery College in Maryland, near Washington, DC to observe the bi-coastal distribution of weed species around the campuses. Our goal is to document as many weeds as we can (Weed Bioblitz) and determine those species that are edible and available as free food sources on each campus.

With iNaturalist you will take a picture of a plant, which gets uploaded and recorded into the platform. iNaturalist will help to suggest a species identification, and once submitted the iNaturalist community will discuss your findings and confirm your species ID. iNaturalist tags the location of this species on a map so that it can be viewed by the iNaturalist community. We have started an iNaturalist project with the specific goal of mapping the distribution of the weeds around each campus. The Project website can be located at <https://www.inaturalist.org/projects/kpu-langley-mc-weed-bioblitz>

Once the weed species are identified and mapped we can determine what edible species of weeds we have on campus (another assignment) and compare the types, distribution, and abundance of edible weeds between the KPU and MC campuses. iNaturalist General Steps

### *iNaturalist General Steps*

1. Go to iNaturalist and register. <https://www.inaturalist.org/>
2. Download the app if you have access to a smartphone; alternatively, you can use a camera and desktop/laptop. Watch the short how-to use the app video <https://vimeo.com/162581545>
3. Email your iNaturalist sign-in name to your instructor so you can be added to the Project as a User. Until you do this, you will not be registered as a Project User.
4. Read all the tabs in iNaturalist and become familiar with the how-to details. This is citizen science, and the information they provide is easy to understand.
5. All photos uploaded to iNaturalist are released under a Creative Commons Attribution – Non-Commercial license, as is this Assignment!

### *KPU HORT3250 and HORT4440 Instructions*

Our goal is to create a comprehensive checklist of weedy species by the end of the semester. Because iNaturalist requires you to indicate a location on the map where you found the plant and took the photo, we will be able to develop sub-lists of weedy species by different vegetation management units (e.g. Logan Creek, Roof Ecology Research Lab, Labyrinth). Of course some spring ephemerals may be missing.

1. Because there is a mapping function to the iNaturalist software, we will use a random meander technique for this inventory. We will cover the entire KPU Langley Campus (North Campus – Field Lab, and South Campus – Logan Creek) – wherever your feet can take you around campus – ditches, parking lots, etc.
2. Find at least 50 weedy plants (50 of a single species or 50 different plant species). While you must submit your own plant records (individually and independently), it's OK to wander around with a classmate for safety, and to help each other with ID. Feel free to work on the Project outside class time, whenever you have a few minutes.
3. Some possible search strategies –
  - a) find 50 different locations for the same plant species by wandering around campus wherever you feel like e.g. 50 different records for *Rumex acetosella* or *Iris pseudacorus*.
  - b) find all the weedy species in several geographically-defined areas of campus e.g. Music Garden.
  - c) wait for a class lab when we will collectively blitz an area of campus that no one has been to.
4. Take a photo and upload to the Project iNaturalist site, turning on the satellite image tab on the map and then zooming in to pinpoint where you took the photo. Again the website is at <https://www.inaturalist.org/projects/kpu-langley-mc-weed-bioblitz>

For advice on how to take a better photo watch this one minute video <https://vimeo.com/167341998>

5. When you submit a photo, iNaturalist will make some suggestions for the name of the plant. A list will pop up. Do not simply click on the first suggestion. As you are in upper-level degree courses, you must tentatively identify the plant Genus and Species. Family is not good enough, and that is often what pops up first. Because this is a research quality project, your identification must be verified by 2 experts. Expect rejections, and suggestions for changes to your original ID.

6. If you are unsure what the weed is, collect a specimen and try keying it out or asking someone for suggestions. PLEASE do not randomly pick a name off the suggestion list that pops up, and do not just pick the Family or Tribe names. This is a chance to test your knowledge and build confidence in identifying plant by visual recognition.

7. Once the Project Map starts to populate, we will have a better idea of where we will try doing a collective blitz (see 3(c)) above.

8. We are looking for quality and consistency in data collection. The data will give us an idea of relative abundance and availability for harvesting limited or bountiful quantities.

9. Even though this is not a race you will note that iNaturalist keeps track and a tally of the photos/data you upload.

10. If you know the full botanical name of a plant submitted by someone else in the Project, feel free to confirm their record.

### *Montgomery ANTH215 Instructions:*

We will carry out this “bio-blitz” as an actual archaeological survey. To do so we will act as one field team walking transects across the Montgomery College campus identifying weed species visible within each of our transects based on the methods introduced in class.

1. Go to iNaturalist and register. <https://www.inaturalist.org/> Download the app if you have access to a smartphone; alternatively, you can use a camera and desktop/laptop. The app is ready to use if you have an Android, look for an email to finish installing if you have an Apple phone.

2. Read all the tabs in iNaturalist and become familiar with the how-to details of the app. Watch the how-to videos on Vimeo – how to use the app <https://vimeo.com/162581545> and how to take a better photo <https://vimeo.com/167341998>

3. Begin writing in your field notebook with an entry for this field session. Follow the field notebook guidelines distributed in class. Remember, you must include today’s date, a description of the field task, why we are doing this, and observations as you carry out the survey.

4. Begin walking your assigned transect or grid, taking pictures of any weed species you find and submitting it to iNaturalist. Ideally, you will locate between 10-20 weedy plants for ID. Don’t worry if everyone in the class finds the same plant species. That data will give us an idea of relative abundance and availability for harvesting limited or bountiful quantities.

See: <https://www.inaturalist.org/projects/kpu-langley-mc-weed-bioblitz>

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# 3: GOOD HEALTH AND WELL-BEING

ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING FOR ALL AT ALL AGES



## Targets & Indicators

**3.1** By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births

**3.1.1** Maternal mortality ratio

**3.1.2** Proportion of births attended by skilled health personnel

**3.2** By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births

**3.2.1** Under-five mortality rate

**3.2.2** Neonatal mortality rate

**3.3** By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases

**3.3.1** Number of new HIV infections per 1,000 uninfected population, by sex, age and key populations

**3.3.2** Tuberculosis incidence per 1,000 population

**3.3.3** Malaria incidence per 1,000 population

**3.3.4** Hepatitis B incidence per 100,000 population

**3.3.5** Number of people requiring interventions against neglected tropical diseases

**3.4** By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being

**3.4.1** Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease

**3.4.2** Suicide mortality rate

**3.5** Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol

**3.5.1** Coverage of treatment interventions (pharmacological, psychosocial and rehabilitation and aftercare services) for substance use disorders

**3.5.2** Harmful use of alcohol, defined according to the national context as alcohol per capita consumption (aged 15 years and older) within a calendar year in litres of pure alcohol

**3.6** By 2020, halve the number of global deaths and injuries from road traffic accidents

**3.6.1** Death rate due to road traffic injuries

**3.7** By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes

**3.7.1** Proportion of women of reproductive age (aged 15–49 years) who have their need for family planning satisfied with modern methods

**3.7.2** Adolescent birth rate (aged 10–14 years; aged 15–19 years) per 1,000 women in that age group

**3.8** Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all

**3.8.1** Coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access, among the general and the most disadvantaged population)

**3.8.2** Proportion of population with large household expenditures on health as a share of total household expenditure or income

**3.9** By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination

**3.9.1** Mortality rate attributed to household and ambient air pollution

**3.9.2** Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services)

**3.9.3** Mortality rate attributed to unintentional poisoning

**3.a** Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate

**3.a.1** Age-standardized prevalence of current tobacco use among persons aged 15 years and older

**3.b** Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all

**3.b.1** Proportion of the population with access to affordable medicines and vaccines on a sustainable basis

**3.b.2** Total net official development assistance to medical research and basic health sectors

**3.c** Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States

**3.c.1** Health worker density and distribution

**3.d** Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks

**3.d.1** International Health Regulations (IHR) capacity and health emergency preparedness



# Healthy Smiles for Higher Education Students

ANDREA FOSTER AND MARY E. ROBINSON

Cohort 2018-2019

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Business and English/Reading to achieve SDG #3: Good Health and Well-Being.

## Learning Objectives

This interdisciplinary assignment has two steps: The first part is to complete an informal questionnaire by talking with seven students determine if students are interested in mobile dental care on college campuses. Secondly, you will develop a proposal to write a grant to request funding to support mobile dentistry on college campuses.

## Purpose/Rationale

This active learning practice is designed to improve your academic skills, increase community connections, and improve social justice for our community.

## Instructions

Most students after college don't have medical care. One way to help prevent periodontal and gingival diseases among college students is to provide free-access for college students to get a yearly dental cleaning on the college campus.

This interdisciplinary assignment has two steps: The first part is to complete an informal questionnaire by talking with seven students determine if students are interested in mobile dental care on college campuses.

Secondly, you will develop a proposal to write a grant to request funding to support mobile dentistry on college campuses. The business plan (BSAD 101) or a proposal (ENGL 103) should include a built-in aspect for students in dentistry to acquire an internship through this yearly visit to college campuses. The prototype for activity will be similar

to the mobile food pantry on college campuses and meals on wheels programs. By the end of the project, you should be able to discuss your findings including the impact that this project will have on preventing the escalating periodontal and gingival diseases among college students.

## Format Requirements

The basic framework for a business plan or the proposal will be provided by your professor.

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# Healthy 2020 - Community Health

MICHELLE A. PRENDERGAST AND GEETHA KADA

Cohort 2019-2020

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of English and Nursing to achieve SDG #3: Good Health and Well-Being.

## Learning Objectives

### *English:*

- Summarize and analyze college-level readings and texts
- Articulate and support a position in response to readings and texts
- Demonstrate standard citation and documentation procedures

### *Nursing:*

- Identify the indicators of health and health disparities within a community.
- Differentiate between acute care nursing and community health nursing.

## Purpose/Rationale

This active learning practice is designed to improve your academic skills, increase community connections, and improve social justice for our community.

## Instructions

You will choose one Healthy 2020 “Leading Health Indicators” to examine more in depth. You will conduct research on a topic based on the 12 Topic Areas that indicate the health of people in the United States and present your findings in an Infographic that clearly communicates the status of the health issues outlined in your topic area. You should give an overview of the “one leading health indicator”, the issues related to it and your role as a nursing student to advocate for your patients. You will post your completed work as a video/PPT/poster presentation.

## Format Requirements

*Outputs:*

English: Infographic/PPT/poster presentation

Nursing: Video/PPT/poster presentation

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# Life Long Learners and Evidence-Based Writing

MICHELLE A. PRENDERGAST AND GEETHA KADA

Cohort 2019-2020

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of English and Nursing to achieve SDG #3: Good Health and Well-Being.

## Learning Objectives

### *English:*

- Develop logical and coherent college-level essay structure
- Use rhetorical strategies, based on audience and purpose, to develop academic essays with a balanced expository exploration of a topic
- Write essays that demonstrate facility with grammar and mechanics
- Integrate information into essays by quoting, paraphrasing, and summarizing, based on assigned readings
- Develop own ideas in relation to words and ideas of others
- Demonstrate standard citation and documentation procedures
- Write with academic integrity; recognize and avoid plagiarism

### *Nursing:*

- Discuss the criteria and process for becoming a certified nurse within your specialty area.
- Discover the benefits of continuing education in nursing.
- Construct a professional resume

## Purpose/Rationale

This active learning practice is designed to improve your academic skills, increase community connections, and improve social justice for our community.

## Instructions

### *Nursing Assignment:*

You will be required to watch the listed video on Evidence based practice ( EBP), select a EBP topic related to your hospital, community or any health care setting and complete a continuing education certificate; and will write a reflection on its effect on general population/ patient care and how you plan to use it in the community.

Your reflection paper should be 2-3 pages in length using evidence from at least 3 peer reviewed journals to support the information and should be written in APA format.

### *English Evidence-Based Writing:*

After watching an episode from Unnatural Causes: Is Inequality Making Us Sick, researching “Leading Health Indicators” of Healthy People 2020, and the Evidence-based Practices video, you have some context on issues related to healthcare in the United States. You will now choose a health-related issue in the United States (it can be any topic connected to the previous two assignments) that you think needs to be changed to improve health. You will persuade your audience through evidence-based research that this change is necessary for health and well being or to reduce inequalities related to health and well being in the United States. For instance, you may consider conducting research into evidence-based practices that support the use of vaccinations; or, you might choose to research evidence-based practices for combatting the opiate addiction crisis that currently plagues many communities.

Your research essay must be 3 pages in length using evidence from at least 3 credible, academic sources to support your argument. Include appropriate citations and Works Cited page using either MLA or APA format. You will also include a paragraph long reflection (not included in the 3-page research essay length) in which you explain how you can use evidence-based decision-making in other areas of your life.

## Format Requirements

### *English:*

Argument Essay with Evidence and Reflection

### *Nursing:*

Evidence based practice- Reflection paper.

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# Good Health and Well Being Student Care Guidebook

JULIE LAZZARA AND STEPHANIE GREEN

Cohort 2020-2021

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Nutrition; Psychology to achieve SDG #03: Good Health and Well-Being

## Learning Objectives

Identify psychology-based and nutrition-based strategies to support student mental health.

## Purpose/Rationale:

### Introduction:

This project was developed as a part of the 2020 United Nations Sustainable Development Goals Open Pedagogy Fellowship. Open educational resources (OER) increase equitable access to education and empower students in the learning process. Open pedagogy—an approach to teaching and learning that draws on OER—places the student at the center of that learning process in a more engaging, authentic, and collaborative learning environment in order to achieve social justice in the community. Montgomery College in Montgomery County, Maryland (USA), Kwantlen Polytechnic University (KPU) in British Columbia (Canada), and Maricopa Community Colleges (Arizona) are committed to supporting social justice through this international partnership in which faculty can work across institutions to maximize global impact.

The conceptual framework on which this fellowship is based is the United Nations Sustainable Development Goals (UN SDGs), which is a set of 17 goals that address a wide range of social issues, such as poverty, inequality, climate change, and peace and justice. The SDGs are designed to achieve and maintain social justice and a sustainable future, with a

target of the year 2030 set for the attainment of each goal. This particular project is dedicated to Goal 3: Good Health and Well Being

The hope is that through the creation of this public guidebook that is available to all, we can support the UN's goal of ensuring healthy lives and promoting well-being for all at all ages.

## Instructions

### *Phase 1: Assignment: Mental Health Essentials for College Students*

The purpose of this assignment is to contribute to the creation of a student guidebook for health and well-being. Your assignment is to select from the list of developmental psychology topics (for PSY 101) or nutritional topics (FON 241) that will help students learn how to support their mental health while attending college. Think carefully about what you would want to know and make it interesting to your fellow classmates. This project will be shared as an Open Educational Resource (OER) to be utilized on this campus and it can also be adapted by other schools for use with their students.

#### Project Steps:

1. Review the example chapter for psychology or nutrition.
2. Watch the assignment walk-through videos.
3. You will be assigned to a group. Your group must select a topic from the list provided by your instructor. Once a topic is chosen, it cannot be duplicated.
4. Research your topic using the course text as your primary source with additional support from Wikipedia or other openly licensed sources.
5. Write about your topic using your own words in a short chapter of 500-750 words. Remember that your audience is other students just like you. You must also include a community resources section that links out to appropriate local resources.
6. Find at least two openly licensed images or in the public domain (CC0, CC-BY, or CC-BY-SA) to include in your chapter. Google also offers search tools to help you find images that allow for reuse. You can click "tools", then the dropdown menu will come down and allow you to select "labeled for reuse,"
7. Edit your work using Grammarly or a similar grammar checking software.
8. Post your group's chapter into the Student Care Guidebook
9. Once you have completed all of the steps above, submit the url of your chapter here in the appropriate assignment spot in Canvas.

### *Phase 2: Assignment: Make an H5P Interactive.*

The purpose of this assignment is to creatively design an interactive component that enhances the learning of your topic by adding interesting graphics, multiple-choice questions, a video, or visual matching activity.

You will make these interactives using H5P using the course presentation tool. The presentation should have a minimum of 5 slides and a maximum of 8. The course presentation feature in H5P works like this:

H5P Course presentation

The other types of H5P tools you'll likely to include within the H5P presentation are:

H5P Image Sequencing

- H5P Drag the words
- H5P Fill in the blanks
- H5P Multiple choice

The goal is not to simply duplicate the multiple-choice practice questions that you already see in course, but to create an activity that provides a deeper review or an opportunity to elaborate upon important concepts. You could also pull in current research or other engaging articles to expound upon a topic.

You are required to include at least one reference to an outside peer-reviewed resource in the interactive that was published in the last 3 years. Any and all content you use inside of the interactive needs to be written in your own words and appropriately cited. Most peer-reviewed journal articles are not freely available online. Check in with your institution's library to help you locate a journal article. Similarly, any images used should be openly licensed or in the public domain (CC0, CC-BY, or CC-BY-SA) as noted in Phase 1 of the assignment.

**STEP 1:** Write out your plan for the interactive. It works well to storyboard it first on a document so you know what you'll want to include on each slide. Add this to your group's Google doc that you already shared with me. For example:

- Slide 1: Introductory paragraph on topic. Introduce example.
- Slide 2: Multiple choice question about the example, with feedback.
- Slide 3: Introductory text. Picture.
- Slide 4: Matching activity.
- Slide 5: Conclusion.

**STEP 2:** Go to H5P.org and create a free account. Click "Create New Content."

Read through the [tutorial on creating a course presentation](#). Select the type of content you want to create, and get started. If you are working in Pressbooks, H5P is included as a ready to use tool.

**STEP 3:** Create your interactive! Read through this [brief tutorial on adding attributions](#) or use the guides within H5P to help you create the type of content you need.

**STEP 4:** Add the Interactive to your chapter. Watch this video on how to add your [H5P interactive to Pressbooks](#).

**STEP 5:** Submit the url of your chapter (with the new interactive embedded) in the textbox below and attach the pdf of the required peer-review journal article that you used.

### *Phase 3: Assignment: Peer Review*

Every student must complete the peer review that was assigned to them in Canvas. Before beginning, review the guides below.

- [What is a Peer Review Assignment?](#)
- [How do I submit a Peer Review Assignment?](#)

### *Instructions for completing the Peer Review Assignment*

- Go to the Assignment page and on the right sidebar, look for your assigned peer review
- Before doing any assessment of the work, read the complete work submitted by your assigned peer(s).
- Re-read the assignment and consider the following, noting your thoughts and any feedback you wish to share with the author.
- Focus on content, structure, organization of ideas, quality of information. Provide feedback that will help the author with the next round of revision. You can also make suggestions to address typos, spelling mistakes, and grammar, but it is not the primary focus of the review.
- In Canvas, go use the Rubric in the grading tool to evaluate the work you reviewed. Be sure to click save. The

feedback is anonymous. Give appropriate, helpful, constructive feedback, including written comments.

- Finally, in the text box below give a brief experience on how the peer review process went for you. Did it help you revise your own project? Why or why not?

## Format Requirements

Rubrics for each phase are developed but not included here

“Phase 2: Assignment: Make an H5P Interactive.” by Stephanie Green and Julie Lazzara is licensed under [CC BY 4.0](#) / A derivative from the [original work](#)

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## 4: QUALITY EDUCATION

ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL



### Targets & Indicators

**4.1** By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes

**4.1.1** Proportion of children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex

**4.2** By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education

**4.2.1** Proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being, by sex

**4.2.2** Participation rate in organized learning (one year before the official primary entry age), by sex

**4.3** By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university

**4.3.1** Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex

**4.4** By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship

**4.4.1** Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill

**4.5** By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations

**4.5.1** Parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict-affected, as data become available) for all education indicators on this list that can be disaggregated

**4.6** By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy

**4.6.1** Percentage of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex

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

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

**4.a** Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all

**4.a.1** Proportion of schools with access to: (a) electricity; (b) the Internet for pedagogical purposes; (c) computers for pedagogical purposes; (d) adapted infrastructure and materials for students with disabilities; (e) basic drinking water; (f) single-sex basic sanitation facilities; and (g) basic handwashing facilities (as per the WASH indicator definitions)

**4.b** By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries

**4.b.1** Volume of official development assistance flows for scholarships by sector and type of study

**4.c** By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States

**4.c.1** Proportion of teachers in: (a) pre-primary; (b) primary; (c) lower secondary; and (d) upper secondary

education who have received at least the minimum organized teacher training (e.g. pedagogical training) pre-service or in-service required for teaching at the relevant level in a given country



# Education Equity Comparative Analysis

GLEND A HERNANDEZ BACA AND MARIA-ELVIRA LUNA ESCUDERO-ALIE

Cohort 2018-2019

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Education and Spanish to achieve SDG #4: Quality Education.

## Learning Objectives

Providing quality education and closing the achievement gap in education are high-priority goals both nationally and internationally. This project will allow you to identify and analyze the differences in school systems and conduct a comparative analysis within two school districts. You may choose local, state, national or international comparisons. The first part of the project will include a proposal component where you outline districts you wish you compare, areas you wish to evaluate and resources you will use to support your research and comparative analysis. The second part/ assignment of the project includes a deep dive and investigation in specific domains you wish to research. The sources in your investigation should include visits, interviews and other forms of true “connections” within the communities you are researching. The last assignment in this project includes developing a permanent product that facilitates awareness to others about your findings in the comparative analysis.

## Purpose/Rationale

The awareness component will address specific issues in quality education, achievement gaps and possible solutions to ensuring more inclusive and equitable educational practices for all.

## Instructions

### *Assignments #1: Proposal on Equity and Quality Education*

Students will develop a proposal on the key components of the comparative analysis they will complete. The proposal should include the following:

- Education systems they plan to compare (local, state, international) and a justification for your selection
- Three specific educational domains you wish to compare such as:
  1. Access
  2. Equity (how they compare to each other)
  3. Resources (funding, human resources, environment)
  4. Success rates (scores, graduation rates, etc.)
  5. Safety (measured by reported violence in school and school community, bullying data, etc.)
  6. Presentation mode and justification
  7. Paper/Report
  8. Video
  9. Newsletter
  10. Power Point Presentation or Prezi Presentation
  11. Resources

What resources will you use to compare education systems? At least one must be an outreach resource such as a school visit or interview. If your research is in an out-of-area district, consider using technology to connect with community members and teachers. Be specific with your responses.

1. Journals
2. Visits
3. Interviews
4. Other

### *Assignment #2: Comparative Analysis in Equity and Quality Education*

In the second assignment, you will be diving deeper into the data of the two districts you are comparing. Your resources should be varied and address the specific areas you are researching and analyzing. Identify the two locations you are comparing and provide an explanation for each of the following:

- Name of country (ies), state(s) and district(s) you are comparing
- Specific comparative data on the three domains of choice (from Assignment 1/Proposal):
  1. Access
  2. Equity (how they compare to each other)
  3. Resources (funding, human resources, environment)
  4. Success rates (scores, graduation rates, etc.)
  5. Safety (measured by reported violence in school and school community, bullying data, etc.)

6. Elaborate on how the data compares, where you observe gaps and inequities- be specific
7. Identify and explain three sources used to conduct the comparative analysis
8. Select two areas where you observe gaps or inequities and propose one solution for each gap

### *Assignment #3: Awareness and Social Action in Equity and Quality Education*

In your third assignment, you will be synthesizing your research and publicizing it to bring awareness to the issue of quality education and closing the achievement gap. The following are possible products you can develop:

- Post work in Open Pedagogy site
- Submit report/newsletter
- Post work in community center/outreach location
- Use social media to inform others of efforts and possible plan

The awareness component must include two gaps you identified and one proposed solution to the educational gap. In identifying these possible solutions, consider what others who are reading or viewing your product could also do to address the issues of inclusive and quality education for all.

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# Innumeracy Assignment

CANDY HO AND PAMELA IP

Cohort 2019-2020

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Math; Marketing; Educational Studies to achieve SDG #04: Quality Education; Target 4.6 “By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy.”

## Learning Objectives

(none identified)

## Purpose/Rationale

Numeracy is the ability to understand and work with numbers. [7]

Through a series of class discussions, personal reflection, and group work students will explore the crisis of innumeracy, potential causes, as well as some strategies to accomplish the envisioned goal of reducing the prevalence of innumeracy. Throughout the course students are required to complete a number of local assignments and class discussions culminating in a global assignment completed in groups. During the process students maintain a shared oneNote notebook, or some similar application, to journal their thoughts, contributions and pertinent details as we move through the phases of the assignment.

## Instructions

### *Local Assignment #1: What Does a Mathematician Look Like?*

These local assignments will address the following course outcome: “Effectively communicate the concepts and applications of linear algebra using the language of linear algebra in a mathematically correct way.” The following exercises emphasize the development of a math identity. During this experience, be eager to share with and learn from your peers, while at the same time considering how you might become an agent of change in your community. Some communication formats you will use include publication through web utilizing creative commons copyright, Wikipedia authoring and editing, the organization app Popplet, oneNote, google sheets, google forms, podcasting apps and meme makers. All are freely available to you!

#### 1. Mathematician Images

The first local assignment focuses on investigating mathematical figures in history, as well as building our own mathematical identity. Responses will be shared through the course discussion board.

- Share the name of a mathematician or mathematical role model you look up to, and briefly describe why you have chosen that person.
- Share an image that comes to mind when you think of a mathematician. These images could be conveyed through a written or recorded description.
- Read the following article, write a reflection in your oneNote. Be prepared for a follow up class discussion.

What Does a Mathematician Look Like?

#### 2. Impostor Syndrome in Mathematics

An impostor is a person who pretends to be someone else in order to deceive others, especially for fraudulent gain.

[6]

Read the following opinion pieces relating experience with Impostor Syndrome. Reflect on your thoughts related to the article in your oneNote. Where Does Math Impostor Syndrome Come From? and On “Impostor Syndrome”

We will consider the following questions:

- What is your experience with Math growing up?
- What obvious advantages might the author have in her upbringing?
- Give examples of a situation that might undermine a student’s confidence in their mathematical capability.

#### 3. Mathematical Popplet

Research a mathematician of interest and create a Popplet to be shared to the class discussion board. The vertex of the Popplet will require an image of the individual and at least three facts or vignettes of interest. You may create a complex popplet or one as simplified as the following Popplet Example

#### 4. Wiki Creation and Editing

Find and analyze the Wiki entry related to the Mathematician in your research. Be prepared to report in class discussion if anything is missing from the entry and what (if any) information should be added. Edit the entry to reflect the gaps. If no entry is available – create one. Consider the guidelines for editing on Wikipedia.

### *Local Assignment #2: A Numerate World*

#### 1. Data Collection

Compile, analyze and interpret data regarding numeracy at the college, in the US, and a country of your choosing. You may find information related to your country of choice in the SDG 4 country profile web page. Save your data in your oneNote and record a brief analysis of your findings. Be prepared to share your thoughts in class discussion. The United

Nations Educational, Scientific and Cultural Organization (UNESCO) in partnership with the Institute for Statistics (UIS) maintains the following web resource, housing comprehensive related information to UNSDG 4/ Target 6.

## 2. Community Resources

“Millions of youth and adults are unable to play their full part in the social and economic life of their communities and nations because they lack the skills to read or write a simple sentence or make a simple calculation.” (Montoya, 2018)[5] What resources are available to help individuals grow in numeracy? Share at least three relevant academic or community resources available to assist people in developing numeracy skills. Record the information in our course blog.

## 3. Compare and Contrast Podcast

Compare and contrast US math instruction with an alternate country. Anecdotal information will be welcome in this reflection. Work alone or in a team of no more than 5, to create a 3 + minute “podcast” describing your find

## *Local Assignment #4: Choose Numeracy*

### 1. I'm Aware of my Bad Reputation

Does numeracy have a bad reputation? View the This collection of memes selected from cheeseburger.com, Facebook, imgur.com, Reddit, askideas.com reflect some perceptions related to

## Format Requirements

### References

[1] <https://sustainabledevelopment.un.org/?menu=1300>

[2] <https://www.un.org/millenniumgoals/>

[3] <https://opencontent.org/blog/archives/2975>

[4] <https://www.un.org/sustainabledevelopment/education/>

[5] <http://uis.unesco.org/en/blog/meet-sdg-4-data-measuring-youth-andadult-literacy-and-numeracy>

[6] <https://www.lexico.com/en/definition/impostor>

[7] <https://www.lexico.com/en/definition/numeracy>

[8] <https://imgflip.com/i/tmble>

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# Home Science Investigations

EMILY BOGUSCH AND CHARLENE ESTRADA

Cohort 2020-2021

## Introduction

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## Learning Objectives

- Demonstrate/investigate a scientific concept in a familiar, everyday setting
- Analyze how scientific explanations apply to this new setting
- Communicate your process, observations and conclusions to a wider audience

## Purpose/Rationale

### Introduction

People try to explain the phenomena of our world scientifically through investigation and experimentation. Although this is often depicted to occur in sterile labs with white coats and beakers, science can be performed anywhere and by anyone! In this class, instead of unit tests, you will be conducting your own scientific investigations based on our class content.

Throughout this course, you will select a concept of your choice that we have already examined, and you will explore it further with a hands-on investigation of your own. You will be surprised to find how many experiments can be completed at home with easy to find, everyday objects!

## Instructions

### *Part 1: Everyday Science (50%)*

1. Select one of the concepts that we have been covering in class during the last few weeks.
2. Find a way to demonstrate this concept on your own with everyday materials, or a way to investigate it in a new context. If you are uncertain about the type of investigation you would like to carry out for this assignment, consider visiting the following resources:

Possible Demonstrations:

- [Steve Spangler Science](#)
- [The Exploratorium](#)
- [Physics Girl](#)
- [BBC Earth Lab](#)
- [Scientific American](#)

Possible Investigations:

- [Science Buddies – Physics Ideas](#)
- [Science Buddies – Environmental Science Ideas](#)
- [All Science Fair Projects](#)
- [PhyPhox: Using your smartphone for physics experiments](#)

Keep in mind that these ideas are starting points, but you are free to make variations to the project you choose as you wish as long as you feel you are being challenged. You can also combine multiple ideas into a single project, if you wish!

3. Carry out this demonstration/investigation independently or with friends and family. Science is a social endeavor and the observations and reflections of others may deepen your understanding of the activity while also making it more enjoyable.

4. Keep a record of the following:

- What was your original idea?
- What materials did you use?
- What did you do, specifically?
- What did you observe?

Take photos or a video of your investigation for Part 2. If you were working with someone else, you might want to have them record their own observations and answers to each of the above questions (optional).

### *Part 2: Share your findings (50%)*

You can present your findings through a video, a narrated slideshow, or a blog-type post. Your presentation should:

- explain the science concept you were investigating and why you chose it
- describe your investigation in detail (your answers to the questions in Part 1)
- explain how your investigation relates to what you learned in class

Other items to include, if appropriate: any problems you encountered, techniques that had to be refined, surprises, or suggestions for future investigations. You will share your final presentations with a small group of your classmates during class.

## Format Requirements

### *Originality*

- 15 pts Unique and original
  - 10 pts Adds to existing experiment
  - 5 pts Performs existing experiment
  - 0 pts Did not do work

### *Difficulty*

- 20 pts Science Hero
  - 10 pts Hard
  - 5 pts Moderate
  - 2.5 pts Easy
  - 0 pts Exceedingly Easy

### *Science Communication*

- 10 pts Above & Beyond
  - 9 pts Meets Expectations
  - 8 pts Minor Issues
  - 7 pts Some Issues
  - 6 pts Many Issues
  - 0 pts No credit

### *Visual Presentation*

- 5 pts Complete Visual Evidence of Experiment
  - 3 pts Some Visual Evidence
  - 0 pts No Visual Evidence

### *Relevance*

- 5 pts Relevance Explained
  - 2.5 pts Relevance Apparent

0 pts No Relevance

*Followed Directions*

5 pts Perfect

4 pts One Issue

3 pts Some Issues

2 pts Many Issues

0 pts Missed a lot of directions

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# A Celebration of What You Know

CHARLENE ESTRADA AND EMILY BOGUSCH

Cohort 2020-2021

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Geology; Physics to achieve SDG #04: Quality Education

## Learning Objectives

- Design a final assignment in a format of your choice to communicate your understanding of core scientific concepts.
- Evaluate your knowledge of course topics according to the criteria of the final assignment that you have designed.
- Appraise and critically examine how your classmates have synthesized the same information into different projects.

## Purpose/Rationale

### Introduction

Congratulations, you're almost halfway through the semester! At this point in the semester, midterms may be looming in some courses, but something you should start to think about in this class is your course final. Course finals sometimes look like long, formatted tests that require hours of studying the materials you have acquired over the past semester. While this is one way to demonstrate knowledge, not all students are comfortable with a traditional final exam, and it is completely normal to experience testing anxiety that can impact an otherwise excellent grade. In this course, we will treat our final assignment more like a “celebration of what you know”.

You will choose how you will demonstrate your knowledge for this course by designing and completing your own final assignment. In the last few days of the semester, your work will be showcased to your peers.

## Instructions

### *Part 1. The Contract (10 pts, Due Date: At Mid-Term Check-in)*

Determine what type of project you will be comfortable completing as a final assignment. A good final assignment requires you to critically think about the key aspects of the course and/or how certain modules and scientific concepts might be connected. Keep in mind while designing your assignment that you will be required to explore 5 concepts of your choice that the course covered (or will cover) this semester. Please view the bottom of this assignment for a comprehensive list of these topics.

Some examples of final assignments might include (but are not limited to!):

- A student-written final exam with an answer key
- A countdown video on interesting facts learned in the course
- Reflective videos explaining key course concepts previously not well-understood
- A website or blog on key concepts

Don't be afraid to be creative and bring your own talents into your project! If you are artistic, bring your art into the assignment. If you are more technologically-inclined, then perhaps you might prefer putting together a video or website. Be sure to select a final assignment that will challenge you, but at the same time, is something you know you can successfully complete!

Complete the Course Final Contract assignment (available as a Canvas Quiz) by outlining your vision for the course final. You do not need to select the 5 topics you will be covering at this stage!

After you submit your Contract, your Instructor will do one of the following: 1) sign off on your idea by giving you full credit or 2) send you feedback for revision. If your idea requires revision, you will be expected to revise your ideas within 3 days of receiving feedback until they are approved for full credit.

### *Part 2. What You Know (150 pts)*

Although the final assignment must be submitted in the last week of the course, you have the freedom to work on it throughout the entirety of the second half of the term. Your final assignment must achieve the following:

1. Reflect your ideas in the Course Final Contract
2. Critically explore 5 topics covered in the course
3. Reflect your ability to communicate scientific concepts clearly and effectively

At the bottom of the assignment, along with the list of approved course topics, you will find a rubric of how your instructor will be evaluating your work.

### *Part 3. A Celebration! (40 pts)*

After you and your classmates submit your final assignments online, your peers will have the opportunity to view your hard work. No assignment will be the same, and as such, you will be asked to take a look at what your classmates have achieved in a virtual showcase!

Choose AT LEAST 4 assignments that stand out to you. Leave some positive comments on your classmates' assignments on Canvas. Tell them what you liked, how their assignment was unique, or something you found interesting. Be detailed!

### Example Assignment Evaluation

Approved Topic List for GLG101IN:

- Plate Tectonics/Earth's Interior
- Minerals
- Igneous Rocks
- Sedimentary Rocks
- Metamorphic Rocks
- Geologic Time
- Earthquakes & Tsunamis
- Rivers & Flooding
- Mass Wasting
- Oceans & Coastlines

## Format Requirements

The assignment has a rubric for part 2 and part 3 but it is not included here.

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# Science Representation in Pop Culture

CHARLENE ESTRADA AND EMILY BOGUSCH

Cohort 2020-2021

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Geology; Physics to achieve SDG #04: Quality Education

## Learning Objectives

- Compare and contrast different film representations of science and the scientific method.
- Critically analyze how science is portrayed in pop culture.

## Purpose/Rationale

### Introduction

Science is infused in our culture and it is integral in our everyday lives (and not just in the technology we use!). Pop culture tells us what a science is and can be through the magic of movies! In this renewable assignment, you will select any movie that prominently depicts a scientific subject related to this course and reflect on what you have seen with a recorded video reflection. You will then watch a documentary on the same scientific topic and examine the similarities and differences between the two films with a second video reflection.

## Instructions

### *Part 1: Science in Fiction (40%)*

Choose any movie that prominently features a topic in the Physical Sciences. Be sure to watch the movie after you have

selected it at least once. After you have done so, please record a screencast presentation (between 3 and 6 minutes) that reflects on the following questions:

1. What movie did you choose? Why did you choose this particular film? What topic does it depict?
2. How are the SCIENTISTS depicted in the movie? Examples might include background, body type, gender, personality, skills, etc. How do you think this representation applies to other scientists?
3. Select ONE scientific concept from your movie that you would like to know a little more about. This could be something that confused you, something that was really interesting, or something very weird! Briefly research it further on the internet. Tell us about this concept and tell us whether it was depicted correctly in the movie. Be sure to include the correct APA reference for your source at the end of your presentation!
4. How was the SCIENTIFIC PROCESS carried out in the film? How did the scientists collect evidence for their ideas? Does the film distinguish a clear difference between theory and hypothesis?

### *Part 2: Science in Documentary Film (60%)*

Choose a documentary film that is on the same scientific topic as in Part I. After watching the documentary, please record a second screencast presentation (between 3 and 6 minutes) that reflects on these questions:

1. What documentary did you choose to watch? Give a BRIEF summary of the film and what you learned from it.
2. Describe the SCIENTISTS featured in the documentary or the narrator presenting the data. Do they have any unique stories or backgrounds that you found unusual for someone in science? If so, describe how.
3. How was the SCIENTIFIC PROCESS depicted in the documentary? How did scientists or the narrator describe how data was collected to support an idea? Does the documentary distinguish a clear difference between theory and hypothesis?
4. Compare and contrast THREE differences in how the facts of your scientific subject were portrayed differently in both films.
5. After watching both a movie and a documentary film on science, has your opinion on the scientific topic changed? Why or why not? Why do you think science is portrayed the way it is in the movie you saw?

## Format Requirements

A rubric is provided but is not included here.

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# Digital Storytelling

CONSTANZA ROJAS-PRIMUS

Cohort 2020-2021

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Language and Culture to achieve SDG #04: Quality Education; 4.7: By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion

## Learning Objectives

None identified.

## Purpose/Rationale

As a final project for LANC 1150, you will have the chance to reflect about the content learn through this class and create a digital story through wish you will tell others about how we can build a world that is more representative of the UNSDG#4 Target 4.7. This is a renewable assignment, meaning that you don’t have to think of this project as disposable after it has been graded by me. Instead, your project can add value to the world in some way by contributing to future classes of LANC 1150, by helping others with your work, by sharing your work through open education, etc. If you are interested in keeping your work, reusing it, revising it, and in redistributing it, please contact me so I can guide you on how to mark your work with a Creative Common Licenses.

## Instructions

Instructions:

1. Brainstorm: Together with your assigned group, brainstorm about how the content of LANC 1150 relate to the accomplishment of UNSDG#4 Target 4.7. This first step is for your group to determine exactly what you are going to focus your digital story on. UNSDG#4 Target 4.7 has a lot of important goals, so some questions you could use to decide what to focus on can include: (Your groups is free to focus on other ideas!!)

- What content learned within LANC 1150 can help to promote global citizenship and appreciation of cultural and linguistic diversity?
- What intercultural skills and competencies can contribute to support any aspect of the UNSDG#4 Target 4.7? How so?
- What knowledge and skills learned in this course can help to promote gender equality in education? How so?
- How does the meaning of culture learned in LANC 1150 can help to build a world without violence among culturally different groups?
- What elements learned in this course can contribute to sustainable development and sustainable lifestyles? How so?
- What elements learned in this course can contribute to protect human rights for all, including marginalized groups such as people with disabilities, and indigenous people?
- How does the meaning of culture learned in this course can help to build informed understanding of cultural identities such as gender identity and/or ethnic identity?
- What knowledge learned in this course can contribute to language and culture sustainability in education?

2. Script & Storyboard: Once you have determined what your digital story will be about it's time for your group to write the script which will be the foundation of your digital story narration. Your group will use One Drive for file sharing and make sure you share it with me for guidance and evaluation purposes. This is a group Digital Storytelling project and the script must be written collaboratively. It is a good idea to add your script to a storyboard to organize the content and structure of your digital story as it will make the creation of your digital story way easier!!

## Format Requirements

3. Creation: Now it's time to create your Digital Storytelling! Your digital story can be created in any technological tool that allows for video creation and editing. Your group is free to choose any video/movie maker tool of your choice. Here you have a list of some tools you could use:

- Movie Maker
- Photo Story 3 for Windows
- Web Tools – Powtoon, Animoto
- IPhoto or Apple iMovie for Mac
- Adobe Premiere RUSH
- PowerPoint with interactive features

Depending on your script you may need to:

- Record your voice over
- Gather or create your images or video clips
- Choose music and side effects

Regardless of your script, your digital story must have the following elements:

- A total length between 3 to 5 minutes;
- A title for your digital story;
- The names of all authors;
- References from where you gather images, video clips, and/or music.

#### *Attribution*

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# Children’s Story Project

CONSTANZA ROJAS-PRIMUS

Cohort 2020-2021

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Spanish; Language and Culture to achieve SDG #04: Quality Education; #4.2 By 2030, ensure that all girls and boys have access to free quality early childhood development, care and pre-primary education so that they are ready for primary education

## Learning Objectives

None Identified

## Purpose/Rationale

For evaluation 3 – Unit 7 you will use the material learned in Span 1101 and create a children’s story in Spanish that can contribute to local school/public library children language literacy programs. KPU Spanish collaborates with the Gilford Public Library language literacy program Spanish Storytime / Hora del Cuento en Español where children from kindergarten to third grade learn Spanish through stories, songs, rhymes and fun activities at no cost. Your children’s story can be part of the children’s story collections for this program! In addition, by creating a children’s story in Spanish you are contributing to United Nations Sustainable Development Goal 4 Quality Education which aims to ensure access to quality early childhood development and free and equitable education for girls and boys.

The Spanish Faculty team at KPU is committed to open pedagogies and believe that students can be part of the teaching process by empowering others and by participating in the co-creation of knowledge through open education. We want your children’s story creation to be a renewable project that can continue having value to you and others after Span 1101 is over. If you are interested in keeping your story, reuse it, revise it, and share it with others, you can explore Open Creative Common Licenses which let you retain ownership of your story, while freely allowing others to use, share, and remix it without requiring you to give up the rights (copyright) automatically granted to you for your creation. Please contact your instructor should you wish to register your children’s story with Creative Common

Licenses. Children literacy programs like Hora del Cuento en Español and others will be able to enrich and continue with their work through your story.

## Instructions

None identified

## Format Requirements

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# Final Exam Assignment-Cultural Mapping

EMERALD JONES

Cohort 2020-2021

## Introduction

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## Learning Objectives

Sociology & Criminology are two disciplines focused around understanding interactions and the enforcement of laws. Sociology is the scientific study of large (macro) and small (micro) groups, how those groups interact and influence the advancement of society and humanity.

Criminology is the study of how laws are created, broken, and enforced in society. Criminologists looked at different processes and perspectives that influence an individual’s decision to commit a criminal or deviant act. The overall objective of this assignment is for students to critically think and able the scholarship and literature to real life societal crisis.

## Purpose/Rationale

This active learning practice is designed to improve your academic skills, increase community connections, and improve social justice for our community.

## Instructions

Students will pick a societal issue affecting society for my (sociology) class and a type of crime for my (criminology) class. The issue or crime that the students decide to pick they will:

- Describe the societal issue or crime

- What are the characteristics
- How is it affecting society?
- If you were a sociologist or criminologist how would you go about “solving” the issue?

Students will then record a 5-10-minute video of themselves answering the questions above while also incorporating the possible solutions or policy implications.

Students will then create a visual pamphlet of the possible solutions while including organizations at the collegiate level that are already in place for this societal issue or crime of their choice. The assignment is a two-part assignment that is focused on integration technology and also the usage of computer resources which can be used not only for this class but other classes across the country. The assignment is geared towards learning and understanding differences and the spread of cultural knowledge and awareness. Students will be able to collaborate and share experiences and viewpoints on a platform with individuals that may be in a different location and from a different demographic!

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# 5: GENDER EQUALITY

## ACHIEVE GENDER EDUALITY AND EMPOWER ALL WOMEN AND GIRLS



### Targets & Indicators

**5.1** End discrimination against women and girls everywhere

**5.1.1** Whether or not legal frameworks are in place to promote, enforce and monitor equality and non-discrimination on the basis of sex

**5.2** Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation

**5.2.1** Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months, by form of violence and by age

**5.2.2** Proportion of women and girls aged 15 years and older subjected to sexual violence by persons other than an intimate partner in the previous 12 months, by age and place of occurrence

**5.3** Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation

**5.3.1** Proportion of women aged 20-24 years who were married or in a union before age 15 and before age 18

**5.3.2** Proportion of girls and women aged 15-49 years who have undergone female genital mutilation/cutting, by age

**5.4** Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate

**5.4.1** Proportion of time spent on unpaid domestic and care work, by sex, age and location

**5.5** Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life &lt;br&gt;

**5.5.1** Proportion of seats held by women in national parliaments and local governments

**5.5.2** Proportion of women in managerial positions

**5.6** Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences

**5.6.1** Proportion of women aged 15-49 years who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care

**5.6.2** Number of countries with laws and regulations that guarantee women aged 15-49 years access to sexual and reproductive health care, information and education

**5.a** Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws

**5.a.1** (a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure

**5.a.2** Proportion of countries where the legal framework (including customary law) guarantees women's equal rights to land ownership and/or control

**5.b** Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women

**5.b.1** Proportion of individuals who own a mobile telephone, by sex

**5.c** Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels

**5.c.1** Proportion of countries with systems to track and make public allocations for gender equality and women's empowerment

# Empowering Women through Education

ANDREA FOSTER AND MARY E. ROBINSON

Cohort 2018-2019

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Business and English/Reading to achieve SDG #5: Gender Equality.

## Learning Objectives

This interdisciplinary assignment has two steps. The first part will require you to develop a portfolio using Facebook, Instagram, or any other form of social media. Deeply reflect on the stories that the imagery may be telling you and discuss what can be done to empower other women or what you would like to do to empower other women.

## Purpose/Rationale

This active learning practice is designed to improve your academic skills, increase community connections, and improve social justice for our community.

## Instructions

This interdisciplinary assignment has two steps. The first part will require you to develop a portfolio using Facebook, Instagram, or any other form of social media. This portfolio will be created using imagery (videos, photographs, television or youtube clips) to develop an essay showing how education has enabled or facilitated the empowerment of women. Be as creative as you can be in telling this story and displaying your imagery. It is essential that the portfolio has the great potential to be impactful on those who view it. Any photographs, video clips or imagery, in general, should have the permission of those photographed or the photographer to be used in your portfolio.

This visual essay for your Introduction to Business course (BSAD 101) or your Critical Reading, Writing, and Research

at Work (ENGL 103) course will document women from Montgomery County and or around the world. If you are an international student, you can also focus on your home country. Your imagery should tell the story of how education (either formal or informal) enabled the women selected to be empowered and to achieve the goals they established for themselves. The women can be involved in any professional career, business, not for profit, a non-profit organization, or local movement.

Deeply reflect on the stories that the imagery may be telling you. Once you have done that, write a 2-4 page reflection paper on the impact that these women and their work and achievements have had on the lives of others or more specifically your life. Discuss what can be done to empower other women or what you would like to do to empower other women.

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# Gender Equity Citizen Project

PAULETTE STEVENSON AND TRISHA LAVIGNE

Cohort 2020-2021

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of English; Psychology to achieve SDG #05: Gender Equality

## Learning Objectives

Evaluate gender equality issues.

## Purpose/Rationale

Now that you have explored the United Nations Sustainable Development Goal (UNSDG) of Gender Equality (SDG5), what it means and how it might relate to you, this final project is an opportunity to apply your ideas. You are being challenged to consider the state of gender equality in our current world, gather expert knowledge about this social issue, and propose positive solutions based on what you have learned.

There are 3 parts to this assignment:

- I. Gather additional information specific to your target issue and audience.
- II. Create a tangible product that reflects your specific interest as it relates to SDG5. You are free to choose one of the three possibilities:
  - Option #1: Advocacy Video
  - Option #2: Infographic
  - Option #3 Podcast
- III. Present the finished product to the class.

# Instructions

## I. Literature Review DUE DATE:\_\_\_\_\_

The United Nations Sustainable Development Goal of gender equality is a complex issue spanning numerous areas worldwide. Equity in rights, education, freedom from harassment and victimization, representation, and physical and mental health are just some of the subtopic areas that might be focused on to advocate for SDG5. Generate some ideas for where YOU believe there is a need and interest to advocate. You can navigate to the UNSDG5 website for even more ideas:

<https://www.un.org/sustainabledevelopment/gender-equality/>

Conduct an overview of the research and information relevant to your selected problem. Recent research is desired, although seminal pieces may also be included. Sure, you can do a basic Google search to “get ideas” and inspiration about the specifics related to your idea, but you will not be able to “use” or cite this webpage info UNLESS it comes from a gov. or edu. website. For a review of literature, go on the library homepage and start a basic journal search of your topic. Don’t forget...our librarians are HAPPY to assist you in the journal search!

Generate possible solutions to the issue of your focus based upon your understanding of the “problem” and relevant research. Meaning, what do YOU think would help address the issue? Training, awareness, starting a dialogue, etc...?

## II. Create a Product DUE DATE:\_\_\_\_\_

Each student will be responsible for his or her own work.

Teams are accepted only with prior instructor approval.

Step One: Decide which of the three choices you will be producing for this project.

Step Two: Create the product. You are encouraged to have it reviewed by a trusted person to identify any elements that need editing and assess how “user friendly” the final product is.

Project Choices (select one)

Choice #1: Advocacy Video

Once you’ve done your research, it is recommended that you write/type out a script or outline of ideas. What is your overall point or message? Once that is decided, pick your platform. Do you want to talk in the video? Will you use animation software or YouTube editor? Be careful when choosing a platform and make sure that you are able to export/share correctly. Lastly, finalize (export, check sharing options) and upload to Canvas (a website url, or a media recording, or a file upload). You are responsible for making certain your instructor can access the video PRIOR to the project deadline.

Choice #2: Infographic

You will produce a single, organized, “poster-style” infographic on the SDG5 subtopic of your choice. The topic should be something that you have researched and care about.

Your infographic must have THREE different charts or graphs of AT LEAST TWO different types (2 bar + 1 pie... NOT 3 pie charts). Please take care to create an infographic that is a complete, visually interesting AND informative product with a uniform style and approach. You should not pay any money to use software for the creation of your infographic. Some free options to create an account for and use include:

- [easel.ly](http://easel.ly)
- [canva.com](http://canva.com)
- [piktochart.com](http://piktochart.com)

Other requirements to review prior to submission include:

- Must have titles and/or labels on each chart included in infographic.
- Your project needs an overall Title.

- You MUST have your name on your project.
- You MUST turn in a .PNG of your project.
- You MUST include the sources for your data in the BOTTOM RIGHT of your infographic – make a small box for all three of them as web links
- You MUST include the logo for our school (GCC) in one corner (can be top or bottom, left or right) of the page.

You are responsible for making certain your instructor can access the infographic image PRIOR to the project deadline.

Choice #3: Podcast

Create a ~3 to 5-minute podcast that is based on the subtopic of your choice. While you are free to appropriately express your views in a manner that adheres to our student conduct code (found in the student handbook) the

## Format Requirements

N/A

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# Gender Equality and Labor Markets

HOA NGUYEN

Cohort 2020-2021

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Economics and Gender Studies to achieve SDG #5: Gender Equality.

## Learning Objectives

In this assignment, you will learn about the U.S. Equal Pay Act of 1964, Lilly Ledbetter Fair Pay Act of 2009, and the gender wage inequality in the U.S. labor market.

## Purpose/Rationale

This active learning practice is designed to improve your academic skills, increase community connections, and improve social justice for our community.

## Instructions

Step 1: Check out the Equal Pay Act of 1963 and Lilly Ledbetter Fair Pay Act of 2009 here:

<https://www.eeoc.gov/laws/guidance/equal-pay-act-1963-and-lilly-ledbetter-fair-pay-act-2009>

Step 2: Read the article “Gender wage inequality: What we know and how we can fix it” by Sarah Glynn (2018) here:

<https://equitablegrowth.org/research-paper/gender-wage-inequality/>

Step 3: Based on what you gather from previous steps, write an essay (two to three pages, single spaced, font 12) about the legal framework for equal pay in the U.S. and how it affects female workers in the U.S. labor market. Make sure to address the following points:

- Describe the gender pay inequality in the U.S.
- What are consequences of gender pay inequality in a society?
- What are the Equal/Fair Pay Acts, and why gender pay inequality still exists despite the Acts?
- Recommend 3 policies to address the gender pay inequality in the U.S.

Step 4: Provide a References section to cite all the sources from which you extract information for your research. This section is not counted into the page requirement above.

Note: Do not use direct quotes from other articles. You should be able to rephrase and express what you have learnt using your own words.

## Format Requirements

Use APA citation format: <http://www.cws.illinois.edu/workshop/writers/citation/apa/intextcitation/>

Submit your essay as a pdf document on Blackboard's Course Content. To submit, attach the file through the Submission section inside the Signature Assignment folder at the bottom of the Course Content page. Do not write the essay in the Comments section or email it to the professor. Do not share your Google docs because the professor might not be able to open it to grade, and you will get a zero for your assignment.

You can submit up to 3 times but only the last version will be graded.

Your work will be submitted through SafeAssign. SafeAssign checks your work against work available on the Internet as well as a database of student papers. This is plagiarism-detection tool. Violations of more than 20% will result in a zero grade for the assignment. You cannot submit your paper in another class without revision because SafeAssign will flag you for plagiarism.

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# Masai Women: Inequalities in the Masai Culture and their effect on Masai Women and their future

TARA L. TETRAULT

Cohort 2020-2021

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Anthropology and Gender Studies to achieve SDG #5: Gender Equality.

## Learning Objectives

As John Dewey taught educators in the beginning of the twentieth century that students absorb and remember more when they have to practice the lesson themselves. I use this technique to reach anthropology students how to do their ethnographic fieldwork and analysis. I believe it benefits our students because they learn how to observe and document human behavior, gain what anthropologists call the “insider view” and then take that new knowledge to help resolve local problems.

## Purpose/Rationale

Today, I am applying the same techniques to designing this UN Lesson Plan on the Masai Women. Teaching students about the Masai Culture using the Kinship and Marriage unit gets students to focus on some of the underlying structure of the Masai Culture that guides when women will do and setting some of their direction for their future. According to the older ethnographies about the Masai to be married means to be lead. Some of the un-said message is women will not be given the authority to use money. If they are unable to make financial transactions, it limits their mobility. In this same ethnographic footage students learn about the coming of age ceremonies girls go through to become married, viewers learn what is meant to be married in the transaction, in the sisterhood, and in the workload that is expected of all women.

## Instructions

Anthropology & Community Development Over Time: Students use see an ethnographic film in the 1970's to learn about the Masai culture, Women's work and economic power. First, students learn about the longitudinal field anthropology study in the 1970's and 1980's where the anthropologist worked in the community. They filmed and interviewed women going through the growth process to adulthood, entering their new families home, and learning about the work expectations as a newly married woman. Students will discuss this, as well as the cost these women had to bare as a result. Next, students learn about the photographer who worked with Masai women in the 1990's and started a fundraising organization to send girls to secondary school. Today, a generation later some of the Masai girls are attending college.

Goals: Your job as students is to learn about each project, report on each, and thoughtfully react to the projects giving the pros and cons of each. The last part of this unit is to create a virtual or real example of how to help humanity. This can be a how to help the women we learned about or how to aid a cause of your own. Be creative, have fun, and enjoy learning and doing something hands-on.1. The first goal of this unit is to understand the UN Directive on Inequalities.... Women are often left with children to provide for yet carry the most restrictions on what they are allowed to do, if they are allowed to work and if they are allowed to earn money. This works to secure them in a system of poverty.

2. Learning from the films and website, draft a detailed Cultural Background (knowing what's been done to date): Earlier studies by ethnographer, Melissa Llewelyn Davis 1974-2020 and photographer Barbara Shaw 1990-2013. The ethnographer captured the growth, acknowledges the use of FGM as a part of a girl's growth to becoming ready to marry. In the Masai marriage means to be led. Marriage and initiation of a young Masai girl into the Masai culture are also illustrated in the film. The Masai practice polygyny and they marry outside (exogamous) their extended family but when a Masai girl marries it is said that she leaves her family behind for good. This is traumatic for a young girl and she is initiated into a new family with new sisters who taunt her as part of the initiation process.

Finally, examine the cultural landscape and material culture to the learning how the Masai make a living, and in particular to understand life as a girl and woman. Last, to learn what outside Masai and American organizations are doing to help educate and train the Masai girls, as well as the grown Masai men and women in the Masai culture. Women were not allowed to purchase items. In this context how important might the artifacts the Masai women be?

3. Alternatively, knowing what you do about the Masai of the past, examine the Masai Girls Education Fund.org website. Here, you will be learning about how the MGEF Started, what they do for the girls, how they raise money. Describe this in your second part of your report. Add your reaction to include:

- 1) what the strengths of what MGEF has done?
- 2) What are the weaknesses?
- 3) what do we need to see happen for the Masai Girls?

Finally, describe how we as a class might help an organization like the MGEF. How can we make a change happen? How might we help raise funds or enhance what MGEF does? There is no right or wrong answer here so be creative, think outside the box. You can design a website as a group; or create a public or artistic event that aids the Maasai.

4. This report or your alternative MGEF proposal is due two weeks after you see the film and discuss it in class.

## Format Requirements

- 1) Your 3-page report on the Masai Past
- 2) Your Report on MGEF OR A creative project on the Maasai is due by the end of the semester.

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# 6: CLEAN WATER AND SANITATION

## ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL



### Targets & Indicators

**6.1** By 2030, achieve universal and equitable access to safe and affordable drinking water for all

**6.1.1** Proportion of population using safely managed drinking water services

**6.2** By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations

**6.2.1** Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water

**6.3** By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally

**6.3.1** Proportion of wastewater safely treated

**6.3.2** Proportion of bodies of water with good ambient water quality

**6.4** By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity

**6.4.1** Change in water-use efficiency over time

**6.4.2** Level of water stress: freshwater withdrawal as a proportion of available freshwater resources

**6.5** By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate

**6.5.1** Degree of integrated water resources management implementation (0-100)

**6.5.2** Proportion of transboundary basin area with an operational arrangement for water cooperation

**6.6** By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes

**6.6.1** Change in the extent of water-related ecosystems over time

**6.a** By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies

**6.a.1** Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan

**6.b** Support and strengthen the participation of local communities in improving water and sanitation management

**6.b.1** Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management

# Improving Water Quality in the Chesapeake Watershed

MARY BETH JOHNSON AND MITCHELL TROPIN

Cohort 2019-2020

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Communication and Science Education to achieve SDG #6: Clean Water and Sanitation.

## Learning Objectives

This is an interdisciplinary service learning assignment in which you will be required to engage in a hands-on experience outside of the classroom.

## Purpose/Rationale

This active learning practice is designed to improve your academic skills, increase community connections, and improve water standards for our community.

## Instructions

### *Survey Lesson:*

For this assignment, you will develop several questions to survey at least ten persons about clean water. You can ask about the importance of clean water, clean water quality, clean water issues or how to protect clean water. You can

use face to face interviews or social media tools such as Survey Monkey, Instagram, Snapchat, and Facebook. You will present your findings to the class in a written form or as bar, line, or pie graphs.

*Video/ Pamphlet Lesson:*

For this assignment, you will focus on a particular issue about clean water such as local drinking water quality, pending clean water issues or how students can promote clean water. Your presentation of your research could be a video or pamphlet showing clean water issues as well as one page fact sheet about clean water issues.

*Video link for lesson:*

<http://faculty.montgomerycollege.edu/gbarron2/FiveMinuteProfDev/mbjohnson/Assignment/>

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# 7: AFFORDABLE AND CLEAN ENERGY

ENSURE ACCESS TO AFFORDABLE, RELIABLE, SUSTAINABLE AND MODERN ENERGY FOR ALL



## Targets & Indicators

**7.1** By 2030, ensure universal access to affordable, reliable and modern energy services

**7.1.1** Proportion of population with access to electricity

**7.1.2** Proportion of population with primary reliance on clean fuels and technology

**7.2** By 2030, increase substantially the share of renewable energy in the global energy mix

**7.2.1** Renewable energy share in the total final energy consumption

**7.3** By 2030, double the global rate of improvement in energy efficiency

**7.3.1** Energy intensity measured in terms of primary energy and GDP

**7.a** By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology

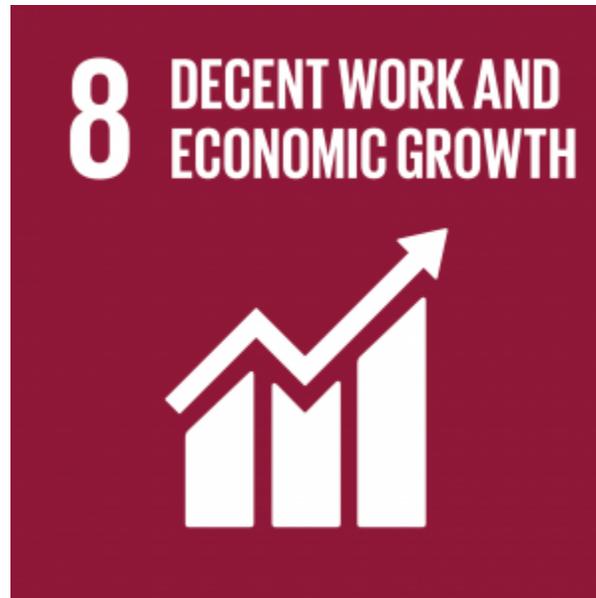
**7.a.1** International financial flows to developing countries in support of clean energy research and development and renewable energy production, including in hybrid systems

**7.b** By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support

**7.b.1** Investments in energy efficiency as a percentage of GDP and the amount of foreign direct investment in financial transfer for infrastructure and technology to sustainable development services

# 8: DECENT WORK AND ECONOMIC GROWTH

## PROMOTE SUSTAINED, INCLUSIVE AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL



### Targets & Indicators

**8.1** Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries

**8.1.1** Annual growth rate of real GDP per capita

**8.2** Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors

**8.2.1** Annual growth rate of real GDP per employed person

**8.3** Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services

**8.3.1** Proportion of informal employment in non-agriculture employment, by sex

**8.4** Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead

**8.4.1** Material footprint, material footprint per capita, and material footprint per GDP

**8.4.2** Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP

**8.5** By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value

**8.5.1** Average hourly earnings of female and male employees, by occupation, age and persons with disabilities

**8.5.2** Unemployment rate, by sex, age and persons with disabilities

**8.6** By 2020, substantially reduce the proportion of youth not in employment, education or training

**8.6.1** Proportion of youth (aged 15–24 years) not in education, employment or training

**8.7** Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms

**8.7.1** Proportion and number of children aged 5-17 years engaged in child labour, by sex and age

**8.8** Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment

**8.8.1** Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status

**8.8.2** Increase in national compliance of labour rights (freedom of association and collective bargaining) based on International Labour Organization (ILO) textual sources and national legislation, by sex and migrant status

**8.9** By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products

**8.9.1** Tourism direct GDP as a proportion of total GDP and in growth rate

**8.9.2** Number of jobs in tourism industries as a proportion of total jobs and growth rate of jobs, by sex

**8.10** Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all

**8.10.1** Number of commercial bank branches and automated teller machines (ATMs) per 100,000 adults

**8.10.2** Proportion of adults (15 years and older) with an account at a bank or other financial institution or with a mobile-money-service provider

**8.a** Increase Aid for Trade support for developing countries, in particular least developed countries, including through the Enhanced Integrated Framework for Trade-Related Technical Assistance to Least Developed Countries

**8.a.1** Aid for Trade commitments and disbursements

**8.b** By 2020, develop and operationalize a global strategy for youth employment and implement the Global Jobs Pact of the International Labour Organization

**8.b.1** Total government spending in social protection and employment programmes as a proportion of the national budgets and GDP



# Resource Hub: Arizona Enterprises

BRIAN DILLE

Cohort 2020-2021

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Political Science to achieve SDG #08: Decent Work and Economic Growth 3

## Learning Objectives

Identify resources that support access to credit in rural and poor communities in Arizona.

## Purpose/Rationale

Access to credit is an overlooked but vital component to economic growth. The more barriers there are to credit, the harder it is for the poor to lift themselves out of poverty through starting small enterprises. This also creates a drag on the economic growth of the larger economy. These barriers are summarized by the World Bank: <https://blogs.worldbank.org/voices/five-challenges-prevent-financial-access-people-developing-countries>.

The United Nations is concerned that these barriers are only growing with the COVID crisis: [https://sdgs.un.org/sites/default/files/2020-07/The-Sustainable-Development-Goals-Report-2020\\_Page\\_15.png](https://sdgs.un.org/sites/default/files/2020-07/The-Sustainable-Development-Goals-Report-2020_Page_15.png).

It is quite difficult to find reliable information on access to credit in rural parts of the developing world. To get an appreciation of how intractable these barriers are, we will evaluate access to credit in rural areas of a developed country, namely rural Arizona.

## Instructions

Assignment: As a group, you are to create a resource hub of local resources that support access to capital in rural and

poor communities in Arizona and that encourage the formalization and growth of micro-, small- and medium-sized enterprises. This resource hub will be shared publicly as an OER resource.

The hub can be a simple list of nonprofit groups or NGOs that specialize in promoting access to credit or it can be a fully functioning website with visuals and links to these organizations. The list should be annotated, with a description of the organization, the strategies it uses to promote access to credit and/or the growth of new businesses, its area of operations, and at least one case study or example of the resource in operation. Your list will have a minimum of 3 sources, with an A paper containing at least 5 sources.

## Format Requirements

Rubric (50 pts)

Description of organization -15

List and annotate 5 or more resources - 15

List and annotate 3-4 resources - 10

List and annotate 1 resource - 5

Description of strategy - 15

Outline strategy for 5 or more resources - 15

Outline strategy for 3-4 resources - 10

Outline strategy for 1 resource - 5

Example or case - 15

Provide example for 5 or more resources - 15

Provide example for 3-4 resources - 10

Provide example for 1 resource - 5

Professionalism - 5

Citations provided and few typos - 5 pts

No citations or lots of typos - 3 pts

This is truly embarrassing - 0 pts

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# Analysis of Employment-Related Policy

BRIAN DILLE

Cohort 2020-2021

## Introduction

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## Learning Objectives

Analyze current state, county, or city statute, regulation, or policy.

## Purpose/Rationale

An important part of sustainable development is ensuring that all members of a society have access to opportunities for meaningful employment under respectful conditions. Targets 5 through 8 offer ambitious objectives for the global community. It is tempting to think that only developing countries need worry about these targets, but every country continues to struggle with them, including the United States. A deeper look at one of these targets in a local context will uncover some of the many barriers to progress on these targets.

## Instructions

Assignment: Research and analyze a current state, county, or city statute, regulation, or policy that impacts (1) wages (from a lens of gender, race, age, ability equity), (2) work-related injuries, (3) agricultural workers, (4) child labor, or (5) workers with disabilities. In a two-page well-written paper, provide an analysis on the pros and cons of the statute, regulation, or policy, including suggestions on how to improve language or explain why the language is effective. Your paper will be made available as an OER tool for others.

## Format Requirements

Rubric (50 pts)

Identify statute – 15

Statute reference is specific and documented – 15

Statue is referred to informally and generally – 10

No evidence the statute actually exists – 5

Analysis- 15

Rich description, erudite analysis – 15

Basic description, some analysis – 10

Poor description, no analysis – 5

Criticism or defense- 15

Pros and cons of statute are given, clear position taken – 15

Pros and cons of statute are given or clear position taken, but not both -10

Treatment is one-sided or student position is unclear – 5

Professionalism – 5 pts

Citations provided and few typos – 5 pts

No citations or lots of typos – 3 pts

This is truly embarrassing – 0 p

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# Material Footprint of Local Business

BRIAN DILLE

Cohort 2020-2021

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Political Science to achieve SDG #08: Decent Work and Economic Growth 4

## Learning Objectives

Evaluate costs and policy implications of material footprint.

## Purpose/Rationale

Part of the effort to “decouple” economic activity from environmental impact is to reduce or even eliminate the carbon or material footprint of a business or activity. Carbon footprint is relatively easy to determine by measuring the energy required to produce or good or service or engage in an activity, then compare that with the carbon cost to produce that energy locally. But what does “material footprint” mean? This is a larger measure of the inputs required to make a good or service or engage in an activity. These include not just energy, but raw materials, human labor, even the opportunity cost of the space being used.

## Instructions

Assignment: Assess the material footprint of a local business. List all of the input costs for the main product or service marketed by the business. Identify any way to reduce the material cost by increased efficiencies or replacing inputs with less costly substitutes (in material terms). Conclude with a discussion of whether any of the costs associated with the material footprint are uncaptured externalities, and any policy implications your findings suggest.

## Format Requirements

Rubric – 50pts

List of the material costs of inputs – 15 pts

The list is comprehensive and well-sourced. – 15

The list is partial or not well-sourced -10

The list is both partial and not well-sourced.-5

Proposal to reduce material cost of inputs – 15 pts

Plan is viable – 15

Plan is possible – 10

Plan relies on rainbows and unicorns – 5

Externality Policy Plan – 15 pts

Rich description, erudite analysis – 15

Basic description, some analysis – 10

Poor description, no analysis – 5

Professionalism – 5 pts

Citations provided and few typos – 5

No citations or lots of typos – 3

This is truly embarrassing – 0

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# Social Entrepreneurship Infographic

REBECCA RAZAVI

Cohort 2020-2021

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Business and Social Entrepreneurship to achieve SDG #8: Decent Work and Economic Growth.

## Learning Objectives

Your job in this assignment is to find an existing business and explore what it is doing—or what it could be doing—to improve life on earth, using the UN SDGs as a framework.

## Purpose/Rationale

Social entrepreneurship, Corporate Social Responsibility (CSR)—there are many names for the work that businesses do that relates directly to a social or environmental issue and that reflects many of the goals in the United Nations Sustainable Development Goals (UN SDGs), not the least of which is Goal #8: Decent Work and Economic Growth. There are many forms that social entrepreneurship or corporate social responsibility take. What is undeniable is that businesses have become increasingly sensitive and involved with tying their business model and goal more directly to work that improves society or our planet.

## Instructions

Step One: Identify an existing company that you already interact with as a customer. The company may or may not already have a CSR mission. The usual suspects of Tom’s shoes, Ben & Jerry’s ice cream, and Starbucks coffee are off the table as their CSR platforms are already so well known. Find a company that surprises you!

Step Two: Research the mission and goals of the company and any existing plan to support the local or larger

community or environment. You may find these on the company's website or in a source such as Bloomberg News or Yahoo financial. You may also find out about their CSR work through their Social and Environmental Annual Reports (SEARS).

Step Three: If the company is not already involved in CSR, your job is to identify at least one or two UN SDGs that are a good fit for the company and propose work that the company might do to incorporate this into its mission. If the company is involved in CSR, your job is to identify the UN SDGs that are addressed. (Note, for full credit, two goals must be identified. One can already exist and you can add a second for this assignment).

Step Four: Identify ways that the CSR for this company can be enhanced or better incorporated into the mission of the company. You should include at least three ways the company can better communicate the work to its stakeholders: consumers, shareholders, and employees.

## Format Requirements

This assignment should fit on one page, in the format of an infographic a company might distribute at corporate meetings, on site at its place of business, or on its website. You should include the company logo and enough information to allow the stakeholders to know what is going on and how they can be part of the mission.

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# 9: INDUSTRY, INNOVATION, AND INFRASTRUCTURE

**BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION AND FOSTER INNOVATION**



## Targets & Indicators

**9.1** Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all

**9.1.1** Proportion of the rural population who live within 2 km of an all-season road

**9.1.2** Passenger and freight volumes, by mode of transport

**9.2** Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries

**9.2.1** Manufacturing value added as a proportion of GDP and per capita

**9.2.2** Manufacturing employment as a proportion of total employment

**9.3** Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets

**9.3.1** Proportion of small-scale industries in total industry value added

**9.3.2** Proportion of small-scale industries with a loan or line of credit

**9.4** By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities

**9.4.1** CO<sub>2</sub> emission per unit of value added

**9.5** Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending

**9.5.1** Research and development expenditure as a proportion of GDP

**9.5.2** Researchers (in full-time equivalent) per million inhabitants

**9.a** Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States

**9.a.1** Total official international support (official development assistance plus other official flows) to infrastructure

**9.b** Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities

**9.b.1** Proportion of medium and high-tech industry value added in total value added

**9.c** Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020

**9.c.1** Proportion of population covered by a mobile network, by technology

# 10: REDUCED INEQUALITIES

## REDUCE INEQUALITY WITHIN AND AMONG COUNTRIES



### Targets & Indicators

**10.1** By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average

**10.1.1** Growth rates of household expenditure or income per capita among the bottom 40 per cent of the population and the total population

**10.2** By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status

**10.2.1** Proportion of people living below 50 per cent of median income, by age, sex and persons with disabilities

**10.3** Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard

**10.3.1** Proportion of the population reporting having personally felt discriminated against or harassed

within the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law

**10.4** Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality

**10.4.1** Labour share of GDP, comprising wages and social protection transfers

**10.5** Improve the regulation and monitoring of global financial markets and institutions and strengthen the implementation of such regulations

**10.5.1** Financial Soundness Indicators

**10.6** Ensure enhanced representation and voice for developing countries in decision-making in global international economic and financial institutions in order to deliver more effective, credible, accountable and legitimate institutions

**10.6.1** Proportion of members and voting rights of developing countries in international organizations

**10.7** Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies

**10.7.1** Recruitment cost borne by employee as a proportion of yearly income earned in country of destination

**10.7.2** Number of countries that have implemented well-managed migration policies

**10.a** Implement the principle of special and differential treatment for developing countries, in particular least developed countries, in accordance with World Trade Organization agreements

**10.a.1** Proportion of tariff lines applied to imports from least developed countries and developing countries with zero-tariff

**10.b** Encourage official development assistance and financial flows, including foreign direct investment, to States where the need is greatest, in particular least developed countries, African countries, small island developing States and landlocked developing countries, in accordance with their national plans and programmes

**10.b.1** Total resource flows for development, by recipient and donor countries and type of flow (e.g. official development assistance, foreign direct investment and other flows)

**10.c** By 2030, reduce to less than 3 per cent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent

**10.c.1** Remittance costs as a proportion of the amount remitted

# Academic Service-learning: Reducing Inequality in Our Community

ALI ALAVI AND ANDRÉE BETANCOURT

Cohort 2018-2019

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Communication Studies and Business Administration to achieve SDG #10: Reduced Inequalities.

## Learning Objectives

Students will research the benefits and challenges of service learning (for students and for the organizations and communities they serve). Students will formulate and implement innovative solutions to current social, economic, and/or environmental issues within their target community. Students will research the life, work, and contributions of a selected entrepreneur (or leader) and prepare a fifteen-minute presentation.

## Purpose/Rationale

This active learning practice is designed to improve your academic skills, increase community connections, and improve social justice for our community.

## Instructions

### *Steps for Successful Service-learning Assignment:*

In groups of 4 or 5, students will research the benefits and challenges of service learning (for students and for the organizations and communities they serve) and write a 6 – 10 page paper about their findings.

During the research process, each group member must analyze a real-life case study about service learning (SL) to determine lessons learned and identify ways SL can enhance social justice and improve quality of life for the people in their communities. Brief individual presentations about their findings are due the third week of the semester.

Based on their research and analysis of case studies, each group will create a fun, original, and effective Steps for Successful Service-learning presentation in a creative format (e.g., video; graphic novelette or comic book; animation; board game or any type of interactive game; original artwork or installation). Groups submit papers and deliver presentations the fifth week of the semester.

Students will also share their projects (or images and descriptions of them) publicly through at least one social media platform in order to raise awareness about the ways in which SL can be used to reduce inequalities etc.

### *Social Justice and Entrepreneurship Assignment:*

In groups of 3, students will formulate and implement innovative solutions to current social, economic, and/or environmental issues within their target community. Each group delivers a presentation during the fourth week of the semester, explaining the problem they have identified. The group members discuss three alternative approaches for resolving the issue. During the eighth week of the semester, each group delivers a presentation explaining their approach, the resources they need for implementing their idea, how they will acquire the required resources, and how implementation of their idea would enhance social justice and improve quality of life for the people in the target community. During the last month of the semester, groups deliver their final presentation, discussing the outcome of their project, presenting facts and measurable outcomes, and their conclusions and lessons learned. The group presentations, findings, and materials will be publicly accessible to other students and will be passed on to students in subsequent semesters as legacy projects and/or case studies/educational materials. Each group will be required to craft and implement an effective strategy for communicating the identified issue in the community and encouraging other students in the community to continue their work and keep the project alive.

### *National Portrait Gallery Assignment: Celebrating Diversity Assignment:*

In groups of 3, students will tour the National Portrait Gallery. Each group will choose a person whose portrait is exhibited in the gallery.

Groups will research the life, work, and contributions of the selected entrepreneur (or leader) and prepare a fifteen-minute presentation. Students are required to create an inspiring presentation, explaining how the selected entrepreneur/leader overcame challenges and obstacles in his/her personal life and/or career and draw lessons from them. Students are encouraged to choose an entrepreneur, leader, or cultural icon with whom they relate (i.e., a person who had similar experiences in his/her life as they have and faced similar challenges and setbacks etc.).

Students are required to publish their work using social media, celebrating diversity by creating and sharing a free and accessible source of inspiration and education for students all around the world. Students are also required to present a strategy for effectively communicating and promoting their work to the intended audience.

Groups will visit the National Portrait Gallery during the fifth week of the semester and will present their reports during the fourteenth week of the semester.

*Attribution*

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# Food, Health, & Race: Reduced Inequalities

KATYA SALMI AND VEDHAM KARPAKAKUNJARAM

Cohort 2018-2019

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Biology and Sociology to achieve SDG #10: Reduced Inequalities.

## Learning Objectives

- Biology: Identify the structure and functions of macromolecules important to living things
- Sociology: Identify components of culture and understand how structural inequalities impact individuals

## Purpose/Rationale

This active learning practice is designed to improve your academic skills, increase community connections, and improve social justice for our community.

## Instructions

### *Assignment 1: Food*

#### Outputs:

- Biology: A Report and a Reflective summary in e-Portfolio
- Sociology: Written assignment & poster design
- Service Learning: Students will design a poster that includes their favorite food and information about either

the nutritional value of the dish or information on food resources available to Montgomery College students on all campuses.

### *Assignment 2: Disparate Health Outcomes*

#### Learning Outcomes:

- Biology: Analyze and interpret experimental results to reinforce biological principles
- Sociology: students will understand how social factors contribute to disparate health outcomes
- Link to Reduced Inequalities: Social factors contribute to disparate health outcomes amongst different populations based on race, gender, socio-economic class, etc...

#### Outputs and Service Learning:

- Biology: Analyze data from Montgomery County's Health Services (DHHS) and write a report.
- Sociology: Original qualitative and/or quantitative research; wiki on Social Determinants to health in Montgomery County; the work will be collaborative.

### *Assignment 3: Race*

#### Learning Outcomes:

- Biology: Apply basic mechanisms of heredity to predict inheritance of traits.
- Sociology: Students will gain a practical understanding of race as a social construct.
- Link to Reduced Inequalities: In many countries, including the US, race is a significant barrier to equality. Understanding the fallacy of race can help students think more comprehensively and broadly about how to reduce inequalities.

#### Outputs and Service Learning:

- Biology and Sociology: Analysis of data relating to skin pigmentation in different parts of the world.
- Sociology students will compare race categories found in Montgomery County census data over three-five different time periods and create a series of tweets or a short video that captures their understanding of race as a social construct.
- Biology students will have a summative assessment on the activity (group presentations) and write a reflective summary in e-Portfolio.

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# Feminization of Migration: Creating a Website to Raise Awareness about Trafficking of Women and Children

GADIS ARIVIA EFFENDI

Cohort 2020-2021

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Sociology; Anthropology; and Psychology to achieve SDG #10: Reduced Inequalities.

## Learning Objectives

In this learning assignment students will be looking at migration processes with a female focus and looking deeper into poverty, inequality, discrimination, and exploitation.

## Purpose/Rationale

Students will choose a country of study and discuss the relevance of the theory of intersectionality in the context of the feminization of migration, particularly the vulnerability of female migrant workers to gender-based violence.

## Instructions

This activity is a group activity that consists of 3-5 groups. The task is to develop a web page highlighting an understanding of migration's feminization. The assignment has a three step process. First, the students watch and discuss the documentary film “Don't Buy Don't Sell” (2003), the case study of Indonesia by Gadis Arivia Effendi. Link: <https://youtu.be/GSgn5OdIDVs>

Then, students learn from a prominent guest lecture, Ms. Shandra Woworuntu, an active activist working in trafficking of women and girls in the US. After watching the documentary film and engaging with a guest lecture, students choose a country of study of female migrant workers (Caribbean, South America, Asia, Africa, US and Europe). Finally, students create a website that contains data from credible sources, labor standards, selective videos, interviews with organizations working on the subject of female migrant workers, and design or plan an awareness campaign on campus. The website should include a reflection page of how the assignment affected the students and what needs to be done to reduce inequality within and among countries.

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## II: SUSTAINABLE CITIES AND COMMUNITIES

### MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE



#### Targets & Indicators

**11.1** By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums

**11.1.1** Proportion of urban population living in slums, informal settlements or inadequate housing

**11.2** By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

**11.2.1** Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities

**11.3** By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries

**11.3.1** Ratio of land consumption rate to population growth rate

**11.3.2** Proportion of cities with a direct participation structure of civil society in urban planning and management that operate regularly and democratically

**11.4** Strengthen efforts to protect and safeguard the world's cultural and natural heritage

**11.4.1** Total expenditure (public and private) per capita spent on the preservation, protection and conservation of all cultural and natural heritage, by type of heritage (cultural, natural, mixed and World Heritage Centre designation), level of government (national, regional and local/municipal), type of expenditure (operating expenditure/investment) and type of private funding (donations in kind, private non-profit sector and sponsorship)

**11.5** By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations

**11.5.1** Number of deaths, missing persons and persons affected by disaster per 100,000 people

**11.5.2** Direct disaster economic loss in relation to global GDP, including disaster damage to critical infrastructure and disruption of basic services

**11.6** By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management

**11.6.1** Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities

**11.6.2** Annual mean levels of fine particulate matter (e.g. PM2.5 and PM10) in cities (population weighted)

**11.7** By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities

**11.7.1** Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities

**11.7.2** Proportion of persons victim of physical or sexual harassment, by sex, age, disability status and place of occurrence, in the previous 12 months

**11.a** Support positive economic, social and environmental links between urban, per-urban and rural areas by strengthening national and regional development planning

**11.a.1** Proportion of population living in cities that implement urban and regional development plans integrating population projections and resource needs, by size of city

**11.b** By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels

**11.b.1** Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030a

**11.b.2** Number of countries with national and local disaster risk reduction strategies

**11.c** Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials

**11.c.1** Proportion of financial support to the least developed countries that is allocated to the construction and retrofitting of sustainable, resilient and resource-efficient buildings utilizing local materials



# Urban Planning in a Global Context - PowerPoint Presentation by a Sustainable Community Development Specialist

NATHAN ZOOK AND JAMES FURGOL

Cohort 2019-2020

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Political Science and History to achieve SDG #11: Sustainable Cities and Communities.

## Learning Objectives

You will become a community development specialist.

## Purpose/Rationale

This active learning practice is designed to improve your academic skills, increase community connections, and improve social justice for our community.

## Instructions

You will become a community development specialist. Choose a neighborhood in Maryland or the District of Columbia. Using US census data, property tax databases, and local historical archives, trace the economic and/or cultural changes that have occurred over the past several decades. Try to find official demographic data related to variables such as education levels, income levels, ethnic identity, home ownership, etc. In addition, interview at least 5 individuals who have lived in the neighborhood for more than 10 years and at least 5 individuals who have lived in the neighborhood

for less than 2 years. Use Google Earth along with photos you have taken and tables/graphs you have created to produce a PowerPoint presentation to be given in class regarding the changes. Feel free to include video footage of your interviewees (with their permission). Discuss how the neighborhood “developed” or changed during this time-frame. What are the costs/benefits of these changes for various stakeholders in the community? To what degree is continued development sustainable or problematic? Finally, based on your analysis, make recommendations for sustainable development in this community. What institutions or continued changes would be optimal for this neighborhood and its current residents? What changes should be avoided? After your classroom PowerPoint presentation has been graded, you may be asked to present this at community or academic events (with your permission) to highlight the interconnection between academic research and sustainable communities.

## Format Requirements

### Additional Expectations

- A list of interviewees with a description of their life in the neighborhood should be submitted
- A list of citations including scholarly sources, databases, archival sources, data websites, etc. should also be submitted
- The classroom PowerPoint presentation should include a minimum of 7 slides and be within the 8-10 minute range
- The presentation should be divided into three roughly equal sections. Please give equal time to each of the following:
  1. description of the neighborhood changes
  2. assessment of the costs/benefits of development
  3. recommendations for future sustainable development in the community

### *Key Takeaways*

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# 12: RESPONSIBLE CONSUMPTION AND PRODUCTION

## ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS



### Targets & Indicators

**12.1** Implement the 10-year framework of programmes on sustainable consumption and production, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries

**12.1.1** Number of countries with sustainable consumption and production (SCP) national action plans or SCP mainstreamed as a priority or a target into national policies

**12.2** By 2030, achieve the sustainable management and efficient use of natural resources

**12.2.1** Material footprint, material footprint per capita, and material footprint per GDP

**12.2.2** Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP

**12.3** By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses

**12.3.1** Global food loss index

**12.4** By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment

**12.4.1** Number of parties to international multilateral environmental agreements on hazardous waste, and other chemicals that meet their commitments and obligations in transmitting information as required by each relevant agreement

**12.4.2** Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment

**12.5** By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse

**12.5.1** National recycling rate, tons of material recycled

**12.6** Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle

**12.6.1** Number of companies publishing sustainability reports

**12.7** Promote public procurement practices that are sustainable, in accordance with national policies and priorities

**12.7.1** Number of countries implementing sustainable public procurement policies and action plans

**12.8** By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature

**12.8.1** Extent to which (i) global citizenship education and (ii) education for sustainable development (including climate change education) are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment

**12.a** Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production

**12.a.1** Amount of support to developing countries on research and development for sustainable consumption and production and environmentally sound technologies

**12.b** Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products

**12.b.1** Number of sustainable tourism strategies or policies and implemented action plans with agreed monitoring and evaluation tools

**12.c** Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities

**12.c.1** Amount of fossil-fuel subsidies per unit of GDP (production and consumption) and as a proportion of total national expenditure on fossil fuels



# Creative Approaches to Reducing Global Plastic Contamination

CHRISTINA GENTILE AND CORY NEWMAN

Cohort 2018-2019

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Spanish and Chemistry to achieve SDG #12: Responsible Consumption and Production.

## Learning Objectives

Investigate how poor recycling practices are impacting rivers, ponds, the ocean or the earth and the consequences this can have on ocean life and on human health.

## Purpose/Rationale

This active learning practice is designed to improve your academic skills, increase community connections, and improve social justice for our community.

## Instructions

### *Part 1*

View two of the following documentaries listed below where recycling practices (or lack thereof) and their impacts throughout the world are discussed. Take note of any (5 or so) topics, places, global impacts, etc. that strike you as fascinating, important, extraordinary, or simply touch you on a personal level. What jumped out at you? Why?

- Plastic Paradise: The Great Pacific Garbage Patch (This video is copyrighted material.)
- Plastic Planet (This video is copyrighted material.)
- A Plastic Ocean (This video is copyrighted material.)
- Straws (trailer) (This video is copyrighted material.)
- Plasticized (This video is copyrighted material.)
- Bag It: Is your Life Too Plastic? (This video is copyrighted material.)

### *Part 2A*

As demonstrated in part one, in many parts of the world, here in the U.S. and abroad, the recycling practices of plastic materials has not always been taken seriously or has been overlooked by the consumer. Many activists and organizations around the world have taken an interest in solving the issue of plastic contamination. Write a 2-3 page research paper focusing on what has been done and what is currently being done to address these concerns. Taking into account what you have found, provide an alternate solution or solutions that could reduce the amount of plastic waste throughout the world. Looking at your solution(s), how would you share your vision to encourage its implementation on a local and global level? What is the greatest impact you foresee it will have for people, the environment, and the world as a whole? Cultivating responsible use and recycling practices of plastic products:

### *Part 2B*

Investigate how poor recycling practices are impacting rivers, ponds, the ocean or the earth and the consequences this can have on ocean life and on human health. Look up several articles, blogs, videos and/or contact people locally (ex.: an industry, a university) to learn more about the impact of recycling practices in your community, the Spanish-speaking country you selected or other areas of the world. Then, working with a partner, combine the research you have found to create an informational pamphlet, video or social media site to raise awareness and to communicate the impact good and poor recycling practices can have on society, both in your local community and the specific Spanish-speaking country you selected. Photo Journal of Local Recycling Practices of Plastics: Pictures and Thoughts:

### *Part 2C*

As you move about your daily life (or travel to a park, visit downtown D.C., go for a hike, etc.) take careful observation of your surroundings. Take notice of where recycling practices, particularly of plastic products (bottles, bags, plastic wrappers, straws, etc.), have been good or bad. Use your phone or a camera to take pictures of these recycling practices. Then, using PPT, Prezi or another technological presentation mode, create a photo journal using the pictures from the observations you made. Under each picture note the location and provide a caption. To conclude your presentation, include a short paragraph (4-5 sentences) about how these practices are having an impact on the surrounding community or region, what could/should be done differently and what you personally could do to have an impact.

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# 13: CLIMATE ACTION

## TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS



### Targets & Indicators

**13.1** Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

**13.1.1** Number of deaths, missing persons and persons affected by disaster per 100,000 people

**13.1.2** Number of countries with national and local disaster risk reduction strategies

**13.1.3** Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies

**13.2** Integrate climate change measures into national policies, strategies and planning

**13.2.1** Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication, biennial update report or other)

**13.3** Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

**13.3.1** Number of countries that have integrated mitigation, adaptation, impact reduction and early warning into primary, secondary and tertiary curricula

**13.3.2** Number of countries that have communicated the strengthening of institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions

**13.a** Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible

**13.a.1** Mobilized amount of United States dollars per year starting in 2020 accountable towards the \$100 billion commitment

**13.b** Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities &lt;br&gt; &lt;br&gt;\* Acknowledging that the United Nations Framework Convention on Climate Change is the primary international, &lt;br&gt;intergovernmental forum for negotiating the global response to climate change.

**13.b.1** Number of least developed countries and small island developing States that are receiving specialized support, and amount of support, including finance, technology and capacity-building, for mechanisms for raising capacities for effective climate change-related planning and management, including focusing on women, youth and local and marginalized communities

# Climate Action Infographic

SEAN WHITCOMB

Cohort 2020-2021

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Biology to achieve SDG #13: Climate Action

## Learning Objectives

Explain main factors which contribute to climate change.

## Purpose/Rationale

The United Nations has identified 17 Sustainable Development Goals that are designed to be “blueprint to achieve a better and more sustainable future for all.” In this assignment you will focus on Goal #13: Climate Action.

Climate scientists have determined that the climate is changing mainly due to human activity, especially carbon emissions. These emissions come from three main sources: agriculture, transportation, and energy.

You will need to create an infographic that educates the public about one of these three main factors that contribute to climate change. You will use the Piktochart website to create your infographic.

## Instructions

*Research your topic*

1. Decide whether you want to focus on agriculture, transportation, or energy for your infographic.
2. Research the ways that your chosen factor affects climate change in general.

3. Research specifically how this factor plays a role in your state's carbon footprint. Here are some example of questions to consider:

- a. What kinds of food are grown in your state and what farming methods are used?
- b. What are the main forms of transportation in your state?
- c. Where does your state get most of its energy from?

4. Keep track of the sources you use in your research. You will need to cite at least three sources at the end of your infographic.

### *Set up an account with Piktochart*

1. Go to the Piktochart website and click the Start For Free button.

2. Set up an account using Google, Facebook, or an email address. Reply to the confirmation message that will be sent to your email account (if you signed up using email).

3. Sign in and answer the questions to set up a new account.

4. Click the Create new button and select Infographic.

5. You will see several templates that can be used to make an infographic. Choose any template you like, but make sure it will be easy to edit so it includes all the required elements for this assignment. Piktochart allows you to create up to 5 free infographics, so you can play around with a few templates and see what you like best.

6. Watch this 5-minute video on YouTube. It will go over the main steps for creating an infographic. Follow the steps in the video to create all the components in the assignment listed below.

### *Create your infographic*

1. The template you use may be too large or too small to fit all the information. You can add, delete, and resize the "blocks" to fit your needs. There is no required length, but it should be large enough to cover all the required information without crowding.

2. Give your infographic a title that clearly states the purpose.

3. Write a short paragraph or bulleted list that gives some general background about the climate factor you are addressing (agriculture, transportation, or energy).

4. Include some data (with numbers) about your factor and its role in climate change.

5. Write at least three short paragraphs or lists explaining how the role of your chosen factor in your state's carbon footprint. Put these in your own words, just like you would in an essay. NO QUOTES!

6. Insert at least one image to accompany each paragraph or list. The image should be directly related to the information in that section. Use the icons provided by Piktochart or use images you are allowed to use for free. This website explains how to find such images. DO NOT pull images from a normal Google Images search.

7. List three or more sources at the end of the infographic. You don't need to put them in MLA or APA format; just include the name of the website and a link. Wikipedia shouldn't be used as a source for this, but it's a good place to find links to other sources.

8. Your infographic should be quick and easy to read (no long paragraphs), while still being thorough and getting all the important points across.

9. Your infographic should be visually appealing so it catches the eye.

10. When your infographic is complete, click the Download button and select Medium size. DO NOT select the "Download as blocks" option. Click the Download as PNG button and save the file on your computer.

11. Submit the infographic.

## Format Requirements

N/A

### *Attribution*

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# Taking Action on Climate Change

SEAN WHITCOMB

Cohort 2020-2021

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Biology to achieve SDG #13: Climate Action

## Learning Objectives

Identify policies to fight climate change.

## Purpose/Rationale

This will be your second assignment on the topic of the UN Sustainable Development Goal #13: Climate Action. In your first assignment, you identified one factor for which societal change is needed to help fight climate change (agriculture, transportation, or energy). In this assignment you will identify a policy that can be implemented to create change for your chosen factor. Then you will write a letter or make a video directed at a decision maker in which you advocate for the policy you have identified.

## Instructions

### *Part 1. Policy research*

Use the internet and/or library databases to identify some proposed governmental policies related to your chosen climate factor that could have a positive impact on climate change. For example, if you chose agriculture, look for laws

that have been proposed to make agriculture more sustainable. The policies could be at any level from your city to your state to the federal government.

Choose one policy from those that you researched that you support and would like to see implemented. Identify a group of decision makers that you would need to convince to vote for this policy. For example, if your policy is about a local city issue, you would likely need to persuade your city council. If it is a nationwide policy, you would need to target the U.S. Senate or House of Representatives.

Now find the person who represents you at the appropriate level of government:

- If you're advocating for a policy at the federal or state level, search the 270toWin website to find the contact information for your members of Congress or state representatives. Make sure you select the correct level of government using the checkmarks below the map.
- If you're advocating for a policy at the city government level, you'll need to do a general internet search to find the contact information for your city council members.

### *Part 2. Advocate for your chosen policy*

Now that you've identified a policy and a decision maker to target, you will write a letter or create a video trying to persuade the decision maker to adopt this policy. The body of the letter will need to be at least 300 words. The video will be in the form of public comments made at a government meeting and will need to be 2-3 minutes long.

Follow these directions if you're writing a letter:

1. Use this sample letter as a guide for how to write your letter.
2. Keep the tone of the letter civil and polite.
3. Address the letter to your chosen decision maker.
4. Write one paragraph introducing yourself and explaining why you are concerned about this issue.
5. Write one paragraph explaining the facts that support your position. Think about the things you included in your infographic on this topic. In this paragraph you should explain why your chosen factor (agriculture, transportation, or energy) plays a role in climate change.
6. Write one or more paragraphs providing three reasons why the decision maker should support the policy you have chosen.
7. End the letter with "Sincerely," and your name.

Follow these directions if you're creating a video:

1. Use this video as a guide for how to give public comments at a government meeting.
2. Record your video using any software you prefer. On Windows, you can use the Camera app. On Mac, you can use QuickTime. On your phone, you can use the built-in camera app.
3. Address the decision maker as if you were speaking to him or her at a public meeting. Be polite and civil.
4. Introduce yourself and explaining why you are concerned about this issue.
5. Spend a minute or so explaining the facts that support your position. Think about the things you included in your infographic on this topic. In this portion you should explain why your chosen factor (agriculture, transportation, or energy) plays a role in climate change.
6. Spend at least one minute providing three reasons why the decision maker should support the policy you have chosen.
7. Conclude the video by thanking the decision maker for their time.

## Format Requirements

N/A

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# Green Ideology in Practice: Following the Energy Stream

KARL T. SMITH

Cohort 2020-2021

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Political Science and Earth Science to achieve SDG #13: Climate Action.

## Learning Objectives

By the end of the semester you should gain an understanding of about a dozen different ideologies. But political ideologies are not meant to stay in classrooms. They are meant to be utilized in the real world.

## Purpose/Rationale

The Final Project is designed for you to think about practical applications of your ideology, or, to look at our world and a world problem through the lens of a political ideology.

## Instructions

One such ideology that is growing in importance is Environmentalism. In fact, environmentalism/climate change is a central component of the United Nation’s Sustainable Development Goals. Many countries have incorporated environmental goals into their national policies. For example, Germany is completely revamping energy production, and eliminating use of fossil fuels. Denmark is curtailing off-shore oil production.

For this project, you will need to follow the energy stream for Washington DC or Maryland, and, if possible, Montgomery County. In other words, what are the sources of the power we use every day?

## Format Requirements

You will be making an infographic to illustrate your findings. A good tool to use for making an infographic:  
<https://piktochart.com>

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# 14: LIFE BELOW WATER

## CONSERVE AND SUSTAINABLY USE THE OCEANS, SEAS AND MARINE RESOURCES FOR SUSTAINABLE DEVELOPMENT



### Targets & Indicators

**14.1** By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution

**14.1.1** Index of coastal eutrophication and floating plastic debris density

**14.2** By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans

**14.2.1** Proportion of national exclusive economic zones managed using ecosystem-based approaches

**14.3** Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels

**14.3.1** Average marine acidity (pH) measured at agreed suite of representative sampling stations

**14.4** By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated

fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics

**14.4.1** Proportion of fish stocks within biologically sustainable levels

**14.5** By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information

**14.5.1** Coverage of protected areas in relation to marine areas

**14.6** By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation

**14.6.1** Progress by countries in the degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing

**14.7** By 2030, increase the economic benefits to Small Island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism

**14.7.1** Sustainable fisheries as a percentage of GDP in small island developing States, least developed countries and all countries

**14.a** Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries

**14.a.1** Proportion of total research budget allocated to research in the field of marine technology

**14.b** Provide access for small-scale artisanal fishers to marine resources and markets

**14.b.1** Progress by countries in the degree of application of a legal/regulatory/policy/institutional framework which recognizes and protects access rights for small-scale fisheries

**14.c** Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of The Future We Want

**14.c.1** Number of countries making progress in ratifying, accepting and implementing through legal, policy and institutional frameworks, ocean-related instruments that implement international law, as reflected in the United Nations Convention on the Law of the Sea, for the conservation and sustainable use of the oceans and their resources

# 15: LIFE AND LAND

## PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION, AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS



### Targets & Indicators

**15.1** By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements

**15.1.1** Forest area as a proportion of total land area

**15.1.2** Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type

**15.2** By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally

**15.2.1** Progress towards sustainable forest management

**15.3** By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world

**15.3.1** Proportion of land that is degraded over total land area

**15.4** By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development

**15.4.1** Coverage by protected areas of important sites for mountain biodiversity

**15.4.2** Mountain Green Cover Index

**15.5** Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species

**15.5.1** Red List Index

**15.6** Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed

**15.6.1** Number of countries that have adopted legislative, administrative and policy frameworks to ensure fair and equitable sharing of benefits

**15.7** Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products

**15.7.1** Proportion of traded wildlife that was poached or illicitly trafficked

**15.8** By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species

**15.8.1** Proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species

**15.9** By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts

**15.9.1** Progress towards national targets established in accordance with Aichi Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011-2020

**15.a** Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems

**15.a.1** Official development assistance and public expenditure on conservation and sustainable use of biodiversity and ecosystems

**15.b** Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation

**15.b.1** Official development assistance and public expenditure on conservation and sustainable use of biodiversity and ecosystems

**15.c** Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities

**15.c.1** Proportion of traded wildlife that was poached or illicitly trafficked

# 16: PEACE, JUSTICE AND STRONG INSTITUTIONS

**PROMOTE PEACEFUL AND INCLUSIVE SOCIETIES FOR SUSTAINABLE DEVELOPMENT, PROVIDE ACCESS TO JUSTICE FOR ALL AND BUILD EFFECTIVE, ACCOUNTABLE AND INCLUSIVE INSTITUTIONS AT ALL LEVELS**



## Targets & Indicators

**16.1** Significantly reduce all forms of violence and related death rates everywhere

**16.1.1** Number of victims of intentional homicide per 100,000 population, by sex and age

**16.1.2** Conflict-related deaths per 100,000 population, by sex, age and cause

**16.1.3** Proportion of population subjected to physical, psychological or sexual violence in the previous 12 months

**16.1.4** Proportion of population that feel safe walking alone around the area they live

**16.2** End abuse, exploitation, trafficking and all forms of violence against and torture of children

- 16.2.1** Proportion of children aged 1-17 years who experienced any physical punishment and/or psychological aggression by caregivers in the past month
- 16.2.2** Number of victims of human trafficking per 100,000 population, by sex, age and form of exploitation
- 16.2.3** Proportion of young women and men aged 18-29 years who experienced sexual violence by age 18
- 16.3** Promote the rule of law at the national and international levels and ensure equal access to justice for all
  - 16.3.1** Proportion of victims of violence in the previous 12 months who reported their victimization to competent authorities or other officially recognized conflict resolution mechanisms
  - 16.3.2** Unsensitized detainees as a proportion of overall prison population
- 16.4** By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime
  - 16.4.1** Total value of inward and outward illicit financial flows (in current United States dollars)
  - 16.4.2** Proportion of seized, found or surrendered arms whose illicit origin or context has been traced or established by a competent authority in line with international instruments
- 16.5** Substantially reduce corruption and bribery in all their forms
  - 16.5.1** Proportion of persons who had at least one contact with a public official and who paid a bribe to a public official, or were asked for a bribe by those public officials, during the previous 12 months
  - 16.5.2** Proportion of businesses that had at least one contact with a public official and that paid a bribe to a public official, or were asked for a bribe by those public officials during the previous 12 months
- 16.6** Develop effective, accountable and transparent institutions at all levels
  - 16.6.1** Primary government expenditures as a proportion of original approved budget, by sector (or by budget codes or similar)
  - 16.6.2** Proportion of the population satisfied with their last experience of public services
- 16.7** Ensure responsive, inclusive, participatory and representative decision-making at all levels
  - 16.7.1** Proportions of positions (by sex, age, persons with disabilities and population groups) in public institutions (national and local legislatures, public service, and judiciary) compared to national distributions
  - 16.7.2** Proportion of population who believe decision-making is inclusive and responsive, by sex, age, disability and population group
- 16.8** Broaden and strengthen the participation of developing countries in the institutions of global governance
  - 16.8.1** Proportion of members and voting rights of developing countries in international organizations
- 16.9** By 2030, provide legal identity for all, including birth registration
  - 16.9.1** Proportion of children under 5 years of age whose births have been registered with a civil authority, by age
- 16.10** Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements
  - 16.10.1** Number of verified cases of killing, kidnapping, enforced disappearance, arbitrary detention and

torture of journalists, associated media personnel, trade unionists and human rights advocates in the previous 12 months

**16.10.2** Number of countries that adopt and implement constitutional, statutory and/or policy guarantees for public access to information

**16.a** Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime &lt;br&gt;

**16.a.1** Existence of independent national human rights institutions in compliance with the Paris Principles

**16.b** Promote and enforce non-discriminatory laws and policies for sustainable development

**16.b.1** Proportion of population reporting having personally felt discriminated against or harassed in the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law



# Hear Me, See Me - How Rap Teaches Peace and Justice

ROXANNE BECKSTROM-STERMBERG

Cohort 2020-2021

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Reading to achieve SDG #16: Peace, Justice and Strong Institutions

## Learning Objectives

Make connections between rap and the social and economic conditions from which they emerge

Connect song lyrics to contemporary events

Integrate information from data charts with texts and videos to make thematic connections and create deeper understanding of racial injustice

## Purpose/Rationale

What’s the goal?

UN SDG #16 promotes peaceful and inclusive societies for sustainable development, providing equitable access to justice for all and building effective, accountable and inclusive institutions at all levels. In 1982, a rap called “The Message” addressed these same equity gaps in an attempt to be seen and heard. However, the inequities persist today and many are fighting against systemic racism. This is a renewable assignment that is designed to enable a student to become an agent of change to further the conversation to be and do better through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, students will integrate the disciplines of reading, writing and hip-hop music to achieve SDG #16.

“Great teaching is about so much more than education; it is a daily fight for social justice.”  
— Secretary Arne Duncan

## Instructions

What can we do to address this?

Students will work together to suggest solutions or ideas to continue the conversation with bringing awareness that the same social injustices clearly addressed in the famous rap song, “The Message”, from 1982 are still currently happening in US cities today. After researching selected racial injustices spotlighted in “The Message”, student projects will emphasize the UN SDG #16 goals of delivering justice, combating corruption and ensuring inclusive participation in their local communities. The students will develop, share and implement their own anti-racist action plan in the form of

- writing and performing an original rap,
- protest art,
- poetry,
- or reporting on activism for racial equality on campus.

Materials

- “The Message” (hip-hop rap), articles and a timeline used in a lesson on racial justice.

### *Part 1—Before Reading Activities*

In more than 580 cities and towns across the United States, hundreds of thousands of Americans have gathered together to protest the police killing of an African American man named George Floyd in Minneapolis, Minnesota. Protestors’ calls for justice, police accountability, and for an end to the systemic racism deeply embedded in the laws, practices, and institutions of the United States mark some of the most widespread protests the country has seen in half a century.

1. Quick write (write about a page answering the following questions):

What have you seen or heard about the protests against the police killing of George Floyd? Do you view these protests as connected to the Black Lives Matter movement? What have you seen on social media or in the news? How have different people of varying backgrounds responded to the movement? What impact do you believe that Black Lives Matter has had on American society? Do you think that street protests have been or will be effective? What makes protest effective?

2. Protests are one way to respond to social injustice, but music is another form that can be listened to many times. According to OWN, “Music is an essential tool for change, and hip-hop legend will.i.am contributed a powerful message to the ‘Where Do We Go From Here?’ conversation.”

Listen to the rap by will.i.am, <https://www.youtube.com/watch?v=xig0Z580U6o>, and write the key points that the rapper conveys to his audience.

“Keep in mind when brothas start flexing the verbal skillz,  
it always reflects what’s going on politically, socially,  
and economically.” –Musician Davey D

3. Develop vocabulary for the anti-racist movement and social injustice. The Racial Equity Tools website explains,

“Words and their multiple uses reflect the tremendous diversity that characterizes our society. Indeed, universally agreed upon language on issues relating to racism is nonexistent. We discovered that even the most frequently used words in any discussion on race can easily cause confusion, which leads to controversy and hostility. It is essential to achieve some degree of shared understanding, particularly when using the most common terms. In this way, the quality of dialogue and discourse on race can be enhanced.”

Take for example, the term “white privilege”. These two words triggered violent reactions and create significant misunderstanding among many who are not familiar with the term “white privilege” as it has come to be used in the current discussion of race relations in this country.

The concept of white privilege does not say or claim anything about your own income level, the size of your bank account, how many jobs you have had, or how hard you have worked in your life; it does not say or claim anything about whether or not you as an individual are prejudiced against people of color.

I would like you to add one more layer to your thinking on the concept of “privilege.” Please read one of the articles I’ve found on the topic:

## Format Requirements

Gina Crossley-Corcoran, “Explaining White Privilege to a Broke White Person” ([https://www.huffpost.com/entry/explaining-white-privilege-to-a-broke-white-person\\_b\\_5269255?guccounter=1](https://www.huffpost.com/entry/explaining-white-privilege-to-a-broke-white-person_b_5269255?guccounter=1)).

Peggy McIntosh, “Unpacking the Invisible Knapsack” (<https://www.racialequitytools.org/resourcefiles/mcintosh.pdf>.)

“What is White Privilege, Really?” by Cory Collins

<https://www.tolerance.org/magazine/fall-2018/what-is-white-privilege-really>

“The Evolution of Racism” by Ben Zimmer in The Atlantic 2020

<https://www.theatlantic.com/culture/archive/2020/09/how-racism-made-its-way-into-dictionary-merriam-webster/>

[615334/?campaign\\_id=37&emc=edit\\_rr\\_20200905&instance\\_id=21944&nl=race%2Frelated&regi\\_id=109773973&segment\\_id=37510&te=1&user\\_id=2221bf8034f7eab8250aab8f639e9d3d](https://www.theatlantic.com/culture/archive/2020/09/how-racism-made-its-way-into-dictionary-merriam-webster/?campaign_id=37&emc=edit_rr_20200905&instance_id=21944&nl=race%2Frelated&regi_id=109773973&segment_id=37510&te=1&user_id=2221bf8034f7eab8250aab8f639e9d3d)

Once you’ve had time to consider these articles, respond to the following questions:

1. How does the concept of Privilege – or lack of it – connect to Place and Personal Identity?
2. Is white privilege racism?
3. What can you infer about the author’s interests and values based on this text?
4. What is this text “saying”? Cite several pieces of textual evidence to support your analysis

*Attribution*

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# 17: PARTNERSHIPS

## STRENGTHEN THE MEANS OF IMPLEMENTATION AND REVITALIZE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT



### Targets & Indicators

**17.1** Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection

**17.1.1** Total government revenue as a proportion of GDP, by source

**17.1.2** Proportion of domestic budget funded by domestic taxes

**17.2** Developed countries to implement fully their official development assistance commitments, including the commitment by many developed countries to achieve the target of 0.7 per cent of ODA/GNI to developing countries and 0.15 to 0.20 per cent of ODA/GNI to least developed countries; ODA providers are encouraged to consider setting a target to provide at least 0.20 per cent of ODA/GNI to least developed countries

**17.2.1** Net official development assistance, total and to least developed countries, as a proportion of the

Organization for Economic Cooperation and Development (OECD) Development Assistance Committee donors' gross national income (GNI)

**17.3** Mobilize additional financial resources for developing countries from multiple sources

**17.3.1** Foreign direct investments (FDI), official development assistance and South-South Cooperation as a proportion of total domestic budget

**17.3.2** Volume of remittances (in United States dollars) as a proportion of total GDP

**17.4** Assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries to reduce debt distress

**17.4.1** Debt service as a proportion of exports of goods and services

**17.5** Adopt and implement investment promotion regimes for least developed countries

**17.5.1** Number of countries that adopt and implement investment promotion regimes for least developed countries

**17.6** Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism

**17.6.1** Number of science and/or technology cooperation agreements and programmes between countries, by type of cooperation

**17.6.2** Fixed Internet broadband subscriptions per 100 inhabitants, by speed

**17.7** Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed

**17.7.1** Total amount of approved funding for developing countries to promote the development, transfer, dissemination and diffusion of environmentally sound technologies

**17.8** Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology

**17.8.1** Proportion of individuals using the Internet

**17.9** Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the sustainable development goals, including through North-South, South-South and triangular cooperation

**17.9.1** Dollar value of financial and technical assistance (including through North-South, South-South and triangular cooperation) committed to developing countries

**17.10** Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda

**17.10.1** Worldwide weighted tariff-average

**17.11** Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020

**17.11.1** Developing countries' and least developed countries' share of global exports

**17.12** Realize timely implementation of duty-free and quota-free market access on a lasting basis for all least developed countries, consistent with World Trade Organization decisions, including by ensuring that preferential rules of origin applicable to imports from least developed countries are transparent and simple, and contribute to facilitating market access

**17.12.1** Average tariffs faced by developing countries, least developed countries and small island developing States

**17.13** Enhance global macroeconomic stability, including through policy coordination and policy coherence

**17.13.1** Macroeconomic Dashboard

**17.14** Enhance policy coherence for sustainable development

**17.14.1** Number of countries with mechanisms in place to enhance policy coherence of sustainable development

**17.15** Respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development Multi-stakeholder partnerships

**17.15.1** Extent of use of country-owned results frameworks and planning tools by providers of development cooperation

**17.16** Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries

**17.16.1** Number of countries reporting progress in multi-stakeholder development effectiveness monitoring frameworks that support the achievement of the sustainable development goals

**17.17** Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships Data, monitoring and accountability

**17.17.1** Amount of United States dollars committed to public-private and civil society partnerships

**17.18** By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts

**17.18.1** Proportion of sustainable development indicators produced at the national level with full disaggregation when relevant to the target, in accordance with the Fundamental Principles of Official Statistics

**17.18.2** Number of countries that have national statistical legislation that complies with the Fundamental Principles of Official Statistics

**17.18.3** Number of countries with a national statistical plan that is fully funded and under implementation, by source of funding

**17.19** By 2030, build on existing initiatives to develop measurements of progress on sustainable

development that complement gross domestic product, and support statistical capacity-building in developing countries

**17.19.1** Dollar value of all resources made available to strengthen statistical capacity in developing countries

**17.19.2** Proportion of countries that (a) have conducted at least one population and housing census in the last 10 years; and (b) have achieved 100 per cent birth registration and 80 per cent death registration

# Blankets for babies- Using blankets to comfort children displaced by unforeseen circumstances in their country

ANDREA FOSTER AND MARY E. ROBINSON

Cohort 2018-2019

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Business and English/Reading to achieve SDG #17: Partnerships for the Goals;

## Learning Objectives

This interdisciplinary assignment has three steps. The first part of the project you will identify a crisis in any part of the world and examine its impact on children. Secondly, you will develop a project to collect blankets in either Montgomery County, Maryland or the entire United States (U.S.) for distribution to children impacted in these areas. Finally, you will use your reflection paper as a basis for developing a business plan.

## Purpose/Rationale

This active learning practice is designed to improve your academic skills, increase community connections, and improve social justice for our community.

## Instructions

Often when we listen to the news, we hear stories of countries that are torn by war; we hear stories of people fleeing their country due to poverty, gang violence and other hardships. Often the casualties of these occurrences are children

who are torn or separated from their parents because of violence, poverty or other hardships. This interdisciplinary assignment has three steps. The first part of the project you will identify a crisis in any part of the world and examine its impact on children. You can document your findings using social media such as Facebook or Instagram to capture the imagery of the crisis as well as to report and document your findings.

Secondly, you will develop a project to collect blankets in either Montgomery County, Maryland or the entire United States (U.S.) for distribution to children impacted in these areas. You will document the project (you can use imagery on social media, or you can record your information in a journal). By the end of the project, you should be able to discuss your findings including the impact that this project had on those in the U.S. involved in the project as well as the children impacted.

Finally, to align the assignment with your Introduction to Business course (BSAD 101) or your Critical Reading, Writing, and Research at Work (ENGL 103) course, you will use your reflection paper as a basis for developing a business plan (BSAD 101) or a proposal (ENGL 103 for a non-profit or for-profit business). One aspect of your business plan or proposal should include a suggestion for acquiring drop off bins to collect the blankets.

## Format Requirements

The basic framework for a business plan or the proposal will be provided by your professor.

### *Attribution*

Blankets for babies- Using blankets to comfort children displaced by unforeseen circumstances in their country is licensed by Andrea Foster, Montgomery College and Mary E. Robinson, Montgomery College under the [Creative Commons Attribution 4.0 International \(CC-BY\)](https://creativecommons.org/licenses/by/4.0/)

# COMBINED PROJECTS

This part holds the projects that tackle more than one unsdg goal.



# English 3390: Final Project

JENNIFER HARDWICK

Cohort 2019-2020

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of English; SDG #1 and SDG #4 to achieve SDG #01: No Poverty

## Learning Objectives

Intervention: the act of interfering in outcomes or processes, particularly to prevent harm or improve functioning.

This assignment invites you to make a creative intervention by using your knowledge and skills to improve outcomes, processes, and/or relationships. Your project should engage with themes and texts from this course (resistance, resurgence, de/colonization, gender and sexuality, reconciliation and-or land) and at least one United Nations Sustainable Development Goal in order to create a product that intervenes in a dialogue or community of your choosing. Possible creative interventions could include (but are not limited to): teaching/learning resources, art (visual, creative writing etc), or media (a webpage, article, or digital resource). In addition to the final product, you will have to hand in a critical reflection (2-3 pages) that explains your product and purpose. A critical reflection sheet will be provided to help guide this writing. The United Nations Sustainable Development Goals can be found here: <https://sustainabledevelopment.un.org/?menu=1300>

## Purpose/Rationale

This active learning practice is designed to improve your academic skills, increase community connections, and improve social justice for our community.

Instructions:

PART I : Workshops As part of this project, we will do two in-class group workshops. The first will be before your proposal is due. During the first workshop, you will be grouped based on your project focus to discuss vision, scope, and resources. You will meet with the same group again after receiving proposal feedback from me. During your second

workshop, you will discuss structure, problem solve challenges, and share what you have learned. Your grade for the workshops will be based on your preparation, your active participation, and brief in-class reflective writing exercises.

PART II: 4 page project proposal. Consider this your “pitch.” What are you trying to accomplish, and how do you expect to accomplish it? Your proposal should have the following sections:

- Background (What dialogues are you intervening in? What texts are you examining? Why is this needed?)
- Overview (What are you creating? What tools and scholarly sources will be necessary? )
- Methodology/Responsibilities (How will you attend to your responsibilities to both the material and the communities you seek to engage? How will you negotiate issues such as copyright, privacy, and Ownership/Control/Accesses/Possession? Are there any particular ethical or logistical challenges you face?)
- Timeline (How will you create what you intend to create? What is your plan?)
- Outcomes (What do you seek to accomplish? Who are you trying to reach?)

PART III: Final Project and Reflection. Your project should be complete and polished, and its purpose should be clear to your audience. Your reflection should be clear, concise, and critically-engaged; please write in full paragraphs as your best “scholarly-self.”

## Format Requirements

Format requirements and guidance is included in the Assignment Instructions, above.

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# International Students

CANDY HO; PAMELA IP; AND MARY WALL

Cohort 2019-2020

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Math; Marketing; Education Studies to achieve SDG #03: Good Health and Well-Being; SDG #10: Reduced Inequalities; 10.2 : By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status

## Learning Objectives

This is a renewable assignment that is designed to strengthen the relationship between domestic and international students in your community through the framework of the United Nations Sustainable Development Goals (SDGs).

## Purpose/Rationale

For this work, you will be integrating the disciplines of education, marketing and numeracy towards achieving SDG #3: improve good health and well-being and SDG #10: reduce Inequality within and among countries. Specifically, Target 10.2: By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status. This active learning practice is designed to create awareness of resources in the community while sharing your personal experiences (as both domestic and international students). This interdisciplinary assignment has 4-parts:

# Instructions

## *Part 1*

Assess current situation Watch Video “All that We Share”: <https://youtu.be/jD8tjhVOITc> and then in your small groups, share your experiences regarding the following:

- What was your initial experience applying to post-secondary education? How did you learn the steps to apply to KPU/MC)? What challenges did you experience and how did you overcome them? Did you do it yourself or did you have help (siblings, parents, friends, agents?)
- Share how each of you arrived at school on the first day? Did your parents drop you off, did you come on your own by car, transit, or did you just get come from the airport?)
- What was your first day on MC/KPU campus and recall as many details as possible, as if you were there back on your first day. What thoughts and feelings rose for you throughout the day? Assignment: Drawing from your own experience, write a 250-word reflection paper on how your experience and challenges might impact students, considering both domestic and international viewpoints.

## *Part 2*

Review an Open Teaching and Learning Project from CMNS 1140 This Introduction to Business Communications class (CMNS 1140) spent the term studying barriers to international student success.

<https://docs.google.com/document/d/1zUxfC9u69U84em2M4ZTt4rLvDIYKSN4SgOaKWMfnWDM/edit#>

- Review the table of contents. Based on your discussion from part 1, what topics attracted you?
- Teams will vote on a topic with which to proceed.

## *Part 3*

Choose your own adventure assignment.

Teams will be formed with both domestic and international students. (4-6 students per team) A progress report(s) will be submitted and each team has a rotating project lead. With your team, brainstorm ideas

## *Part 4*

Shift in Mindset (Diversity and Inclusivity) ‘

You’ve now had a chance to work in teams in this class, and likely in other classes as well. This final component is designed to help you develop appreciation for the need to be inclusive whilst work

# Format Requirements

Assignment (choose one):

1. Conduct research that shows the positive correlation in working in or being part of a diverse team. What could be done in the classroom itself to improve interaction. How can our campus environment be improved to make all students feel welcome. OR

2. Research and explain how to create an inclusive team. What could be done in the classroom itself to enhance inclusion. How can our campus environment be improved in order to make all students feel included.

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# Career Connections Assignment: Educator Guide

CANDY HO; PAMELA IP; AND MARY WALL

Cohort 2019-2020

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Math; Marketing; Education Studies to achieve SDG #04: Quality Education; SDG #8: Decent Work and Economic Growth; #4.4: By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship • 8.5: By 2030, achieve full and productive employment and decent wo

## Learning Objectives

This assignment is designed to help you increase the likelihood of career planned happenstance through making purposeful connections with others, both face-to-face and online. Career planned happenstance describes an individual’s ability to:

- Generate, recognize, and incorporate unplanned/chance events into their career development
  - See unplanned/chance events as inevitable, desirable, and as opportunities for learning
  - Be open-minded, curious, and develop an exploratory attitude to increase their chances of being exposed to unexpected/chance events

## Purpose/Rationale

BEFORE THE ASSIGNMENT: Setting the context

Show an introductory video and discuss the following questions: SFU Career Services: Wondering Where Your Degree Might Lead You?: <https://www.youtube.com/watch?v=7OqhUrXhaAM>

- The video discussed factors that influence your career goals and decisions you make about school and work. What factors (personal, environmental, social, cultural, physical, etc.) factors

do you think would impact you most? Why?

- What actions can you take to stay alert of these factors, so you can make informed career decisions?

Share some statistics to demonstrate the world of work is constantly changing, along with our own career goals and aspirations:

- “Canadians can expect to hold roughly 15 jobs in their careers.” (Workopolis, 2014, para. 8)

<https://careers.workopolis.com/advice/how-many-jobs-do-canadians-hold-in-a-lifetime/>

- “85% of the jobs that today’s learners will be doing in 2030 haven’t been invented yet.”

(Institute for the Future, 2017, p. 14)

[https://www.delltechnologies.com/content/dam/delltechnologies/assets/perspectives/2030/pdf/SR1940\\_IFTFforDellTechnologies\\_Human-Machine\\_070517\\_readerhigh-res.pdf](https://www.delltechnologies.com/content/dam/delltechnologies/assets/perspectives/2030/pdf/SR1940_IFTFforDellTechnologies_Human-Machine_070517_readerhigh-res.pdf)

There’s also the Monte Carlo Fallacy. Scenario: 5 reds show up in a row in roulette. Do you bet on black or red next?

Often a typical response would be that we should surely bet on black since there is no way it could happen a 6th time”. Though we are less likely to get 6 reds vs. 1 black and 5 reds in any order – we have equal chance to see RRRRRB and RRRRRR – since the events are independent.

We can easily draw meaning from events that are in fact independent. Basing our decisions on independent events is tempting – but not logical. Not landing that job one or two or three times can make us think we are never going to get the job or moreover that we are not capable of performing the duties of the position. We may have years of study, and 3 instances of failure could unravel the confidence of our training. In fact, it can be argued that learning from your failed interview experiences would help improve your future interview performances.

Considering these statistics, along with various factors we each face, when it comes to managing our careers successfully, we need to be cognizant that:

- Career planning is a lifelong learning process that involves making countless decisions
- Career indecision may be sensible, even desirable
- Anxiety about planning for the future is normal
- Planned happenstance doesn’t mean leaving to chance

(Note: Educator may want to ask students to think of personal examples, or provide their own, to illustrate each bullet point.)

With this in mind, the assignment can now be introduced.

AFTER THE ASSIGNMENT: Debrief the experience

Share in small groups how you went about compiling your list of career contacts. Discuss the following questions:

• Who did you choose to have career conversations with, and why? What were the main lessons you gathered from these conversations (as well as how you organized and facilitated these conversations)?

- What worked and what didn’t work? Generate tips and strategies to share with the rest of the class.
- Identify one or two actions you will now take as a result of this assignment towards your career journey.

To conclude, show video on Jim Carrey talking about his dad (<https://youtu.be/gC8XJenmURY>); the main message connects nicely with SFU introduction video in the sense that we can’t control our dream jobs’ existence or even that of our “safety” job. As such, it is important for us to practice the five critical skills of career planned happenstance, which are:

- Curiosity: explore new learning opportunities
- Persistence: continue trying even when you run into setbacks
- Flexibility: be open to changing attitudes and situations
- Optimism: see new opportunities as being possible and attainable
- Risk taking: have the courage to do something even when you’re not sure how or if it will turn out

## Instructions

### COMPONENT 1: Develop your career contact list

Compile a list of 250 individuals who might play a contributing role to your career. These can be individuals already within your network (e.g., friends, classmates, family, co-workers), or individuals you would like to meet (e.g., local business leaders, contacts within your network). When identifying individuals, consider diversity and find people with varying perspectives. For example, is there someone whose life experience might be different from your own that you'd like to learn more about? Who might be able to positively challenge your perspective?

To keep track of your connections, organization is key. You may use MS Excel or apps such as HubSpot. In your list, include their first and last names, contact information (email and/or phone), and why you think they might be helpful to your career. Students who were thoughtful about who they include in their contact list and benefitted the most from the assignment. For instance, a former student in KPU's EDUC 4100 (Post-University Transition) course who aspired to become a Meteorologist included the Chief Meteorologist from a local news network on her list as a possible career contact.

A note on privacy: As you are compiling people's contact information, please be respectful of their privacy and not share their information (e.g., put your contact list publicly online)

### COMPONENT 2: Connect with your career contacts

#### Part A

Reach out to everyone on your contact list by sending them a message. You may choose to start with a generic templated message that you adapt depending on the individual.

Your message may include COMPONENT 3: Reflect on your experience

Reflecting on the tasks you conducted for this project, answer the following questions in any of these formats:

- a written paper (3-4 pages excluding appendices)
- a video (3-4 minutes in duration)
- an infographic

## Format Requirements

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# Visual Rhetoric: Persuading your audience

JENNIFER HARDWICK

Cohort 2019-2020

## Introduction

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## Learning Objectives

### *Part I: Photo Assignment*

I will be grading you on:

- Your understanding and use of rhetorical devices (Do you understand the devices? Have you used them effectively?)
  - The relevance of your photograph to your argument (Does it further your goals?)
  - The structure of your paragraph
  - The clarity of your writing (Is your writing error free? Are your connections clear? Have

you used a scholarly tone?)

### *Part II: Presentation*

I will be grading you on:

- The clarity and organization of your presentation
  - The depth of your analysis

- Your presentation skills (eye contact, voice projection etc)
- Your ability to answer questions

## Purpose/Rationale

As we have discussed this semester, there are many ways to share information and make arguments! This assignment asks you to use your knowledge of rhetorical appeals and visual rhetoric devices in order to persuade your audience (in this case the classroom community) of your final essay argument. Remember, your final essay topics are:

- 1) What can Canadian colleges and universities do to support diversity?
- 2) What can Canada do to better protect wildlife?
- 3) What can Canada do to address poverty and homelessness?

Instructions: Part I: Photo Assignment

Weight: 5%

Due Date:

Please take a photograph that will help persuade your audience of your final essay's thesis. Your photograph should include at least one appeal to ethos, pathos, or logos and it should make use of key elements of visual rhetoric (for example: colour, composition, symbols, and/or juxtaposition).

Feel free to be creative! And, please think carefully about being respectful. Avoid personal attacks (ad hominem) and harmful stereotypes (generalizations), and make sure you respect the privacy and dignity of your figures (if you use figures). You are welcome to edit your photograph and/or add text. Please keep your text to 1 or 2 phrases – remember, this is visual (not written) persuasion!

Part II: Presentation

Weight: 5%

Due Date:

You will give a 5 minute in-class presentation that provides an analysis of your piece of visual media. During your presentation you will: provide context for your topic and image; state your argument and g

## Format Requirements

### *Part I: Photo Assignment*

Your assignment should be handed in via your E-Portfolio along with a 1 paragraph overview (about 6-8 sentences). Your paragraph should explain your argument and goals (both implicit and explicit), the appeals you are making, and the rhetorical devices you have used to support your argument. Your paragraph should be should be written in a scholarly tone and carefully edited.

### *Part II: Presentation*

You must show your piece of visual media and you are welcome (but not required) to use powerpoint, handouts, cue cards, or other resources to organize your presentation.

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# Creative Interventions to Improve Outcomes, Processes, and/or Relationships

JENNIFER HARDWICK

Cohort 2019-2020

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of English (This instructor did not work in an interdisciplinary group). to achieve SDG #16: Peace, Justice and Strong Institutions SDG #1: No Poverty;SDG #2: Zero Hunger;SDG #3: Good Health and Well-Being;SDG #4: Quality Education;SDG #5: Gender Equality;SDG #6: Clean Water and Sanitation;SDG #7: Affordable and Clean Energy;SDG #8: Decent Work and Economic Growth;SDG #9: Industry, In

## Learning Objectives

none provided

## Purpose/Rationale

This assignment invites you to make a creative intervention by using your knowledge and skills to improve outcomes, processes, and/or relationships. Your project should engage with themes and texts from this course (resistance, resurgence, de/colonization, gender and sexuality, reconciliation and-or land) and at least one United Nations Sustainable Development Goal in order to create a product that intervenes in a dialogue or community of your choosing. Possible creative interventions could include (but are not limited to): teaching/learning resources, art (visual, creative writing etc), or media (a webpage, article, or digital resource). In addition to the final product, you will have to hand in a critical reflection (2-3 pages) that explains your product and purpose. A critical reflection sheet will be provided to help guide this writing. The United Nations Sustainable Development Goals can be found here: <https://sustainabledevelopment.un.org/?menu=1300>

## Instructions

### *PART I: Workshops*

As part of this project, we will do two in-class group workshops. The first will be before your proposal is due. During the first workshop, you will be grouped based on your project focus to discuss vision, scope, and resources. You will meet with the same group again after receiving proposal feedback from me. During your second workshop, you will discuss structure, problem solve challenges, and share what you have learned. Your grade for the workshops will be based on your preparation, your active participation, and brief in-class reflective writing exercises.

### *PART II: 4 page project proposal.*

Consider this your “pitch.” What are you trying to accomplish, and how do you expect to accomplish it? Your proposal should have the following sections:

- Background (What dialogues are you intervening in? What texts are you examining? Why is this needed?)
  - Overview (What are you creating? What tools and scholarly sources will be necessary? )
  - Methodology/Responsibilities (How will you attend to your responsibilities to both the material and the communities you seek to engage? How will you negotiate issues such as copyright, privacy, and Ownership/Control/Accesses/Possession? Are there any particular ethical or logistical challenges you face?)
  - Timeline (How will you create what you intend to create? What is your plan?)
  - Outcomes (What do you seek to accomplish? Who are you trying to reach?)

### *PART III: Final Project and Reflection.*

Your project should be complete and polished, and its purpose should be clear to your audience. Your reflection should be clear, concise, and critically-engaged; please write in full paragraphs as your best “scholarly-self”

## Format Requirements

n/a

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# Improving Outcomes, Processes and/or Relationships: A digital media approach

JENNIFER HARDWICK

Cohort 2019-2020

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of English (This instructor did not work in an interdisciplinary team). to achieve SDG #16: Peace, Justice and Strong Institutions SDG #1: No Poverty;SDG #2: Zero Hunger;SDG #3: Good Health and Well-Being;SDG #4: Quality Education;SDG #5: Gender Equality;SDG #6: Clean Water and Sanitation;SDG #7: Affordable and Clean Energy;SDG #8: Decent Work and Economic Growth;SDG #9: Industry, In

## Learning Objectives

none provided

## Purpose/Rationale

This assignment invites you to make an intervention by using your knowledge and skills to improve outcomes, processes, and/or relationships. Scholarly and/or creative, your intervention uses digital media to engage in one or more of the United Nations Sustainable Development Goals . Please note that these goals are not mutually exclusive!

The goals are very broad, so you will want to think about the who/what/where/when/why in order to focus your assignment. More details about the goals can be found here: [https:// www.un.org/sustainabledevelopment/sustainable-development-goals/](https://www.un.org/sustainabledevelopment/sustainable-development-goals/)

## Instructions

There are three parts to your final project:

1. A 3-4 page project proposal. Consider this your “pitch.” What are you trying to accomplish, and how do you expect to accomplish it? Your proposal should have the following sections:

- Background (What dialogues are you intervening in? Why is this needed?)
- Overview (What are you creating? What tools and scholarly sources will be necessary?)
- Timeline/Methodology (How will you create what you intend to create? How will you be mindful of issues such as copyright, privacy, and Ownership/Control/Accesses/ Possession?)
- Outcomes (What do you seek to accomplish? Who are you trying to reach? What rhetorical appeals are you making to reach them?)
- Works Cited/Bibliography

Due:

Weight: 15%

2. Workshop. After I provide feedback on your proposals I will be placing you into groups of 3-4 members based on your project goals for an in-class workshop. This is your opportunity to share your knowledge with (and get feedback from) the classroom community. What have you learned through the process of researching and writing/creating? What are the strengths and weaknesses of your approach? Are there any challenges you are facing? Your workshop will be guided by Prof. Hardwick and it will include both discussion and editing. You will be given a list of materials to bring in advance.

Due:

Value: 5%

3. Final Project and Reflection. Your project should be polished and complete. Sources should be properly cited using MLA and/or digital (ie: links) guidelines. You must hand in a final reflection with your project.

Due: (via Moodle, unless otherwise indicated)

Value: 30%

## Format Requirements

Your assignment can take several different forms: it can be a learning resource such as a podcast, multimedia essay, or video that calls attention to particular issues; a digital tool for organizing, documenting, or archiving such as a timeline or map; or something entirely different! As you plan your approach, think carefully about your audience and goals, and consider the confines of your time and skills. Remember that simple can be very effective!

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# Research and Evidence Based Practice

MICHELLE A. PRENDERGAST AND GEETHA KADA

Cohort 2019-2020

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of English and Nursing to achieve SDG #3: Good Health and Well-Being and SDG #10: Reduced Inequalities.

## Learning Objectives

### *English:*

- Summarize and analyze college-level reading and texts
- Integrate information into essays by quoting, paraphrasing, and summarizing, based on assigned readings and texts
- Demonstrate standard citation and documentation procedures

### *Nursing:*

- Determine how nursing research contributes to evidence based nursing practice.
- Utilize evidence-based practice to plan and make decisions about patient care.

## Purpose/Rationale

This active learning practice is designed to improve your academic skills, increase community connections, and improve social justice for our community.

## Instructions

You will be required to watch one episode from the listed documentary videos, *Unnatural Causes: Is Inequality Making Us Sick?* You will access the episode in our Blackboard course under the Library Course Reserves Tab (you may have to use your M# to access the Library's materials from home). Then you will have to summarize your episode in a response of one (full) page in length and post your initial reflection discussion post. To write an effective summary, ensure that you fully understand what you have watched. You should take notes while watching the documentary; this will help you to identify main ideas and supporting details. After you have watched the documentary, review your notes and choose 3-4 main points from your notes and rewrite these main points in your own words.

## Format Requirements

### *Outputs:*

English: Summary paper.

Nursing : Reflection paper.

### *Attribution*

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# Portraits of Power: Women Leaders in African Art

CRISTIN CASH

Cohort 2020-2021

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Education; Art to achieve SDG #04: Quality Education SDG #5: Gender Equality;SDG #10: Reduced Inequalities;SDG #16: Peace, Justice and Strong Institutions;

## Learning Objectives

This assignment promotes the UN goals for Quality Education and Gender Equality through student investigation of the power of representation. Portraits of Women Leaders in African art provides rich context the development of skills in visual and data literacy, critical thinking, effective communication and self-reflection. Content can be adapted to any cultural context in order to empower women and help them envision themselves as leaders globally or in local communities.

### Purpose/Rationale

This active learning practice is designed to improve your academic skills, increase community connections, and improve social justice for our community.

Instructions: Assignment (student-led, peer reviewed, instructor as facilitator), designed as a full-semester project aligned with art history/visual literacy skill building embedded in the course content and schedule.

### *Part 1*

Select a work of art by an African artist that represents or depicts a woman leader. The artwork may be from any geographic region, time period, and cultural context – the decision is yours.

1. QUICK LOOK: Record your initial impression of the artwork (e.g. “What caught your eye?”). This should be done loosely while browsing for images but record it so that it can be looked up afterwards.

2. CLOSE LOOK: After you select your work of art, spend a few minutes looking more closely. Note your observations about the visual qualities and content of the artwork.

3. INITIAL RESPONSE: Write down what words, experiences, or associations come to mind as you reflect on the overall style and subject of the artwork.

4. DESCRIPTION: Now describe what you observe in the artwork and how the visual qualities evoke a response. Use specific visual evidence to write a short summary about why you chose this image, how it connects to our discussion of African women leaders/leadership, and one or more of the SDGs.

Online Activity: Students should post the image they have selected and Part 1 in the Class Discussion Forum.

### *Part 2*

5. CREATIVE INTERPRETATION: Write a very short story that can accompany your chosen image. Build your own narrative about the women leader represented in your artwork.

6. CONTEXTUALIZATION: Collect research related to the woman represented in your artwork and her culture of origin. Use at least two reliable sources. Make sure you cite your data sources.

7. DISCUSSION: Pair an image of your artwork with the data you have collected. Provide a summary of your research for peer review.

a. Describe what you think your artwork communicates about this African women leader

b. Explain your interpretation of how the visual qualities of the artwork represent these ideas

c. Describe the historical and cultural context of the artwork and its subject.

d. Make an argument if the artwork accurately or inaccurately represents the role, symbolism or context of the life and achievements of the subject.

e. Briefly, speak to how hearing from current African women leaders has changed your perspective on how you see the artwork as a representation of a historical woman leader.

8. CREATIVE RE-INTERPRETATION: Using your artwork, your knowledge about its subject and her culture of origin, and the research you have collected – it's time to tell a new story! (or adapt your previous one).

Create something new that brings your

## Format Requirements

[https://most.oercommons.org/courses/portraits-of-power-women-leaders-in-african-art?\\_\\_hub\\_id=7](https://most.oercommons.org/courses/portraits-of-power-women-leaders-in-african-art?__hub_id=7)

### *Attribution*

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# Ethnographic Mapping & Exhibit Curation

AMY CARATTINI

Cohort 2020-2021

## Introduction

You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Anthropology to achieve SDG #11: Sustainable Cities and Communities SDG #3: Good Health and Well-Being;

## Learning Objectives

Through the three parts of this assignment, the goal is to explore what makes “cities inclusive, safe, resilient and sustainable”. Currently, more than half the world’s population lives in urban environments. Yet, while cities may generate economic growth and innovation, they also can generate pollution and other kinds of imbalances.

Often, environmental, health and social issues intersect with one another, provoking the recognition of our shared humanity and our shared interests. You will probably want to begin your work on this assignment by observing what kind of social cohesion is actually happening in our own communities and what everyday people are doing to demonstrate resilience and inclusivity. Some examples may include art, murals, posturing and performative activities like skateboarding, busking, singing, parkour, dancing, protesting, etc.

Through these observations, what do you think needs to happen in order to create urban spaces that benefit the people who live in them? What variables would we need to change in order for more people to experience economic prosperity? What kinds of physical and social landscapes would we need to create in order to sustain an environment that nurtures everyone who lives there? For example, what kinds of public space, architecture, and cultural/artistic representations and performances can be recognized for their diversity and marginalized voices? What still needs to be built, repaired and imagined?

## Purpose/Rationale

This active learning practice is designed to improve your academic skills, increase community connections, and improve social justice for our community.

## Instructions

The following assignment is scaffolded to include three sections: 1) ethnographic mapping 2) a paper on sustainability 3) a class curated, virtual exhibit and individual reflection on visitor feedback.

### *Part 1: Ethnographic Mapping*

For this assignment, we will all contribute to a shared Google Earth Map where everyone will be responsible for documenting life in our communities by uploading descriptions, photos and videos that will help us to collectively understand and answer the above questions. You will need to upload a total of 3 photographs and/or pictures with accompanying video interviews (that you will conduct) that explore issues of economic, social and environmental sustainability within our communities.

You may start by exploring the specifics of what a healthy and productive, urban ecosystem would look like such as having good air quality, fresh water supply, and reduced pollution; however, you should also think about how this basic infrastructure impacts your community's social and economic health and well-being. Here are some questions to consider, but please do not limit yourself to these alone. I'm sure there are many more questions that you could engage in.

### *Part 2: Paper on Sustainability*

After all materials are uploaded, please take a look at the map we've collectively created and write a 5-7 page reflection on what you have learned based on our collective gaze at sustainability. In addition to analyzing our ethnographic map, you should also include materials from our class readings and discussions. Finally, please include a statistical chart that shows your interpretation of the issues through a counting of how many times you understand that specific issues came up. You can design the codes/themes within the chart however you want as long as you are interacting with the data we have collected (table, pie chart, graph, etc.). Your reflection should describe and explain your statistical portrait on urban sustainability within our shared communities.

### *Part 3: Class Curated Virtual Exhibit*

Now that we have created an ethnographic map of our community, our edge city, and you have each analyzed and interpreted our collective understandings of how sustainability works here, we are going to curate a virtual

## Format Requirements

*Attribution*

**Ethnographic Mapping & Exhibit Curation** is licensed by Amy Carattini, Montgomery College; ; , under the [Creative Commons Attribution 4.0 International \(CC-BY\)](#)

# Appendix A: Meeting Agendas

*United Nations Sustainable Development Goals Open Pedagogy Faculty Fellowship*

*Thursday, May 30, 2019*

*1:00 – 3:30 p.m. Eastern Standard Time Zone*

## AGENDA

TIME	TOPICS	LEAD
1:00 – 1:10	Welcoming Remarks	Dr. Michael Mills Prof. Shinta Hernandez Dr. Rajiv Jhangiani
1:10 – 2:00	Introductions of Fellowship Participants	ALL
2:00 – 2:15	The What and Why of Open Pedagogy	Dr. Michael Mills
2:15 – 2:30	Open Pedagogy in Practice	Dr. Rajiv Jhangiani
2:30 – 2:45	Results from the Inaugural Faculty Fellowship 2018	Prof. Shinta Hernandez
2:45 – 2:55	Discussion of Fellowship Materials	Prof. Shinta Hernandez
2:55 – 3:05	Q & A	ALL
3:05 – 3:25	Team Time	ALL
3:25 – 3:30	Closing Remarks and Next Steps	Dr. Michael Mills Prof. Shinta Hernandez Dr. Rajiv Jhangiani

*United Nations Sustainable Development Goals Open Pedagogy Faculty Fellowship*

*Thursday, June 6, 2019*

*1:00 – 3:30 p.m. Eastern Standard Time Zone*

*AGENDA*

TIME	TOPICS	LEAD
1:00 – 1:15	Welcoming Remarks	Dr. Michael Mills Prof. Shinta Hernandez Dr. Rajiv Jhangiani
1:15 – 3:00	Faculty/Student Presentations from 2018 Cohort <ul style="list-style-type: none"> <li>· Professor Christina Gentile (Spanish)</li> <li>Ø Ms. Callie Etches</li> <li>· Professor Ali Alavi (Business)</li> <li>Ø Ms. Evangeline Pergantis</li> <li>· Dr. Mary Robinson (English)</li> <li>Ø Ms. Djeza Kore or Ms. Helen Tark</li> <li>· Dr. Vedham Karpakakujaram (Biology)</li> <li>Ø Mr. Freddy Lane</li> </ul>	
3:00 – 3:05	Closing Remarks and Next Steps	Dr. Michael Mills Prof. Shinta Hernandez Dr. Rajiv Jhangiani
3:05 – 3:30	Team Time	ALL

*United Nations Sustainable Development Goals Open Pedagogy Faculty Fellowship*

*Thursday, June 13, 2019*

*1:00 – 3:30 p.m. Eastern Standard Time Zone*

**AGENDA**

<b>TIME</b>	<b>TOPICS</b>	<b>LEAD</b>
1:00 – 1:05	Welcoming Remarks	Dr. Michael Mills Prof. Shinta Hernandez Dr. Rajiv Jhangiani
1:05 – 1:50	Support Services for Faculty and Students	Ms. Christine Tracey Mr. Ed Cunningham Dr. Rajiv Jhangiani
1:50 – 2:20	Creative Commons Licensing	Dr. Rajiv Jhangiani
2:20 – 2:30	BREAK TIME	
2:30 – 2:40	Future Professional Development Opportunities	Dr. Michael Mills Prof. Shinta Hernandez Dr. Rajiv Jhangiani
2:40 – 3:10	Brief Updates from Teams	ALL
3:10 – 3:15	Closing Remarks and Next Steps	Dr. Michael Mills Prof. Shinta Hernandez Dr. Rajiv Jhangiani
3:15 – 3:30	Team Time	ALL

Thursday, August 1, 2019

1:00 – 3:30 p.m. Eastern Standard Time Zone

AGENDA

TIME	TOPICS	LEAD
1:00 – 1:05	Welcoming Remarks	Dr. Michael Mills Prof. Shinta Hernandez Dr. Rajiv Jhangiani
1:05 – 2:30	Faculty Team Presentations #1, 2, 3, 4	ALL
2:30 – 2:40	BREAK TIME	
2:40 – 3:25	Faculty Team Presentations #5, 6, 7	ALL
3:25 – 3:30	Closing Remarks and Next Steps	Dr. Michael Mills Prof. Shinta Hernandez Dr. Rajiv Jhangiani

Faculty Team Presentations:

1. Mary Beth Johnson (Education) and Mitchell Tropin (Communications): “Water, Water – Everywhere”
2. Mary Wall (Math), Candy Ho (Educational Studies), Pamela Ip (Marketing): “How Math, Marketing, and Education Can Enhance Health and Well-Being and Quality Education” \*
3. Zev Cossin (Anthropology), Kathy Dunster (Urban Ecosystems), and Michelle Franklin (Sustainable Horticulture): “Food For All” \*
4. James Furgol (History) and Nathan Zook (Political Science): “Urban Planning in a Global Context”
5. Michelle Prendergast (English) and Geetha Kada (Nursing): “Integration of Nursing and English Composition to Examine Health and Well-Being”
6. Jennifer Hardwick (English) and Greg Chan (English): “The Ethics of Intervention” \*\*
7. Andrea Niosi (Marketing): “Open Education for a Better World: Consumer Behavior” \*\*

\* These faculty teams are comprised of MC and KPU colleagues who have partnered to create their renewable assignments.

\*\* These presentations are by KPU colleagues.

# Appendix B: Assignment Template

## United Nations Sustainable Development Goals Open Pedagogy Faculty Fellowship

### Assignment Template

1. Assignment Title\*

*Describe the Assignment not the course. Example: Mapping Food Access in Our Neighborhood*

2. Author 1\*

*Type name as you would like it to appear on the assignment. Example: Dr. J. Jones*

3. Author 1 Institution\*

*Select your institution*

4. Author 2

*Type name as you would like it to appear on the assignment. Example: Dr. J. Jones*

5. Author 2 Institution

*Select your institution*

6. Author 3

*Type name as you would like it to appear on the assignment. Example: Dr. J. Jones*

7. Author 3 Institution

*Select your institution*

8. Cohort year\*

*Select your cohort year*

9. Which primary goal will be the focus of your assignment?\*

For more information visit: <https://sdgs.un.org/goals>

10. Within the above SDG which specific target does your assignment focus on?

<https://sdgs.un.org/goals>: Click on the goal and select targets and indicators.

11. Other than the primary goal indicated in #9, is the assignment focused on any additional UN SDG(s)? If so, which one(s)?

For more information visit: <https://sdgs.un.org/goals>

12. Introduction text to include in all assignments. Fill in the blanks in the final sentence.\*

*You are a part of a global effort to increase access to education and empower students through “open pedagogy.” Open pedagogy is a “free access” educational practice that places you – the student – at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of \_\_\_\_\_ and \_\_\_\_\_*

*Example text: Sociology; Biology (up to three disciplines)*

13. Assignment Learning Objectives\*

*What do you want students to learn?*

14. Purpose/Rationale of the Assignment\*

*How will the knowledge, skills, or activities be useful in the students’ major, career, civic, or personal life?*

*Example text: “This active learning practice is designed to improve your academic skills, increase community connections, and improve social justice for our community.”*

15-17. Assignment Instructions\*

*Describe the components of the assignment clearly. Make the key steps in your assignment explicit and include the sequencing of assignment steps. Are there tips to include that would help student be successful?*

18. Format Requirements

*If you have specific parameters for the assignment (e.g., length, size, formatting, citation conventions), specify them here.*

19. Would you be willing to share any existing supporting information including assessment criteria, rubrics, checklists, or schedules for scaffolded assignments and feedback to students?\*

*If yes, a link will be provided via email to upload additional content.*

20. Which Creative Commons copyright license will you apply to this work?\*

*For information about or to choose which license is best for you visit: <https://creativecommons.org/licenses/> or <https://chooser-beta.creativecommons.org/>*

# Conference Presentations and Community Contributions

Baker, D., Hernandez, S., Mills, M., & Nizami, U. (September 2021). [An International Faculty Fellowship Focusing On Open Pedagogy and the UN SDGs](#). Presentation at Open Education Global 2021: UNESCO OER Recommendations, Virtual.

Hernandez, S., Mills, M., (August 2021). [United Nations Sustainable Development Goals Open Pedagogy Fellowship](#). OEG Voices: A podcast from Open Education Global.

Bloom, M., Baker, D., Ghanem, C., Hernandez, S., Mills, M., (April 2021). [The UN Sustainable Development Goals Open Pedagogy Fellowship: Promoting change across disciplines and institutions](#). Presentation at Cascadia Open Education Summit, Virtual.

Hernandez, S., Mills, M., (April 2021). The Award Winning SDG Open Pedagogy Fellowships Maryland Open Source Textbook OER Summit.

Jhangiani, R., Mills, M., & Hernandez, S. (2019, November). [An International Open Pedagogy Fellowship in Support of the UN Sustainable Development Goals](#). Presentation at the 2019 Open Education Global conference, Milan, Italy.

Jhangiani, R. (2018, October). [Open Educational Practices in Service of the Sustainable Development Goals](#). Presentation at OpenCon 2018 United Nations, New York, USA.