Vancouver Island University & the United Nations Sustainable Development Goals

Prepared by: Mount Arrowsmith Biosphere Region Research Institute

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Acknowledgements

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<tr>
<td>ACER</td>
<td>Awareness of Climate Change through Education and Research</td>
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<tr>
<td>AERL</td>
<td>Applied Environmental Research Laboratories</td>
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<tr>
<td>AIFY</td>
<td>All in for Youth</td>
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<td>BCCIC</td>
<td>British Columbia Council for International Cooperation</td>
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<td>BCGEU</td>
<td>British Columbia Government and Service Employees’ Union</td>
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<td>BRiCC</td>
<td>Building Resilience in Coastal Communities</td>
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<td>CBAIR</td>
<td>Community Based Applied Interdisciplinary Research</td>
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<tr>
<td>CIEL</td>
<td>Centre for Innovation &amp; Excellence in Learning</td>
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<td>CIHR</td>
<td>Canadian Institutes of Health and Research</td>
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<td>CIMS</td>
<td>Cleaning Industry Management Standard</td>
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<td>Cascadia Urban Analytics Cooperative</td>
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<td>FFE-</td>
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<td>FIRE</td>
<td>Northern Feminist Institute for Research and Evaluation</td>
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<td>GCC</td>
<td>Green Chemistry Commitment</td>
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<td>GLORIA</td>
<td>Global Observational Research Initiative in Alpine Environments</td>
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<td>HRRWO</td>
<td>Human Rights and Respectful Workplace Office</td>
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<td>ICSS</td>
<td>International Centre for Sturgeon Studies</td>
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<td>ISE</td>
<td>Institute for Sustainable Energy</td>
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<td>IT</td>
<td>Information Technology</td>
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<td>Kisii National Polytechnic</td>
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<td>LEED</td>
<td>Leadership in Energy and Environmental Design</td>
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<td>SRCA</td>
<td>Scholarship, Research and Creative Activity</td>
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SSHRC – Social Sciences and Humanities Research Council

TRU – Thompson Rivers University

VIU - Vancouver Island University

U of A – University of Alberta

UBC – University of British Columbia

U of C – University of Calgary

UN – United Nations

UNBC – University of Northern British Columbia

UNC – University of Northern Colorado

U of O – University of Ottawa

U of T – University of Toronto

UVic – University of Victoria

UW – University of Waterloo

WCH – Women’s College Hospital

WEST – Workplace Essential Skills and Training program

WHIMIS – Workplace Hazardous Materials Information System

WHO – World Health Organization

WPC – Wildlife Preservation Canada

WUSC – World University Service of Canada
Introduction

Vancouver Island University

Vancouver Island University (VIU) was established in 1936 when Jack Macready started an automotive training program with eight students in his garage: two years later, the Dominion-Provincial Youth Training Centre was formed (Vancouver Island University [VIU], 2018-a). Over the years as new courses were added the institution was renamed as Malaspina College, and then as Malaspina University-College in recognition of new abilities to offer degree programs (VIU, 2018-b). The institution was renamed as Vancouver Island University in 2008 (VIU, 2018-a; VIU, 2018-b). Today, the University consists of four campuses located on the west coast of British Columbia (BC). Three campuses, Nanaimo, Parksville-Qualicum, and Cowichan, are located on the east coast of Vancouver Island, and the fourth is located on mainland BC in Powell River (VIU, 2018-c). VIU campuses are located within the unceded territories of Coast Salish First Nations – Powell River, within Tla’amin First Nation territory (Tla’amin Nation, 2018), Parksville-Qualicum Centre within the Snaw-naw-as First Nation territory (VIU, 2018-b), Cowichan within Cowichan Tribes territories, and Nanaimo, VIU’s main campus, within Snuneymuxw First Nation territory (VIU, 2018-c).

VIU prides itself in being a place that contributes to stronger and healthier communities through fair access, the provision of regionally relevant programming, and a focus on student and staff achievement (VIU, 2018-b). In order to realize this, VIU is constantly reviewing its current sustainability status and seeking ways to continually improve, ever increasing the view of VIU as a desirable place to work and learn (VIU, 2018-e, Policy 11.02).

The United Nations & the Sustainable Development Goals

The United Nations (UN) was established in 1945 and is an international organization of 193 member states (United Nations, 2018-a). The work of the UN is guided by its founding charter, which outlines how the UN will take action on global issues relating to sustainability, human rights, climate change, and food production (United Nations, 2018-a).

In 2000, the UN developed eight Millennium Development Goals (MDGs), which were intended to be globally achieved by 2015 (World Health Organization [WHO], 2018-a). The purpose of the MDGs was to commit “world leaders to [combating] poverty, hunger, disease, illiteracy, environmental degradation, and discrimination against women” (United Nations, 2018-b, para. 1). In 2015, the UN gathered at a 3-day summit to update the MDGs in an effort to “call for action by all countries, poor, rich and middle-income to promote prosperity while protecting the planet” (United Nations, 2018-c, para. 3). The summit was held at the UN headquarters in New York City and was considered a historic opportunity, bringing together over 150 world leaders to collaborate on the development of new goals that would improve the quality of life for all people (WHO, 2018-b). These new goals were dubbed the 17 Sustainable Development Goals (SDGs) and were adopted in 2015 (United Nations, 2018-c; Figure 1).
The SDGs are a part of the 2030 Agenda for Sustainable Development and are applicable to all countries (United Nations, 2018-c). The SDGs “recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests” (United Nations, 2018-d, para. 1). The SDGs are a call to all nations – regardless of economic status – to take action towards fostering the social, economic, and cultural prosperity of their citizens while simultaneously caring for and protecting the earth (United Nations, 2018-c; Figure 1). Accepted by all 193 member states of the UN, the SDGs are composed of 17 Goals which are then further divided into 169 targets; achievement of the goals and targets is evaluated through more than 230 indicators (WHO, 2018-b; United Nations, 2018-e). The indicators were developed to aid in the follow-up and review process at national, regional, and global levels (United Nations, 2018-f).

Figure 1. The 17 United Nations Sustainable Development Goals (United Nations, n.d.)

Although the SDGs are not legally binding on any individual nation or the UN, signatory governments are expected to take responsibility for creating national frameworks that work towards successfully achieving the 17 SDGs and meeting the affiliated targets and indicators by the year 2030 (United Nations, 2018-c). The countries involved in this initiative have the responsibility of reviewing their own progress and providing follow-up reports that ideally outline their successful implementation of the Goals (United Nations, 2018-c).

Although the 17 SDGs are often only understood as they relate to a national level, the cooperation of many different sectors will be essential for these ambitious Goals to be achieved. In fact, the informal summary of the 2015 UN Summit on Sustainable Development suggested just that:

*The engagement of stakeholders, including through partnership, was highly emphasised and over fifty partnership events were held during the Summit. The participation of development partners, including civil society organisations and the private sector, in the preparation of the SDGs and the 2030 Agenda*
has been unprecedented. In order to fully achieve the Agenda, it will be necessary to continue to be inclusive, bringing together stakeholders everywhere to be engaged in the Agenda’s implementation (United Nations, 2015, p. 1).

Project Objectives
With nations worldwide striving to meet the 17 UN SDGs by 2030, this study aims to investigate how an educational institution can play its part in helping Canada achieve the Goals (United Nations, 2018-b). The project is a collaboration between VIU’s Office of the President and Mount Arrowsmith Biosphere Region Research Institute (MABRRI), a research institute located at VIU’s Nanaimo campus that aligns its research goals with the University’s pillars of sustainability (VIU, 2018-f). This study has two primary objectives: (1) to examine what VIU is doing to currently meet the SDGs; and (2) to develop a list of recommendations that aim to assist the University in directing its efforts to continue to meet the SDGs in the future. In order to achieve these objectives, this report will review VIU’s educational and research foci, services, infrastructure, and community engagement initiatives. It will also include suggestions made by the VIU community and provide examples of initiatives implemented by other universities. Finally, the data collected to build this report has also guided the development of specific recommendations that showcases actions that VIU can take to continue to assist Canada in achieving the UN SDGs by 2030. These recommendations were presented to VIU’s Office of the President as a separate document.

Methodology

Preliminary Measures
To address the objectives of this project, a number of preliminary steps were taken. First, two representatives of MABRRI were sent to Montréal, Québec to attend a workshop at McGill University. This workshop, titled “Toward Meeting the Sustainable Development Goals: From Theory to Practice”, ran for three days in May of 2018 and was hosted by the Institute for the Study of International Development (McGill University, 2018). The main focus of the workshop was to provide participants with an understanding of the SDGs and how to implement the Goals into organizations and programs, along with educating participants on how to best measure and evaluate progress and success (McGill University, 2018).

Following the workshop, MABRRI’s research team conducted a detailed literature review to further their understanding of the SDGs. The purpose of the literature review was to investigate the context of the SDGs, what they are aiming to achieve, the current status of the Goals worldwide, and case studies outlining how other countries and universities have approached their implementation. The literature review allowed the research team to have an appropriate background understanding of the SDGs before they began applying these concepts to VIU.

As the SDGs are a global concept designed to address countries rather than organizations or educational institutions, the team had to first understand the SDGs in a context applicable to VIU. Since the Goals
themselves are broad and difficult to measure, the team focused its efforts on applying the Goals’ indicators to VIU. To do this, each indicator was analyzed and the team established a system to rank them as relevant, somewhat relevant, or not relevant/not applicable to VIU. The majority of indicators that were ranked not relevant or not applicable were not applicable to Canada in general – for example, one “not relevant” indicator was the accessibility for citizens to mobile networks (see Goal 9 in Appendix L). Those that were ranked as somewhat relevant included indicators that were more focused on a national or federal government level. Based on this ranking system, the team initially focused on how VIU is currently meeting the indicators that were ranked relevant and somewhat relevant. However, throughout the research process, the indicators originally deemed not relevant to VIU were re-evaluated to determine if any of the data collected could be applied to these indicators.

VIU Website Review

The next step of the project was to understand what VIU is currently doing to meet the 17 SDGs. An in-depth review of the VIU website was conducted. Program sites, course outlines, VIU policies and reports, event pages, and news articles, along with various other VIU webpages, were examined. This review helped to outline the known educational focus and initiatives occurring at VIU that tie into the SDGs.

The data collected throughout this process was gathered in Excel 2013. In the spreadsheet, indicators related to each SDG were listed in the rows, and columns were comprised of the different categories that the compiled data may fall under. For example, data was separated into programs, courses, policies, research, activities, services, and more (Appendix A).

Meetings with VIU Faculty and Staff

Following the review of VIU’s website, the research team facilitated meetings with various faculty and staff across the University. To meet with representatives from VIU’s satellite campuses, the research team traveled to the Cowichan and Powell River campuses, and made contact with the Parksville-Qualicum campus. The research team also met with the Deep Bay Marine Field Station, G.R. Pain Horticultural Centre, and Milner Gardens and Woodland. The purpose of these meetings was to further the understanding of what VIU is doing to meet the SDGs, as not all of VIU’s initiatives are listed on its website. As the results of the website review were considered, the team identified areas that required clarification or more information and determined programs or departments at VIU that may be able to help the team better understand how VIU is meeting each Goal. Lists of questions for each identified program or department were then developed and a representative was contacted. In some cases, data that was quantitative or easy to convey electronically, was gathered through email correspondence.

In an attempt to ensure the correct people were involved in the interviews, the head of each faculty or department was contacted first. For example, rather than reaching out to each Department Chair, the Faculty Dean was first contacted. In most cases, however, the Deans directed the research team to the Department Chairs or other representatives instead, preferring that the Chairs or other faculty members speak on behalf of their department in order to provide greater detail about the respective department.

Between August and October 2018, the team facilitated a total of 43 meetings with members of the VIU
community (Appendix B). An additional 43 meetings were held between May 2019 and January 2020, resulting in an overall total of 86 meetings (Appendix B). The meetings were semi-structured with questions based on a department or faculty’s relevance to a specific SDG indicator (Appendix C). These questions were developed to guide conversation and ensure sufficient data collection, while also offering space to allow for the introduction of new ideas and topics. However, as data collection proceeded into 2019, the research team used more of an open conversation approach to the meetings, where specific indicators were not always addressed. This way, interviewees were not confined by the pre-determined questions, allowing researchers to obtain more information that may be applicable to one or more of the SDGs. This was typically dependent on the background information collected prior to the meeting and what type of data the project team was looking for. Two researchers attended each meeting, with one person facilitating the conversation and the other taking notes.

Analysis of Other Initiatives
The researchers also investigated approaches to the SDGs at a sample of other universities in North America. The purpose of this step was to provide examples of other initiatives for attendants of the symposium, discussed below, in an effort to stimulate conversation, as well as to begin the development of recommendations to be provided to the VIU Office of the President. The initiatives are described in The Sustainable Development Goals & VIU section of this report and consist of examples of programs or events that Canadian or American universities are engaged in, that VIU can consider as it continues to work towards meeting the SDGs in the future.

Community Engagement
The research team hosted a handful of community engagement events with the purpose of addressing the second objective of this study: to develop a list of recommendations to assist the University in achieving the SDGs. A total of three events were held to collect data from the VIU community, including: The United Nations Sustainable Development Goals & VIU Symposium, Powell River Rural Cafe on the United Nations Sustainable Development Goals, and Accelerating the SDGs: Building VIU’s Roadmap to 2030. Each of the events are described in more detail below.

The United Nations Sustainable Development Goals & VIU Symposium
On October 18, 2018, MABRRI hosted The United Nations Sustainable Development Goals & VIU symposium in collaboration with the Office of the President. The symposium consisted of two presentations by experts on the topic of sustainability (Rebecca Mellett and Mark Holland); the speakers introduced the audience to the UN SDGs and described how they can be implemented at an educational institution. Following these presentations, the MABRRI research team presented on the data collected to date. Together, these three presentations provided the audience with context before engaging in a World Café style event (The World Café, 2018).

During the World Café, participants had the opportunity to sit at three of seven tables over a one-hour period. Each “table topic” was on two or three SDGs that were similar in focus. Goals 16 and 17 were
not included in the World Café discussion primarily due to limited space available at the venue – an eighth table would not fit in the space, so the two goals deemed most complex by the research team were removed from the World Café discussions.

At each table, one or two staff members of MABRRI were present to both facilitate the conversation and to take notes. A poster was displayed at each table outlining: indicator topics; how VIU is currently meeting the Goal; and examples of activities at other universities (see example in Figure 2). Table facilitators had supplementary notes on hand with additional information in case participants required further detail on what was presented on each poster. Participants were given approximately 20 minutes at each table to discuss their thoughts related to the table’s topic. Approximately 60 participants attended the first half of the symposium, which included the presentations, then approximately 30 individuals participated in the World Café.

**Figure 2. An example of the posters presented at the UN SDGs & VIU Symposium: Table 1 (Goals 1 & 2)**

**Powell River Rural Cafe on the United Nations Sustainable Development Goals**

On January 21, 2019, the research team hosted the Rural Café on the United Nations Sustainable Development Goals on the VIU Powell River campus. The event followed the World Café format, but due to its smaller size, was dubbed a Rural Café. The Rural Café had three main objectives: (1) increase awareness of the SDGs at VIU’s Powell River campus and within the surrounding community; (2) mobilize knowledge of sustainability initiatives that are working towards the SDGs; and (3) foster collaboration between VIU and community partners on sustainability initiatives to further the achievement of the SDGs. Additionally, engagement with Powell River community members and VIU Powell River students and staff acted as an opportunity to mobilize findings and recommendations for
this project. Approximately 30 guests attended the event, including interested VIU students and staff, community members, and local organizations.

The Rural Café opened with a presentation from the MABRRI research team, providing context and information on the SDGs and the research project, as well as highlighting some data the team had collected to date. Following this talk, participants engaged in a Rural Café to discuss their recommendations regarding actions VIU can take to further advance the SDGs. Rather than discussing each of the 17 SDGs, this activity allowed participants to provide recommendations on any of the SDGs that they felt were most urgent. The Rural Café followed the World Café method which is used to create and encourage discussion amongst small groups of people that lead to new ideas. Following the first breakout session, presentations by the City of Powell River, the Creative Economy and Innovation Initiative, FibreSpace and Eunoia, Plant-Based RHN, LIFT Community Services, and Climate Action Powell River were given. These presentations highlighted local initiatives that work towards the SDGs. This round of presentations was followed by another Rural Café session. The second breakout session concluded the event and discussions focused on what the Powell River community can do to further advance contributions to the SDGs.

Accelerating the SDGs: Building VIU’s Roadmap to 2030

The final community engagement event, Accelerating the SDGs: Building VIU’s Roadmap to 2030, was held during VIU’s Global Citizens Week, on February 6, 2020. The event was hosted in collaboration between MABRRI, VIU Sustainability, and VIU’s Faculty of International Education. Accelerating the SDGs had three main objectives: (1) highlight sustainability initiatives that are working towards the UN SDGs at VIU and other universities across Canada; (2) synthesize various perspectives on how VIU is meeting the SDGs; and (3) identify priority areas and create action items to further VIU’s achievement of the SDGs. The overarching purpose of this event was to allow VIU community members from various faculties and departments to identify the priority areas in which VIU needs to take action to help guide the University’s improvement in meeting the SDGs. The event was attended by 30 guests, and an additional 10 student volunteers participated in discussion and activities.

The event opened with presentations from an expert on the topic of sustainability (Mike Simpson, Executive Director of the BC Council for International Cooperation), followed by MABRRI researchers. The former provided an overview of the SDGs and the importance of sustainable development, with examples of how other organizations and universities across Canada are taking action. The latter provided an overview of MABRRI’s SDG research project at VIU and highlighted some of the ways in which VIU is currently meeting the SDGs.

For the two activities during this event, participants were encouraged to seat themselves in groups of 4 to 6 with a variety of representatives from different departments and faculties. The first activity used an “SDG wheel” (Figure 3) with a 4-point ranking system where the middle of the wheel was 1 (weak) and the outside of the wheel was 4 (strong). In their groups, participants were asked to rank VIU’s work on each of the 17 SDGs. After each group completed their SDG wheel, all ratings were placed on a larger version of the wheel at the front of the room using coloured dot stickers with the corresponding group.
number. This synthesized SDG wheel allowed for group analysis to identify which Goals VIU is lacking on, and which of those should be VIU’s main priority areas moving forward with sustainable development. On average, participants ranked VIU’s achievement of Goals 4 (Quality Education), 6 (Clean Water and Sanitation), and 10 (Reduced Inequalities) as relatively strong with a ranking of 3 on a scale of 1-4. The remaining goals all received a relatively low average ranking of 2 (Appendix U).

The second activity was focused on the Goals which received the lowest rankings to determine priority areas for improved SDG achievement at VIU. The main priority areas that were determined related to Goal 1 (No Poverty), Goal 2 (Zero Hunger), Goal 3 (Good Health and Wellbeing), Goal 12 (Responsible Consumption and Production), Goal 13 (Climate Action), and Goal 17 (Partnerships for Sustainable Development). Each group then decided on a Goal they would like to determine action items for. This was done by providing handouts that instructed participants to determine an action item that contributes to the respective SDG, as well as the approximate time, cost, and effort required to complete the action (Figure 4). Each group was encouraged to fill in as many of these handouts as possible during the allocated time, and a total of 21 recommendations were made.

To conclude the event, each group hung up their action items on the wall at the front of the room. All participants were then invited to cast three votes using a dotmocracy method\(^1\) to identify the most urgent, yet feasible action items that VIU should focus on moving forward. The five action items with the most dotmocracy votes included the creation of a sustainability office, providing cheaper yet nutritious food on campus, implementing a mandatory course in environmental literacy for all students and employees, eliminating the sale of products packaged in single-use plastic, and implementing an on-campus recycling centre and increasing the amount of compost and recycling bins available. The discussions and results of the activities at this event have been used to help guide the development of recommendations for this project.

**Data Analysis**

Data analysis for this project involved compiling and summarizing all data collected through the website review, the meetings with faculty and staff, and the three community engagement events. Data from the first two stages of this study – the website review and meetings with faculty and staff – were compiled together and summarized in table format for each of the 17 SDGs, with data that was collected in 2018 separated from data that was collected in 2019 (Appendices D to T). To showcase how VIU is meeting each Goal more broadly, this data was then summarized further to highlight research, departmental, or engagement-focused contribution to the SDGs. This summary, the discussions facilitated through community engagement events, and examples from other university initiatives together informed the development of this research report. Data collected from the community engagement events was used to develop actionable recommendations for VIU to accelerate future progress in achieving the SDGs. These recommendations have been provided to the Office of the President as a separate document.

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\(^1\) Dotmocracy is form of cumulative voting that uses dot stickers, where participants vote on their chosen options with a limited number of stickers (https://dotmocracy.org/what_is/)
Figure 3. SDG Wheel Activity used at Accelerating the SDGs: Building VIU’s Roadmap to 2030 as a rating system for VIU’s achievement of each SDG. SDGs are grouped into the 5 P’s of Sustainable Development – people, planet, prosperity, peace, and partnerships.

Figure 4. Action Item handout
The Sustainable Development Goals & VIU

Goal 1: End poverty in all its forms everywhere

Between 2000 – when the MDGs were developed – and 2016, the world reduced the number of people living in extreme poverty by half (United Nations, 2018-b; United Nations, 2018-g). However, there are still almost 800 million citizens around the globe that live in extreme poverty, subsisting on less than the equivalent of USD $1.90 per day (United Nations, 2018-g). Through the SDGs, the UN hopes to abolish extreme poverty by 2030 (United Nations, 2018-g).

While Canada may be considered a prosperous, developed nation, Canadians are not immune to extreme poverty (Government of Canada, 2018). In 2018 Canada published its first voluntary National Review outlining its achievement towards meeting the SDGs (Government of Canada, 2018). This document, titled Implementation of the 2030 Agenda for Sustainable Development: Voluntary National Review (2018), includes the term low-income in its analysis of Goal 1 (Government of Canada, 2018). Based on the Canadian Income Survey (2016), numbers show that 4.6 million Canadians (13%) are of low-income status (Statistics Canada, 2018-a).

Indicators for Goal 1 include topics relating to social protection systems, populations living below the national poverty line, and access to basic services (United Nations, 2018-h). It is difficult to say if a proportion of the VIU community is experiencing poverty or living below the international poverty line. However, student populations in Canada are generally of a low-income status as only 50% of Canadian students are employed (Statistics Canada, 2018-b). Combined with this is the fact that approximately 50% of students in Canada finish their Bachelor degrees with student debt (Statistics Canada, 2018-c). Therefore, for this Goal the research team investigated not only how VIU is educating on the topic of poverty and low income, but also what VIU is doing to aid individuals of our community who are in financial need.

How VIU currently contributes to Goal 1

In an attempt to provide assistance to low-income populations, VIU introduced the Tuition Waiver program in 2013, which provides cost-free post-secondary education to students who have spent some portion of their childhood in foster care (VIU, 2018-h). This program is supported by the BC Ministry of Children and Family Development and the BC Ministry of Advanced Education (VIU, 2019-c). Although the Tuition Waiver program is now mandatory across BC, VIU was the first post-secondary institution in the province to implement it (VIU, 2018-h). VIU’s 2016/17 Economic Impact of Vancouver Island University report acknowledges that child poverty in the region is significantly higher than the provincial and national averages (VIU, 2018-g). The Tuition Waiver program is one way that VIU can help to alleviate poverty in the region. The program has already had positive impacts: 70 students participated in the program in 2016/17 (VIU, 2018-h), 85 students participated in 2017/18, a total of 181 students have enrolled since the program launched in 2013, and 45 students have graduated through the program (VIU, 2018-fffff). In addition, VIU offers a wide range of scholarships and bursaries for students in financial need (Appendix D) (VIU, 2018-I).
VIU acknowledges that Indigenous youth typically face many barriers to education, with the primary barrier being related to financial limitations (Aboriginal Education and Engagement, personal communication, July 12, 2019). To address this, the MasterCard Foundation is supporting VIU through a commitment of $22.5 million over 5 years to deliver EleV, a program which expands initiatives that work with communities to remove educational barriers for Indigenous youth (MasterCard Foundation, 2019). The program matches funding that Band Offices provide to their youth for attending university, and also provides scholarships, social and cultural support through Indigenous Education Navigators, and career advising (Aboriginal Education and Engagement, personal communication, July 12, 2019; VIU, 2019-d; VIU, 2019-P).

To address housing concerns as they relate to poverty, VIU Residence has 10 buildings located at the Nanaimo campus offering a variety of accommodation including traditional dormitory-style housing, townhouses, and apartments (VIU, 2019-gggg). VIU Residence also maintains available space in order to offer emergency housing for students as a place to go if their regular housing situations fall through (Residence, personal communication, July 22, 2019). For Indigenous students who live in VIU Residence, flexible payments and timelines are offered and housing is always guaranteed for all first-year students (Residence, personal communication, July 22, 2019).

**Departmental focus**

Students at VIU are educated on the topics of poverty and low economic status in various departments across campus, such as: Anthropology, Sociology, Political Studies, English, History, Business Administration, Recreation and Tourism Management, Nursing, and Education (Appendix D). These departments teach VIU students about colonialism and social welfare in Canada, global economic issues such as economic inequalities, and social problems at local, provincial, national, and international levels (Appendix D).

Aside from increasing awareness of poverty-related issues, VIU is preparing these students to potentially work in fields related to poverty. For example, students who have graduated from the Sociology or Political Science departments at VIU have gone on to work in non-profit organizations, the volunteer sector, and in government agencies as policy analysts, developing policies related to poverty (Political Studies, personal communication, September 18, 2018; Sociology, personal communication, September 25, 2018). Additionally, Nursing students gain experience working in poverty through community placement practicums (Nursing, personal communication, July 4, 2019). These students often spend time in local Indigenous communities where they learn about the impacts of low income and when possible, help community members obtain employment (Nursing, personal communication, July 4, 2019).

A department that takes a more direct approach to addressing local poverty is the Workplace Essential Skills and Training (WEST) program, which is specifically designed for students with developmental and cognitive disabilities as well as those with self-disclosed barriers to employment (Workplace Essential Skills and Training, personal communication, September 19, 2019; VIU, 2018-JJ). The WEST program provides employability skills training and has proven successful among graduates, with at least 50%
obtaining employment and the rest going into volunteer work or continuing in post-secondary studies (Workplace Essential Skills and Training, personal communication, September 19, 2019).

Research

VIU’s Centre for Community Outreach and Care, located on the Nanaimo campus, provides applied and practical learning opportunities for VIU students (VIU, 2018-k). Under faculty supervision, student groups conduct research and develop programs that assist the community with issues related to youth at risk and in low socio-economic status (Appendix D) (VIU, 2018-k; Centre for Community Outreach and Care, personal communication, September 27, 2018).

Engagement

VIU also addresses poverty through numerous engagement initiatives (Appendix D). For example, in 2017 and 2018, the Sociology Students’ Union participated in Chew on This! as part of the International Day for the Eradication of Poverty (Bowns & Pastro, 2018). During the event, students joined people from all across Canada in handing out lunch bags containing apples and information, with the purpose of spreading awareness about poverty and food insecurity in Canada while actively working to eliminate it (Bowns & Pastro, 2018).

VIU also supports the United Way campaign that addresses a wide range of issues in the local community. In 2017, 169 VIU employees donated over $50,000 towards the campaign (VIU, 2018-l; University Relations, personal communication, October 4, 2018). These donations have supported 90 service agencies, funded 116 social service programs, and contributed to four research reports (VIU, 2018-m). In 2018, the United Way helped 52,177 people across Central and Northern Vancouver Island (VIU, 2018-m). Additionally, VIU participates in the Giving Tuesday initiative, which is a global movement for giving and volunteering that takes place each year after Black Friday, aiming to address community challenges (Giving Tuesday, 2020). In 2018, VIU raised over $300,000 from 350 donations to support students (VIU, 2019-e). In 2019, VIU participated in Giving Tuesday between November 15 and December 3, with a goal of receiving 400 donations, which was exceeded with 452 donations and totalled to over $400,000 (Advancement and Alumni, personal communication, February 28, 2020; VIU, 2019-e). The focus for 2019 donations was for student support in the form of additional scholarships and bursaries, offering over $175,000 in matching funds from partners such as Indspire, the VIU Alumni Association, and the VIU Foundation (VIU, 2019-e).

The Centre for Community Outreach and Care also engages in many initiatives related to poverty. For example, the I Have a Dream project is focused on reducing poverty and the cycle of poverty by helping youth set goals, such as pursuing post-secondary education (Appendix D) (Centre for Community Outreach and Care, personal communication, September 27, 2018). Each year, the Centre engages over 500 children in their programs (Centre for Community Outreach and Care, personal communication, September 27, 2018).

As previously mentioned, one of the UN indicators that measures poverty reduction looks at populations that live in households with access to basic services (United Nations, 2018-e). In addition to on-campus
housing at VIU, community housing needs are addressed through VIU’s First Nations Housing Manager Certificate program, which trains housing managers to assist communities with affordable, healthy, high quality, and well-maintained housing (VIU, 2019-f). Graduates of the program are qualified to work as on-reserve housing managers which have a direct impact on the health of families and communities and the potential to make long-lasting change in First Nations communities (VIU, 2019-f).

While it is clear that VIU aims to educate students on issues related to poverty or low-income, assist specific cohorts of students with access to education who would not otherwise be able to afford it, and assists with poverty-related issues in the surrounding region, researchers were unclear whether or not VIU was able to fully assess the poverty or low-income status of its students at each of its campuses. This was made clear in the recommendations from the VIU community in the section below.

Discussions from VIU community engagement events

Discussions at the World Café regarding Goal 1 focused heavily on integrating a more holistic and interdisciplinary approach to teaching about poverty. Participants also felt that resources and skills on campus should be used to help address issues related to poverty and low-income. For example, individuals suggested that the Building Construction programs could help build or repair homes for low-income individuals or families in the area (noting that the program already works with a wide range of community partners on building initiatives). This would not only work towards actively achieving this Goal but also provide the Trades students with hands-on real-world experience. Additionally, participants suggested that VIU should offer more options and pathways for parents or working individuals to be able to access post-secondary education. Discussions at both the World Café and the Powell River Rural Café focused on lowering tuition costs and providing low-cost child care services.

Participants were adamant that there are significant issues for parent students being able to afford education. A representative from the Arts & Humanities Faculty noted that parent students may drop out of university due to the high cost of living, education, and child care; this individual suggested that interviews should be conducted with non-returning students to understand why they were not continuing their education (Arts & Humanities, personal communication, September 11, 2018). Knowing the reasons why could help VIU take steps towards mitigating these issues in the future (Arts & Humanities, personal communication, September 11, 2018). Increasing family support for access to education was a suggestion that was also brought up at the Powell River Rural Café. Participants mentioned that child care services should be available across all VIU campuses to provide more support for parents pursuing post-secondary education.

Suggestions from participants at *Accelerating the SDGs* focused on increasing community outreach to address poverty in the local communities surrounding VIU. For example, one recommendation that received positive feedback from other participants was to implement a program similar to the co-curricular program, where students get credit for volunteering their time in the community with an aim to increase involvement and awareness for poverty in our own backyard.
Other university initiatives

The University of Alberta (U of A) is a part of the Community-University Partnership (CUP) for the Study of Children, Youth, and Families along with community agencies and organizations in Edmonton and across Alberta (University of Alberta, 2018-a). CUP started exploring the topic of poverty in Edmonton in 2001, which led to the Families First Edmonton (FFE) project that was launched in 2005 (University of Alberta, 2018-b). The FFE project addresses poverty through connecting low-income families with existing services (University of Alberta, 2018-b). The FFE went on to support the Mayor’s Task Force for the Elimination of Poverty in Edmonton and the United Way Alberta Capital Region’s Pathway Out of Poverty (University of Alberta, 2018-b). In addition, through CUP and the Faculty of Extension, U of A supports the All in For Youth (AIFY) initiative (University of Alberta, 2018-c). AIFY is a network of programs and services provided to families and youth that aims to help support students to be successful in school at five schools throughout the Edmonton area (University of Alberta, 2018-c). The program contends that risks and impacts associated with poverty can be reduced for secondary school aged youth and their families through access to mentorships, mental health services, family supports, school-based support, and nutritional support systems (University of Alberta, 2018-c).

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Over the last 15 years global hunger has declined from approximately 15% of the population (2000-2002) to approximately 11% (2014-2016) (United Nations, 2018-i). Food security, however, is still a major global concern and in Canada it varies widely between demographic cohorts and geographic locations (Government of Canada, 2018-a). Between 2011 and 2012, 8.4% of Canadian households (or more than 2 million people) reported experiencing food insecurity (Government of Canada, 2018-a). It is recognized that the federal, provincial, and territorial governments, along with non-governmental organizations, industry, and communities must work together to effectively address food insecurity in Canada (Government of Canada, 2018-a).

Hunger, in terms of undernourishment and food insecurity, is hard to recognize and difficult to measure at VIU. However, with many students potentially being of low-income status (Statistics Canada, 2018-c), one can surmise that issues of undernourishment and food insecurity are occurring at VIU. Indicator topics for Goal 2 included undernourishment, food insecurity, and agriculture (United Nations, 2018-h). Similar to Canada’s Voluntary National Review of the UN SDGs (Government of Canada, 2018-a), the research team approached Goal 2 by looking not only at access to food and nutrition available at VIU, but also how VIU is educating students on these topics.

How VIU currently contributes to Goal 2

On the Nanaimo campus, VIU provides students and employees with access to a number of locations with food options. These include options that are owned and operated by VIU itself, including: the upper and lower cafeterias and the Discovery Room, operated by VIU’s Food Services; the Students’ Union Pub, operated by VIU’s Students’ Union; the VIU campus store which contains convenience foodstuff options; and two private food establishments, Starbucks and Subway (Appendix E) (VIU, 2018-n).
are also vending machines placed across campus (VIU, n.d.-a). While Food Services provides a variety of choices at different price-points, there is no system for requiring food to meet certain nutritional values (Food Services, personal communication, October 2, 2018). However, all cooks employed by Food Services must be qualified with education related to nutrition (Food Services, personal communication, October 2, 2018). Unfortunately, due to resource restrictions, the research team was unable to meet the remaining establishments and therefore cannot provide information regarding their nutritional standards. However, there appears to be a variety of options for the Nanaimo VIU community to access food during regular operating hours.

VIU Food Services also offers meal plans to both students and employees (VIU, 2018-o; VIU, 2018-p). Each meal plan offers a 5% bonus dollar, which adds 5% of the money back to the account (e.g. for $100 put on the card, an additional $5 is added) (VIU, 2018-o). To help increase access to food on campus, VIU also has the Good Food Box program and the VIU’s Farmers Market. The Good Food Box program is available to both students and employees, and allows individuals to purchase a $15 box with produce from wholesalers and local farmers (Residence, personal communication, July 22, 2019). The Good Food Box program has been operating for 5 years and has approximately 100 participants (Residence, personal communication, July 22, 2019). The Farmers Market is offered at least once per week during Vancouver Island’s growing season (VIU, 2018-q). VIU also operates a Grocery Shuttle that drives up to 25 students to Superstore twice a week to get groceries (Residence, personal communication, July 22, 2019).

At the Cowichan campus, a cafeteria offers a variety of foodstuffs, including beverages, sandwiches, soups, and lunch specials (Vancouver Island University Cowichan, 2018-a). Food Services available on the Powell River campus includes the Future Chefs’ Café, a dining room that requires reservations, and a small café, Food for Thought, that serves soup and sandwiches at a low cost (Powell River campus, personal communication, July 3, 2019). The café is run by Inclusion, a non-profit employment program for people with disabilities (Vancouver Island University Powell River, 2018; Powell River campus, personal communication, July 3, 2019). Powell River’s Culinary Arts program also operates a restaurant every Wednesday night out of a local high school, as well as catering services that have served functions with up to 400 people (Powell River campus, personal communication, July 3, 2019).

*Departmental focus*

Many courses offered at VIU touch on the topic of hunger in a variety of ways related to Goal 2 (Appendix E). Programs such as Sport, Health and Physical Education (SHAPE), Sociology, Nursing, Child and Youth Care, and Geography have courses that focus on undernourishment and food insecurity (Appendix E). SHAPE students have the opportunity to gain hands-on experience through activities and programs such as *Will Work for Food*, where students work for local farmers in exchange for food (Sport, Health and Physical Education, personal communication, September 14, 2018). Additionally, each year the student-led SHAPE Club has raised money for the Breakfast Club in Nanaimo (Sport, Health and Physical Education, personal communication, September 14, 2018). The Breakfast Club of Canada has partnered with the Nanaimo-Ladysmith Schools Foundation to provide students with a meal to start their day (Nanaimo-Ladysmith Schools Foundation, 2018). Through this partnership, more than 7,400
meals a month have been served to eleven Nanaimo schools (Nanaimo-Ladysmith Schools Foundation, 2018). Students in the Nursing and Child and Youth Care programs have also been involved in supporting food security in local communities through food banks and breakfast and lunch programs in schools (Appendix E). In 2018/19, as a result of student observations of Cowichan school children’s nourishment and behaviour, a VIU Nursing professor founded the Nourish Cowichan Society (VIU, 2019-ii). The non-profit organization’s goal is to ensure that children in the Cowichan Valley area are receiving adequate nourishment, and currently supports more than 800 children at ten different elementary schools, three daycares, and one maternity ward (VIU 2019-ii).

In relation to sustainable agriculture, VIU offers the Master Gardener Certificate program in collaboration with the Vancouver Island Master Gardeners Association (VIU, 2019-j). VIU was approached by the Master Gardeners Association to develop a curriculum that focuses on the importance of sustainable gardening and includes topics such as water management, native plants, and climate change (Cowichan campus, personal communication, October 30, 2019). The program is based on a multifaceted approach to gardening problems and emphasizes the promotion of plant health, the use of an environmentally responsible approach, and the employment of integrated pest management (VIU, 2019-j).

Research

Over the years, students in SHAPE courses have engaged in research projects that have focused on topics related to food insecurity and nutrition (Sport, Health and Physical Education, personal communication, September 14, 2018). Similarly, students in the Community Based Applied Interdisciplinary Research (CBAIR) program have partnered with Nanaimo Food Share to look at ways that the Good Food Box program in Nanaimo can expand (Sociology, personal communication, September 25, 2018; VIU, 2018-r). The Centre for Community Outreach and Care offers many programs that work with youth who are at risk (Appendix E). All of the Centre’s programs focus on providing youth with access to healthy and nutritious food (Centre for Community Outreach and Care, personal communication, September 27, 2018). For example, the Friday Night Lights program offers free activities and dinners to children of low-income families while their parents are working in the evenings (Centre for Community Outreach and Care, personal communication, September 27, 2018).

One of VIU’s primary research projects related to Goal 2 has been in progress since 1984 and even had its own centre constructed – the International Centre for Sturgeon Studies (ICSS) (VIU, 2018-s). The ICSS, located on the Nanaimo campus, is actively engaged in the conservation of white sturgeon through research (VIU, 2018-s). Through it, VIU is researching more about the spawning habitats and conditions of the sturgeon and exploring alternative food sources for producing sturgeon (International Centre for Sturgeon Studies [ICSS], personal communication, August 24, 2018). The ICSS produces canned sturgeon in order to help protect the wild sturgeon from being fished for its meat (ICSS, personal communication, August 24, 2018), thereby actively creating a new food product on campus.
Engagement

VIU’s staff and students have engaged in a wide range of initiatives that aim to increase awareness on topics related to hunger (Appendix E). *Chew on This!,* mentioned in Goal 1, is a good example (Dignity for all, 2018). In addition, VIU’s ElderCollege has hosted events related to hunger; a typical event was held in October 2018 with the hosting of a speaker on *Hungry Canadians, Corporate Charity and the Right to Food* (VIU, 2018-t).

All of VIU’s campuses provide a variety of ways for students and faculty to access food, which occasionally includes locally sourced options, however, the capacity of each campus’ Food Services varies. In addition, while ICSS is producing food on campus, it appears as though this is a business endeavour and that this food is not necessarily affordable or widely accessible to the VIU community. However, access to food itself – not necessarily for those that live on campus – is the primary focus of this Goal, and ICSS, as well as programs working off campus, are actively providing food to people that live in the region.

Discussions from VIU community engagement events

Discussions from all three community engagement events revolved around growing food on campus, such as using native species for food, building more community gardens, and growing vertical gardens on walls. Participants felt that VIU could utilize some of its unused spaces (rooftops and alleys) to produce food. These ideas indicate that many participants showed a desire to have VIU produce more of its own food in order to provide nutritious yet affordable food to the VIU community. For food that VIU may not be able to grow, participants suggested that VIU should support local suppliers as much as possible. It was also mentioned during the World Café that VIU should buy imperfect produce, or produce that does not look like the ideal produce, which would typically result in food waste that could alternatively be purchased at a discounted rate (Imperfect Produce, 2018).

Participants also discussed increasing educational opportunities related to Goal 2. There was a desire to have more research funding for food-related projects. Participants also felt as though nutrition courses should be interdisciplinary and offered to students in all programs in an effort to spread awareness of nutrition to members of the VIU community that are not in programs such as SHAPE. The implementation of training and workshops on how to access and prepare nutritious food was also a popular suggestion at *Accelerating the SDGs.*

Other university initiatives

Examples of how other universities are meeting Goal 2 were pulled from U of A and the University of Northern Colorado (UNC). U of A has a Campus Food Bank that provides students who are in need with access to food and toiletries (University of Alberta, 2018-d). Food hampers are used and designed to provide a five-day supply of food that is modeled after Canada’s Food Guide (University of Alberta, 2018-e). U of A is also partnered with the WECAN Food Basket Society which purchases produce and meat in bulk quantities and provides orders to students at a significantly reduced cost (University of
Alberta, 2018-f). Similarly, at UNC, students who face food insecurity are encouraged to visit the Bear Pantry (University of Northern Colorado, 2018). UNC students can access the Bear Pantry twice per week to receive five free food and toiletry items (University of Northern Colorado, 2018).

Goal 3: Ensure healthy lives and promote well-being for all at all ages

While more people today are living healthier lives than in the past, many people are still dying prematurely from preventable diseases (United Nations, 2018-j). For example, in 2016 there were 140 new cases of tuberculosis per 100,000 people (United Nations, 2018-j). Additionally, in 2015, 303,000 women died during pregnancy or childbirth across the world (United Nations, 2018-j). Health is an important component in sustainable development as people will be more successful and happier if they are healthy (Government of Canada, 2018). Many factors, such as gender, ethnicity, social status, and employment, are determinants of a person’s health (Government of Canada, 2018). Canada has recognized the impact of these social determinants of health and has been working to identify and reduce health inequalities within the country (Government of Canada, 2018).

The health of VIU employees and students is a factor that affects the University daily. Indicators related to health for Goal 3 include examining physical and mental health, sexual and reproductive health, access to health care services, and substance use (United Nations, 2018-h). Furthermore, an additional target looks at the impact of chemicals, pollution, and contamination on health (United Nations, 2018-h). For this report, the research team looked into what services and initiatives VIU offers for increasing the health and well-being of students, faculty, and staff, as well as how VIU is increasing the awareness of these issues through education and research (Appendix F).

How VIU currently contributes to Goal 3

Students and employees of VIU each have access to different benefit plans. Students are offered the Students’ Benefit Plan while full-time employees are offered the Manulife Faculty Benefits Plan (Vancouver Island University Students’ Union, 2018-a; VIU, 2018-u). Both of these plans offer basic health coverage and mental health coverage (Vancouver Island University Students’ Union, 2018-a; VIU, 2018-u). VIU also partners with Superstore Pharmacy each year to offer free flu clinics to employees and students (VIU, 2019-k). The Health and Wellness Centre is also accessible to VIU students, providing both physical and mental health care services (Appendix F) (VIU, 2018-v). Some of the services include illness diagnoses, ordering and interpreting laboratory tests, specialist referrals, and medicine prescriptions (VIU, 2018-v). However, there are no facilities to fill the prescriptions on campus (Health & Wellness Centre, personal communication, August 15, 2018). The Health and Wellness Centre is also not available to employees, as its limited resources require that it focus its efforts on providing care to students alone (Health and Wellness Centre, personal communication, August 15, 2018). However, some health services are offered to surrounding communities in addition to VIU students. For example, VIU’s Dental Clinic is open to the public where community members can receive low-cost dental services from the Dental Assistant and Dental Hygiene programs (VIU, 2019-I). Additionally, all Health and Human Services programs have clinical placements which allow students to take their knowledge into local communities (Health and Human Services, personal communication, July 3, 2019).
Aside from offering basic health care services, VIU’s Health and Wellness Centre has a strong focus on mental health (Health and Wellness Centre, personal communication, August 15, 2018). Here, students have access to counsellors, including a mental health specialist for students with disabilities (Health and Wellness Centre, personal communication, August 15, 2018). In addition, the Centre offers mental health first aid programs to employees that teach them to recognize suicide ideation in students (Health and Wellness Centre, personal communication, August 15, 2018). Aside from the Centre, VIU has two Aboriginal counsellors for Indigenous students, one of who is located on the Cowichan campus (Aboriginal Education and Engagement, personal communication, August 17, 2018). At Shq-apthut (A Gathering Place), Elders are available five days a week to offer support and guidance to students (VIU, 2018-w; Aboriginal Education and Engagement, personal communication, August 17, 2018).

Additionally, various individuals at VIU have indicated that due to the small nature of VIU and the program sizes, students and employees often receive support from their peers and instructors (VIU High School, personal communication, September 17, 2018; Arts and Humanities, personal communication, September 11, 2018; Sport, Health and Physical Education, personal communication, September 14, 2018).

Focusing on preventative measures, the Healthy U VIU program promotes preventative health initiatives on campus such as health fairs, biometrics clinics, naloxone training, and Wellness Wednesdays (Nursing, personal communication, June 4, 2019). Many of these initiatives involve collaboration between various departments at VIU, including Student Affairs, the Health and Wellness Centre, Campus Recreation, Nursing, and Aboriginal Education and Engagement (Appendix F). For example, in collaboration with Campus Recreation and the Nursing program, the Health and Wellness Centre offers biometric clinics that provide students or employees with the opportunity to learn about their personal health (Campus Recreation, personal communication, August 14, 2018). These clinics measure a range of health concerns such as blood pressure, heart rate, cholesterol, and body mass index (Campus Recreation, personal communication, August 14, 2018). Students may also access the clinic to discuss substance use and mental health (Health and Wellness Centre, personal communication, August 15, 2018; Facebook, 2019-b) and workshops on these topics have taken place on the Nanaimo and Cowichan campuses (VIU, 2018-x). The clinics have proven to be beneficial to the VIU community in both Nanaimo and Cowichan, and discussions with Campus Recreation have suggested that students want them to expand (Campus Recreation, personal communication, August 14, 2018). Similar to the biometric clinics, the Health and Wellness Centre and Campus Recreation also hosts Wellness Wednesdays and the annual Wellness Fair (Campus Recreation, personal communication, August 14, 2018). The Fair provides an opportunity for various campus and community groups, such as BC Lung Association and Canadian Blood Services, to share resources with the VIU community (Campus Recreation, personal communication, August 14, 2018). Additionally, through Aboriginal Education and Engagement, the Community Cousins program is involved in the Wellness Fair by providing a holistic approach to health and having Elders share their knowledge of traditional health and wellness (Aboriginal Education and Engagement, personal communication, July 12, 2019).

Where regions around the world do not have enough health workers to meet the needs of their populations, better-staffed health systems can lead to improved health outcomes (The World Bank, 2018). VIU’s Health and Human Services programs are continuously increasing the number of health workers on campus.
workers through graduates of these programs. For example, each year the Bachelor of Science in Nursing program has the capacity for 72 students, with the number of graduates ranging between 69 to 71 per year (Nursing, personal communication, June 4, 2019). The Kw’am Kw’um Shhwuli Health Care Assistant program offered through the Cowichan campus reduces barriers for individuals from First Nations communities so they can receive an education that will lead to employment in a field of need (Cowichan campus, personal communication, October 29, 2019). VIU also plans to expand various Health and Human Services programs to meet the growing demand for healthcare professionals, which will allow for more future graduates to enter the health workforce (Health and Human Services, personal communication, July 3, 2019). One expansion will involve the Early Childhood Education and Care program, which will be expanded to offer an Assistant Certificate, as well as the Early Childhood Education and Care Basic Certificate (Powell River – Health and Human Services, personal communication, October 26, 2019). VIU’s New Program Development Schedule (2019) indicates that there will be four new Health and Human Services programs implemented in 2020/21 (Office of University Planning and Analysis, 2019). These new programs are: Health Care Assistant to Licensed Practical Nurse Bridging program, Occupational Therapist Technician, Pharmacy Technician, and Rehabilitation Therapist Technician (Office of University Planning and Analysis, 2019).

In order to maintain physical health, students and staff have free access to the VIU Gymnasium. To register, students and staff must present a valid student/employee card and sign a waiver form (VIU, 2018-PPP). Once registered, members are entitled to basketball, volleyball, and badminton courts, the fitness and weight room, and the multi-purpose room (i.e. boxing bags, table tennis, weight balls, and more) (VIU, 2018-PPP). For a fee, alumni and the general public may also use the facility and equipment (VIU, 2018-PPP). VIU Residence and Campus Recreation promote physical health through the resident sports league program (Residence, personal communication, July 22, 2019). The program offers weekly events for students in Residence and involves a points system to encourage participation (Residence, personal communication, July 22, 2019). Additionally, Residence has basketball courts, beach volleyball courts, and hockey nets for students to access (Residence, personal communication, July 22, 2019).

Relating to chemicals and air pollution, VIU produces an annual Carbon Neutral Action Report (VIU, 2017-a). The report showcases what the University has accomplished, and what it plans to do, to reduce greenhouse gas emissions on campus (VIU, 2017-a). The report also looks at VIU initiatives related to these topics, such as research conducted by the Applied Environmental Research Laboratories (AERL) and Active Commute Week (Appendix F). Additionally, in 2019, VIU started a janitorial contract with BEE-Clean Building Maintenance (Facilities Services & Campus Development, personal communication, September 21, 2018). BEE-Clean Building Maintenance is committed to providing sustainable solutions as it is CIMS-Green Building certified and follows a Green Cleaning policy (BEE-Clean Building Maintenance, 2020). CIMS stands for Cleaning Industry Management Standard, which is the benchmark of cleaning standards for North American companies (BEE-Clean Building Maintenance, 2020). By utilizing a janitorial service that is committed to a national standard, VIU is ensuring that its facilities are clean and contribute to good health.
**Departmental focus**

Students in Nursing, Sociology, Chemistry, or Geography, and other disciplines learn about topics related to Goal 3 in their courses (Appendix F). From Nursing courses such as NURS 318 (Health and Healing IV: Global Health Issues) to SHAPE courses that require students to engage in physical assessments (Appendix F), VIU is committed to increasing the health of its students on campus, as well as increasing students’ understanding of both physical and mental health issues. VIU’s Nanaimo campus also received the new Health and Science Centre in 2018 (VIU, 2019-m). Within this Centre, students and faculty have access to state-of-the-art laboratory technology and educational tools such as simulation suites (Nursing, personal communication, July 4, 2019). The simulation suites are designed to simulate a hospital room and patient, which provides students the opportunity to learn appropriate skills needed for a real-life situation in a hospital (Nursing, personal communication, July 4, 2019).

For the VIU High School, mental health and well-being is an important component (VIU High School, personal communication, September 17, 2018). The VIU High School aims to provide a safe and supportive environment for students who may be experiencing life away from home for the first time in addition to stress typically related to school (VIU High School, personal communication, September 17, 2018). At the beginning of each year during student orientation, each student takes part in an hour and a half workshop with one of VIU’s mental health counsellors; they also have access to other counselling services or workshops throughout the year if needed (VIU High School, personal communication, September 17, 2018). Regarding sexual health, the VIU High School follows the BC Physical and Health Education curriculum, which includes annual sexual education that involves bringing in a sexual health educator (Government of British Columbia, 2018-a; VIU High School, personal communication, September 17, 2018).

VIU programs that include education and discussion about mental health include Psychology, Recreation and Tourism, and Child and Youth Care (Appendix F). Many Psychology students participate in practicums at local treatment centres, gaining experience in the field of mental health work (Psychology, personal communication, May 17, 2019). Some ElderCollege courses also touch on topics related to mental health, such as how to mourn loss, self-help, and planning for end of life (ElderCollege, personal communication, October 16, 2019). VIU also offers a 6-month Community Mental Health Worker Certificate program that trains and provides students with the tools required to work with individuals that face mental health and addiction issues (VIU, 2019-n).

With regard to substance abuse, students at VIU have the opportunity to receive an Addiction Studies Certificate (VIU, 2018-y). To earn this certificate, students must take a collection of courses that specialize in different areas of addictions (VIU, 2018-y). Courses for the Addiction Studies Certificate are selected from departments such as Psychology, Sociology, Criminology, First Nations Studies, Anthropology, Social Work, and Political Studies (VIU, 2018-y). After graduation, students will have experience and knowledge on research related to substance abuse, pharmacology, and addiction (VIU, 2018-y). Additionally, most of VIU’s Health and Human Services programs, including Nursing, Child and Youth Care, Early Childhood Education, Social Work, and Community Mental Health Worker, touch on the topic of substance abuse (Health and Human Services, personal communication, July 3, 2019).
Research

There are two primary research labs conducting research related to Goal 3. Through the Centre for Community Outreach and Care, projects focus on children who have had exposure to trauma, which has been linked to cardiovascular disease and other conditions in adulthood (Suglia et al., 2018; Centre for Community Outreach and Care, personal communication, September 27, 2018). Each of the Centre’s programs addresses trauma by providing youth with mental, spiritual, emotional, and physical support (Centre for Community Outreach and Care, personal communication, September 27, 2018). For example, in 2017 for the Sanala Housing project, the Centre partnered with the Nanaimo Aboriginal Centre to provide 50 children with positive activities to help reduce their exposure to drug use and sex work (Appendix F) (Centre for Community Outreach and Care, personal communication, September 27, 2018).

VIU’s AERL engages in research related to chemicals, pollution, and contamination; faculty and students collaborate with community partners to research environmental health, particularly in terms of air, water, and soil (VIU, 2018-z; Applied Environmental Research Laboratories [AERL], personal communication, August 3, 2018). One of the Lab’s undergraduate student research projects investigated air quality in the Alberni Valley and the Nanaimo region (AERL, personal communication, August 3, 2018). Other students have researched the chemistry of drinking water (AERL, personal communication, August 3, 2018). Although the primary focus of AERL is not on the impacts on human health, it is the underlying purpose behind various research projects (AERL, personal communication, August 3, 2018). For example, a team of researchers from VIU’s Chemistry department and AERL have used mass spectrometers to develop a breakthrough opioid drug testing method to check drugs for toxic substances such as fentanyl or carfentanil (VIU, 2019-ii). These methods were proven efficient when tested in August 2019 during an on-site drug testing trial at an overdose prevention site in Vancouver (VIU, 2019-ii).

Numerous VIU faculty members conduct research in the medical field and have received research grants to fund them (Health and Human Services, personal communication, July 3, 2019). For example, for the past decade, a VIU Health and Human Services professor has been researching resilience in individuals such as firefighters, nurses, and police officers, who regularly face trauma (VIU, 2018-nnnn). Another VIU professor, from the History department, has been recognized for their work in Canadian healthcare history and has been elected as VIU’s first Fellow in the Academy of Arts and Humanities of the Royal Society of Canada (VIU, 2018-rrrr). The work was recognized for giving a voice to vulnerable populations in the 19th century, including people with mental health issues, addictions, and children (VIU, 2017-i).

In 2018, VIU received a grant from Island Health to lead the Recreation Prescription Project in partnership with the City of Nanaimo Parks and Recreation, Division of Family Practice, and the Nanaimo Ladysmith School District (VIU, 2018-hhhh; VIU, 2019-P). Within VIU this project involved collaboration between the Nursing, Child and Youth Care, Recreation and Sport, and Sport Health and Physical Activity programs (World Leisure Centre of Excellence, personal communication, June 10, 2019; Nursing, personal communication, June 4, 2019). The program developed through Recreation Prescription Project works with vulnerable schools in Nanaimo, involving approximately 120 school-aged children, to promote health, physical activity, and literacy among youth over a 16-week period (World Leisure
Centre of Excellence, personal communication, June 10, 2019; VIU, 2019-o). In addition to health promotion, Nursing students conducted pre-, mid-, and post-program health assessments on the youth involved (World Leisure Centre of Excellence, personal communication, June 10, 2019; Nursing, personal communication, June 4, 2019). VIU has received further funding to continue this project and look at how large systems such as academic and health care institutions can work together to address youth health and well-being (World Leisure Centre of Excellence, personal communication, June 10, 2019).

In addition to on-campus research initiatives in support of mental health, a VIU Nursing Professor and a multi-disciplinary team from Island Health are working in collaboration to develop a curriculum that emphasizes the importance of self-compassion among health-care providers (VIU, 2019-ii). The team was awarded a REACH award from the Michael Smith Foundation for Health Research to address commonly reported issues of hostile work environments and the stressors associated with the health-care environment (VIU, 2019-ii). In August 2020, the Faculty of Health and Human Services (in partnership with the University of Hawaii) plans to host an international conference on the social determinants of health at VIU (Health and Human Services, personal communication, July 3, 2019).

Engagement

VIU has taken many steps to promote good health and well-being on campus (Appendix F). For example, in October 2018, VIU hosted its first annual THRIVE Week, which involved a week-long series of events that promoted positive mental health (VIU, 2018-A). Some of these events included yoga, juggling, dog therapy, a Mind, Body & Spirit Health and Wellness Fair, and a campus chill station (VIU, 2018-B). In addition, during the 2018 Experience VIU Open House, a Sociology faculty member gave a public lecture related to the social causes of suicide and well-being (Sociology, personal communication, September 25, 2018). Further, VIU’s Outdoor Recreation offers opportunities for students to spend time in nature and be active – activities such as hiking, sea kayaking, or snowshoeing, are all considered to contribute to mental health (VIU, 2018-C; Campus Recreation, personal communication, August 14, 2018). While these outdoor programs are a great way for students to relieve stress and increase their mental well-being, they are generally offered at a cost (Vancouver Island University, 2018-C), which may be a hindrance to income-limited students on campus, and tend to focus on students at VIU’s Nanaimo campus (Campus Recreation, personal communication, August 14, 2018).

To increase education about health topics and trends in healthcare, Nursing students work with CHLY 101.7 radio station to produce a series of 8-10 radio shows per semester, called A Sound Constitution (Nursing, personal communication, June 4, 2019; CHLY, 2019). The radio show discusses current health trends and holistic approaches to health, debunks mythical information, and uses research-based evidence to inform their audience (Nursing, personal communication, June 4, 2019). Another initiative Nursing students are involved with is the promotion of the 5-2-1-0 Initiative to youth in local schools (Nursing, personal communication, June 4, 2019). The 5-2-1-0 Initiative is a movement that promotes five fruits and vegetables, two hours of screen-time, one hour of activity, and zero sugary drinks every day to youth (Nursing, personal communication, June 4, 2019, Liver 5210, 2019).
To raise awareness about substance abuse, VIU Residence hosts a number of initiatives on campus that aim to reduce substance use among students (Residence, personal communication, July 22, 2019). *Eat Before you Hit the Streets* is an initiative that provides students with food before they go out drinking in order to reduce harmful effects of alcohol (Residence, personal communication, July 22, 2019). Workshops are also hosted to educate students on topics such as date rape, consent, and driving under the influence (Residence, personal communication, July 22, 2019). Dry events are also hosted on Halloween and St. Patrick’s Day to offer students a place to socialize without alcohol (Residence, personal communication, July 22, 2019).

Discussions from VIU community engagement events

Although VIU already offers health services and initiatives, participants at each of the community engagement events felt as though more could be done. Participants indicated that the services from the Health and Wellness Centre and their resources are limited; they discussed expanding the Health and Wellness Centre and increasing mental health resources, specifically counselling services, and making these available to both students and employees across all campuses. *Accelerating the SDGs* and Rural Café participants indicated that increasing capacity and resources to better serve the VIU community’s health and wellness needs would include actions such as expanding support services to evenings and weekends, upgrading the health clinic and campus recreational facilities to allow increased student and employee intake, and providing more community gathering spaces. World Café participants also demonstrated a desire to have more health and wellness workshops around mindfulness and meditation, as well as better promotion for these workshops.

Discussions at the World Café also revolved around creating a culture at VIU that focuses on mental health and well-being. One way that individuals felt that VIU could address a health-orientated culture would be by improving opportunities to be “tech free”. Promoting well-being and health was seen by participants as a systematic approach to helping solve other issues. Participants discussed offering a free course for first year students that focused on health and well-being, thereby increasing awareness and education. Participants also felt that VIU should incorporate a holistic methodology to health and wellness that includes an Indigenous approach. Additionally, the idea of incorporating more green spaces on campus where people can meditate or exercise was also discussed.

Other university initiatives

The University of Toronto (U of T) Faculty of Medicine recognizes that medical students and medical professionals are at risk of substance abuse and addiction as much as any other individual (University of Toronto, 2018-a). Therefore, the University has taken steps to provide information and support through early stage addiction and substance use intervention (University of Toronto, 2018-a). Therapeutic intervention at the early stages of students’ schooling is directly focused on improving the health and well-being of medical students dealing with the responsibilities and workload in medical school (University of Toronto, 2018-a). Additionally, the University of Waterloo’s (UW) Propel Centre for Population Health and Impact aims to positively impact the health of people by leading studies and
taking action (University of Waterloo, 2018-a). The Centre conducts the Canadian Student Tobacco, Alcohol, and Drugs Survey (CSTADS) for Health Canada (University of Waterloo, 2018-b). The CSTADS provides up-to-date information to governments, schools, parents, and communities on substance use as well as bullying, mental health, and school connectedness among grade 7 to 12 students across Canada (University of Waterloo, 2018-b).

**Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all**

Even though more children than ever are going to school, more than half the children in the world are still not receiving quality education (United Nations, 2018-k). About 617 million children (or 58% of primary and lower secondary aged children) are not meeting minimum proficiency standards in reading and mathematics (United Nations, 2018-k). As education is essential for economic and social prosperity, Canada is focused on providing its country with quality programming and lifelong learning opportunities (Government of Canada, 2018). Because of this, Canadians are among the most educated people in the world, with 54% of Canadian adults having completed post-secondary education (Government of Canada, 2018). However, inequalities from factors such as gender and urban-rural locations still impact Canadian citizens (Government of Canada, 2018).

VIU, as a post-secondary educational institution, directly contributes to providing quality education in Canada. Indicator topics for Goal 4 address equal access to education, global citizenship education, access to education technology, and adapted infrastructure for peoples with disabilities (United Nations, 2018-h). To address this Goal, the research team investigated what steps VIU is taking to make itself accessible to as many different people as possible, such as those with disabilities or those who are low-income. In addition, the team was interested in whether or not students of VIU were being taught about different issues related to the limited access of education, in either localized or global contexts.

**How VIU currently contributes to Goal 4**

In Canada, just 0.22% of the population (or 79,860 people) over the age of 40 are enrolled in some form of post-secondary education (Statistics Canada, 2018-d). At VIU, on the other hand, approximately 25% of students are over the age of 35 (VIU, 2018-d) (Table 1; Appendix G), suggesting that VIU is accessible to older demographics. In addition, the number of VIU students that identify as Indigenous is 11% (VIU, 2018-d), which is significantly higher than the percentage of people in Nanaimo that identify as the same (6.83%) (Statistics Canada, 2018-e), suggesting that VIU is accessible to Aboriginal peoples in the area and beyond. VIU ranks second among BC universities in Indigenous student headcount, with 12% of the 2018/19 student population self-identified as Indigenous (VIU, 2018-ffff). Data available for 2017/18 shows that there were 819 self-declared Indigenous women enrolled at VIU and 494 self-declared Indigenous men (VIU, 2018-HHHH). Out of the total student headcount in 2017/18, 390 new Indigenous students came to VIU (VIU, 2018-HHHH). With respect to international students, in the 2013/14 academic year, Canadian universities had a total enrolment of 123,840 international students, which made up approximately 11% of Canada’s student population (Statistics Canada, 2014). As VIU’s
international students represented 14% of the VIU population in 2016/17, and 15% of the population in 2017/18, again, these numbers exceed the national statistics (VIU, 2018-d).

<table>
<thead>
<tr>
<th>Demographic Cohort</th>
<th>2016/17 Statistic</th>
<th>2017/18 Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>6,125 (43%)</td>
<td>6,092 (42%)</td>
</tr>
<tr>
<td>Female</td>
<td>8,119 (57%)</td>
<td>8,412 (58%)</td>
</tr>
<tr>
<td>Under 19</td>
<td>1,670 (12%)</td>
<td>1,577 (11%)</td>
</tr>
<tr>
<td>19 – 24 years</td>
<td>5,472 (38%)</td>
<td>5,828 (40%)</td>
</tr>
<tr>
<td>25 – 34 years</td>
<td>3,282 (23%)</td>
<td>3,284 (23%)</td>
</tr>
<tr>
<td>35 years and older</td>
<td>3,955 (27%)</td>
<td>3,621 (25%)</td>
</tr>
<tr>
<td>Domestic Indigenous</td>
<td>1,603 (11%)</td>
<td>1,600 (11%)</td>
</tr>
<tr>
<td>Domestic Non-Indigenous</td>
<td>10,792 (75%)</td>
<td>10,657 (73%)</td>
</tr>
<tr>
<td>International</td>
<td>2,009 (14%)</td>
<td>2,247 (15%)</td>
</tr>
<tr>
<td>Registered with Disability Access Services (2017/18)</td>
<td>1,000 (7%)</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>Total Enrolment</strong></td>
<td><strong>14,404</strong></td>
<td><strong>14,504</strong></td>
</tr>
</tbody>
</table>

Table 1: Demographic statistics for Vancouver Island University for the academic years of 2016/17 and 2017/18 (VIU, 2018-d; Disability Access Services, personal communication, August 29, 2018).

**Note:** The VIU Statistics column is not meant to total 100% altogether; percentages are based off of each Demographic Cohort’s percentage of the total population (e.g. males at VIU makeup 43% of the total VIU population).

One statistic that VIU does not compare to or exceed when compared to national-level indicators is with students with registered disabilities. Students that have registered with Disability Access Services at VIU make up just 7% of the Institution’s population (1,000 students) (Disability Access Services, personal communication, August 29, 2018). In Canada, however, approximately 22% of Canadians 15 years and older report having a disability (Statistics Canada, 2017). The topography of the Nanaimo campus and VIU’s relatively remote location on Vancouver Island may be factors impacting this indicator. VIU’s Accessibility Facility Design Criteria provides guidelines for VIU to better meet the needs of peoples with disabilities, as well as older adults and seniors on campus (VIU, 2008). Through the Annual Capital Allowance Program, VIU’s Facilities Services is continually making changes to infrastructure in an effort to better meet the needs of the VIU community, including peoples with disabilities (VIU, 2018-E; Facilities Services & Campus Development, personal communication, September 21, 2018). For example, in 2018 tactile paving was installed outside of the Welcome Centre on the Nanaimo campus to assist people with low vision (Facilities Services & Campus Development, personal communication, September 21, 2018). Also on the Nanaimo campus, which is located on a hillside with an elevation change of 75.9m and has a total of 409 stairs (VIU, 2018-ee), a barrier-free route is available for those with mobility issues (VIU, 2018-F). The Universal Access Committee helped develop a VIU Nanaimo campus map that outlines the barrier-free routes and accessible routes, including the degree of accessibility (i.e. steepness of slopes), accessible parking and bathroom locations, and which buildings have power doors and elevators (VIU, 2019-y). This map helps students, staff, faculty, and visitors navigate the campus if they are unable to climb stairs (Universal Access Committee, personal communication, January 7, 2020). However, the barrier-free route still imposes some problems related to efficiency and slope steepness,
for which Facilities has created a plan, with suggestions from the Universal Access Committee, to update the barrier-free route to address some problem areas (Facilities Services & Campus Development, personal communication, September 21, 2018; Universal Access Committee, personal communication, January 7, 2020).

To continue making improvements to campus accessibility, VIU’s Universal Access Committee was established in May 2018 (Universal Access Committee, personal communication, January 7, 2020). The Committee is comprised of Directors from across campus that work to raise funding and awareness for campus accessibility (Universal Access Committee, personal communication, January 7, 2020). Between August 2018 and April 2019, all VIU buildings underwent audits by the Rick Hansen Foundation which gave each building a rating of how accessible they are (Universal Access Committee, personal communication, January 7, 2020; Rick Hanson Foundation, 2020). Some buildings received good ratings, but the majority are in need of significant upgrades (Universal Access Committee, personal communication, January 7, 2020). So far, the Universal Access Committee has received enough funding to put new, single use, accessible bathrooms in various buildings of the Nanaimo campus, as well as an upgraded wheelchair ramp outside of building 345 (Appendix G). These upgrades allow individuals with specific needs to access education on campus (Universal Access Committee, personal communication, January 7, 2020). In relation to providing an effective learning environment, VIU provides free access to computers and WIFI to students, employees, and guests (VIU, 2018-rr). VIU also offers educational technology for persons with disabilities. For example, the Institution provides assistive stations and technology that offers access to programs such as Kurzweil, Zoom Text, and Inspiration (Disability Access Services, personal communication, August 29, 2018). Kurzweil offers a text-to-speech program that reads text out loud for individuals with limited visual abilities (VIU, 2018-G; Kurzweil Education, 2018).

To help reduce the income barriers relating to accessing education, VIU offers scholarships and bursaries to students (Appendix G) (VIU, 2018-i; VIU, 2018-H). These scholarships and bursaries are available to a wide variety of students and include awards specifically designed for different cohorts of students, including Aboriginals, those with disabilities, those that identify as LGBTQ+, and single parents (VIU, 2018-i). In 2018/19, VIU disbursed over $3.4 million to students for scholarships, awards, and bursaries (Appendix G) (VIU, 2018-ffff). The Tuition Waiver program, discussed in Goal 1, also helps to aid students that are likely in financial need (VIU, 2018-J). Furthermore, in 2008, VIU became a member of the World University Service of Canada (WUSC), which aims to create a better world for youth by improving education, employment, and empowerment opportunities through initiatives such as the Student Refugee Program (VIU, 2018-I; World University Service of Canada, 2018-a). The Student Refugee Program combines resettlement with higher education by bringing refugee students to Canada to study as permanent residents (World University Service of Canada, 2018-b). Since joining WUSC in 2008, VIU has sponsored two student refugees per year (VIU, 2018-I). VIU also has an International Refugee Newcomer Award for refugees who are new to Vancouver Island and are seeking post-secondary education (VIU, 2019-z). In addition to sponsoring student refugees, the Student Refugee Program provides social support among students, helps build relationships and competency skills, and raises awareness and education around various SDGs such as education for girls and conscious consumption (Education Abroad, personal communication, November 21, 2019).
One of this Goal’s indicators speaks to the proportion of the population that is achieving a certain level of proficiency with literacy and numeracy skills. To meet VIU’s admission requirements, all students have to achieve a certain level of academic proficiency (Appendix G). While additional requirements vary with each program, VIU’s general requirements for the academic programs state that students must be a graduate from a secondary school with a minimum of a “C” grade in English 12 or meets one of the following: (i) graduation from a BC secondary school or (ii) has education history with another post-secondary institution (VIU, 2018-K). For students entering the Trades and Applied Technology programs, the requirement is graduation from a secondary school (VIU, 2018-K). For international students, along with meeting the program requirements, proficiency in English must also be proven (VIU, 2018-K). However, VIU’s Academic and Career Preparation programs are available to individuals that require further development of literacy and numeracy skills before being admitted to university (VIU, 2019-A). The main focus of these programs is to provide people with the skills and prerequisites needed for university courses (Academic and Career Preparation, personal communication, June 26, 2019).

To encourage youth enrolment in post-secondary education, VIU offers a dual credit program, in which a partnership between VIU and the local school district provides high school students with the opportunity to take university courses. Students can simultaneously take university and high school courses, earning credit towards both transcripts (VIU, 2019-E). In the 2017/18 academic year, 527 students were enrolled in the dual credit program, including students at all VIU campuses (VIU, 2018-ffff). VIU also offers learning opportunities to older adults through ElderCollege, which provides a variety of courses and speaker series at VIU campuses as well as in surrounding communities (VIU, 2019-F). In 2018/19, there were 2,030 enrolments in ElderCollege courses, with 20-30 students in each course (ElderCollege, personal communication, October 16, 2019). In addition to ElderCollege, VIU also offers the Love of Learning program, which allows any member of the public to take a VIU course without the requirements of grading or receiving credit (VIU, 2019-G).

In regard to eliminating disparities in education and ensuring equal access to education for all, VIU has been successful in its commitment to Indigenous reconciliation and the removal of educational barriers for Indigenous learners. VIU’s Academic Plan lists “Indigenous Commitment” as one of the six overall objectives and in 2018, VIU was recognized as a world leader in teaching excellence due in part to the institution’s commitment to social responsibility and Indigenous peoples (VIU, 2018-D; VIU, 2018-nnnn). VIU was one of the only two Canadian universities to make the list as a finalist for the AdvanceHE 2018 Global Teaching Excellence Award (VIU, 2018-nnnn). One of the ways VIU strives to accommodate access to education for Indigenous students is through the support of the Jay Treaty of 1795, by allowing all Indigenous peoples whose ancestral lands are within Canada to pay domestic tuition fees even if they reside outside of Canada (VIU, 2018-wwww). As VIU is in a Territory where a Treaty was entered in 1854, a Centre for Pre-Confederation Treaties and Reconciliation was established at VIU in 2014 to work on increasing research, understanding, and public dialogue regarding Pre-Confederation Treaties and reconciliation (BC Ministry of Advanced Education, Skills and Training, 2017). Additionally, VIU and McGill University signed a Memorandum of Understanding in 2018 agreeing to explore how the universities can work together to support research and learning for Indigenous education and studies (Yukon College, 2019).
**Departmental focus**

VIU’s Education program offers a Bachelor of Education and a Post Baccalaureate that trains students to teach at both elementary and secondary levels (VIU, 2018-L). The Education program is committed to providing education training that is “current, relevant, and meets the practical needs by the expressed field” as it educates its students to implement the BC Provincial curricula (VIU, 2018-M, para. 1). Over the years, the number of students in the Education program at VIU has been growing (Education, personal communication, September 17, 2018). For the 2018/19 academic year, there were 150 students enrolled in the program and it is expected by 2021 there will be approximately 186 students enrolled (Education, personal communication, September 17, 2018). Additionally, due to the high demand for jobs in Early Childhood Education and Care (ECEC) on Vancouver Island, VIU doubled its capacity for the ECEC program for the September 2019 intake, with an additional cohort at the Nanaimo campus and new delivery of the program at the Powell River campus (VIU, 2019-B). The program trains students to acquire the necessary skills to provide child care for young children, while also working with their families (VIU, 2019-C). Within this program, students look at the expected curve of development in children and learn how to identify signs of possible abnormalities, noting both the children’s strengths and needs (Early Childhood Education and Care, personal communication, October 3, 2019). Graduates of the program are certified as early childhood educators and are eligible to certify as Infant, Toddler, and Special Needs workers (VIU, 2019-B). VIU also offers a Bachelor of Arts in Child and Youth Care which is designed in response to a growing demand for skilled child and youth care practitioners (VIU, 2019-D).

Global citizenship education is a fundamental component for some departments at VIU, such as Political Studies, Global Studies, Sociology, Art and Design, Nursing, English, Child and Youth Care, WEST, Indigenous Studies, and Liberal Studies (Appendix G). For example, Political Studies focuses on educating students on global issues with an unbiased perspective (Political Studies, personal communication, September 18, 2018). The topics of gender and human rights related to global citizenship is addressed in these departments, along with other departments across campus (Political Studies, personal communication, September 18, 2018; Global Studies, personal communication, September 24, 2018; Sociology, personal communication, September 25, 2018; Criminology, personal communication, September 28, 2018). The idea of global citizenship education is taught at the VIU High School; intercultural awareness and global inequalities are important topics for the students (VIU High School, personal communication, September 17, 2018). The VIU High School is participating with eight other school districts in BC in the Global and Intercultural Skills Program run by the BC Ministry of Education (Government of British Columbia, 2018-b). Two courses in the program teach students about the notions of global citizenship, values, and beliefs around cultural understanding (VIU High School, personal communication, September 17, 2018).

In addition to campus-wide initiatives previously discussed, various VIU departments also address educational disparities related to Indigenous peoples. The Academic and Career Preparation department offers the Aboriginal University Bridging program, which provides Indigenous students with access to adult education programming that aligns with university program prerequisites (Appendix G) (VIU, 2019-H). To encourage both cultural and gender diversity among trades, VIU offers 12-week non-credit Trades
Sampler programs for women and Indigenous students. These programs provide foundational knowledge for a variety of trades to either help students upgrade their education, or explore the trades industry, to determine if they want to pursue an education and career in the area (Cowichan campus, personal communication, October 30, 2019). Additionally, the Early Childhood Education and Care program is able to provide an entire Indigenous cohort with full financial support (Early Childhood Education and Care, personal communication, October 3, 2019). Other programs such as the Kw’um Kw'um Shhwuli Health Care Assistant, Aboriginal Construction, Aboriginal Ecotourism, and the First Nations Stewardship Technician Training programs provide education and training to local First Nations communities (Appendix G). The delivery of these programs involve VIU faculty visiting communities to provide the training, which creates a reciprocal learning opportunity for both faculty and the communities (VIU, 2017-f).

To address disparities related to disability status, VIU offers the WEST program, which is open to students that may have a self-disclosed employment and education barriers as well as documented disabilities (Workplace Essential Skills and Training, personal communication, September 19, 2019). A main goal of the WEST program is to incorporate the nine essential skills outlined by the Ministry of Education, which include reading, writing, document use, numeracy, computer use/digital skills, thinking, oral communication, working with others, and continuous learning (Workplace Essential Skills and Training, personal communication, September 19, 2019; Government of Canada, 2015). As discussed in Goal 1, financial disparities can also act as barriers to education, which VIU works to eliminate through initiatives such as the Tuition Waiver program. VIU also promotes access to education through the Canada Learning Bond (CLB) and was the first Canadian university to become part of the Canada Education Savings Program Champion’s Network (VIU, 2018-g). Children with a Registered Education Savings Plan (RESP) are four times more likely to attend post-secondary schooling, therefore, the CLB provides support to low income families with children to help develop RESPs (VIU, 2018-g). Since CLB’s outreach began at VIU in 2013, post-secondary participation rates have risen from 23% to 36% (VIU, 2018-g). In addition to funding that supports tuition costs, VIU offers the Education Assistance Fund, the Youth Futures Education Fund, and the Youth Education Bursary to assist students with living expenses (Financial Aid and Awards, personal communication, September 12, 2019).

With respect to providing access to educational technology, VIU’s Information Technology (IT) Services and Centre for Innovation & Excellence in Learning (CIEL), as well as the Computing Sciences, Applied Business Technology, and Media Studies & Digital Media departments all focus on providing and aiding individuals with information and communications technology skills (VIU, 2018-WWW; Centre for Innovation and Excellence in Learning, personal communication, August 9, 2018; Computing Sciences, personal communication, September 25, 2018; VIU, 2018-XXX; Media Research Lab, personal communication, October 3, 2018). For example, the Media Studies & Digital Media Technology program teaches students media skills, such as how to produce media technology and how to view media and technology through an analytical and critical lens (Media Research Lab, personal communication, October 3, 2018).
Research

Two small research labs at VIU conduct research and projects related to access to quality education as outlined by Goal 4 (Appendix G). The VIU@Cowichan Innovation Lab is a research lab on the Cowichan campus with projects relating to technology. For example, the Place Specific Learning Modules project aims to modify course materials to be place specific for the Cowichan Valley (VIU@Cowichan Innovation Lab, personal communication, September 20, 2018). The purpose of Place Specific Learning Modules is to enhance access to knowledge and prevent learning challenges for students with language barriers (VIU@Cowichan Innovation Lab, personal communication, September 20, 2018). Another project done through the Lab partners with School District 79 to teach coding in elementary and secondary schools; the objective of the project is to help reduce the digital divide for students in remote communities (VIU@Cowichan Innovation Lab, personal communication, September 20, 2018). In addition, the Media Research Lab encourages students to have an analytical perspective when dealing with media and technology, as well as offers workshops and training sessions to aid individuals with technology and media skills (Media Research Lab, personal communication, October 3, 2018).

Global citizenship education and education for sustainable development is also being addressed through collaborative research between the Faculty of Education and the BC Regional Innovation Chair for Aboriginal Early Childhood Development (Aboriginal Early Childhood Development, personal communication, October 31, 2019). The project is led by UNESCO’s Chair in Reorienting Education Towards Sustainability and aims to improve the lives of Indigenous youth and communities by enhancing the quality of their education, while engaging them in education for sustainable development (UNESCO, 2018-b). In this five-year project, involving over 120 institutions and communities across 40 countries, VIU is researching ways in which education for sustainable development can enhance learning opportunities for Indigenous youth (VIU, 2018-rrrr).

Engagement

VIU hosts events such as Global Citizens Week, WorldVIU Days, International Women’s Day, and International Refugee Day that all promote global citizenship on campus (Appendix G). Global Citizens Week has an academic focus on global issues and WorldVIU Days celebrates cultural diversity (VIU, 2018-N; VIU, 2018-O). Both these annual events showcase VIU students and faculty in an effort to find solutions to global issues and problems while celebrating cultural diversity. The theme of WorldVIU Days 2019 was Creating a Connected Community at VIU, which showcased initiatives of faculty, staff and students that increase social connections on and off campus, especially between international and domestic students or between people from different cultural backgrounds (Appendix G) (Education Abroad, personal communication, November 21, 2019). VIU also hosts events such as Discovery Days, Open House, and Spring Break Days to promote post-secondary education to youth (VIU, 2018-P; VIU, 2018-Q; VIU, 2018-R).

VIU’s Faculty of International Education also facilitates off-campus engagement related to global citizenship and education for sustainable development through International Cooperation projects (VIU, 2018-kkk). These projects all have a teaching focus on competency-based education and training, with
an aim to improve educational programs in partner countries (Education Abroad, personal communication, November 21, 2019). Gender equality and human rights are also addressed in different ways through each of these projects (Education Abroad, personal communication, November 21, 2019). For example, an ongoing partnership between VIU and Kisii National Polytechnic (KNP) in Kenya is working to develop a new building technology program at KNP, which involves developing the curriculum, training for teachers and technicians, and delivery of the program (VIU, 2019-fff). The capacity-building approach of this partnership is helping Kenya to develop a teaching and learning centre, in addition to increasing cultural literacy and global citizenship amongst VIU faculty (Education Abroad, personal communication, November 21, 2019). This project also has a gender equality component, as participants are actively working to encourage women to work non-traditional jobs (Education Abroad, personal communication, November 21, 2019).

Discussions from VIU community engagement events

At the World Café participants indicated that they liked the small class sizes and wished they would stay that way. Students felt that smaller class sizes provide them with better access to faculty support and resources. Participants at all community engagement events expressed a desire for more interdisciplinary and collaborative projects between departments. In addition, participants felt that education at VIU should be more meaningful. For example, education should reflect what we value in society, the challenges we face today, and how we can approach these challenges. Participants also brought up the importance of increasing education for sustainable development, which could be done by offering specific SDG-related courses, and by implementing components of sustainability into all course curricula.

To ensure quality education at VIU, participants suggested expanding the topics that are considered in each department’s program Review every five years. Participants also felt that there is quality education on the Nanaimo campus, but the other campuses are lacking; in particular, they felt as though VIU students in Cowichan and Powell River do not have as many opportunities as students that attend the Nanaimo campus. As an example, some participants expressed concern about the Cowichan library being closed frequently; individuals felt that it should be open for longer hours.

Other university initiatives

Examples of how other universities are meeting Goal 4 were pulled from the University of Michigan and Thompson Rivers University (TRU). At the University of Michigan, steps have been taken towards integrating the study of disability into research, scholarship, and teaching (University of Michigan, 2018). The goal is to both advance knowledge about disability, as well as to help people with disabilities to fully and equally engage in academia and society (University of Michigan, 2018). This is done through the University of Michigan Initiative on Disability Studies, which views disability as a political construction and cultural identity, not just a medical condition (University of Michigan, 2018). At TRU, students can earn a Global Competency credential on their transcript for being globally minded citizens (Thompson Rivers University, 2018-a). Through intercultural and international experiences (e.g. Study Abroad,
learning a second language, and volunteer work), students can earn this recognition in tandem with any program offered at TRU (Thompson Rivers University, 2018-a).

**Goal 5: Achieve gender equality and empower all women and girls**

The United Nations acknowledges that even though some forms of inequalities and discrimination towards women are diminishing, women are still held back in many ways (United Nations, 2018-I). For example, 2005 to 2016 data illustrates that from 56 countries, 20% of adolescent girls aged 15 to 19 who have been in sexual relationships have experienced physical or sexual violence from their intimate partners (United Nations, 2018-I). Even within Canada, gender inequalities and discrimination occur due to “ingrained social and gender biases” (Government of Canada, 2018, p. 46). The focus of the targets and indicators for Goal 5 is primarily on equality for women and children (United Nations, 2018-h). Indicator topics include discrimination based on sex, sexual and psychological violence, access to sexual and reproductive health care, and women in power (United Nations, 2018-h).

Discrimination based on gender does not only happen towards women, but unfortunately none of the SDGs discuss discrimination towards any other gender or towards transgender and gender non-conforming individuals. Therefore, the research team approached this Goal by investigating what VIU is doing towards increasing equality and decreasing discrimination, as well as raising awareness of these issues, for all people.

**How VIU currently contributes to Goal 5**

To address personal harassment, including sexual harassment and discrimination, VIU has implemented a number of policies and supplementary procedures, including: Policy 21.05 (Personal Harassment), with Procedure 21.05.001 (Responding to Complaints of Personal Harassment), and Policy 21.03 (Human Rights), with Procedure 21.03.001 (Human Rights Education Initiatives & Complaint Resolution) (Appendix H; VIU, 2018-S). Both policies state that VIU aims to provide an environment free of harassment and discrimination of all kinds, including on the basis of sex and gender (VIU, 2018-S). The development of these policies involved significant consultation from various stakeholders including VIU’s Sexual Violence and Harassment Education and Response Steering Committee, VIU’s Risk and Threat Assessment Team, the Nanaimo Sexual Assault Response Program Steering Committee, the Ending Violence Association of BC, and many more (VIU, 2019-Y). In addition, VIU Residence has a set of community standards in place that all residents must comply with (Residence, personal communication, July 22, 2019; VIU, 2019-ee). Any behaviours or activities that are threatening, racist, sexist, or reflect any form of discrimination or harassment are prohibited (Residence, personal communication, July 22, 2019). To understand VIU’s status regarding discrimination, the Human Rights and Respectful Workplace Office (HRRWO) produces an annual report that highlights the number of discrimination or violence claims that have occurred at VIU (Human Rights and Respectful Workplace Office, personal communication, May 27, 2019; VIU, 2019-Z). The report for the 2016/17 academic year indicates that just one alleged sexual harassment incident occurred (VIU, 2016). This number has decreased from nine sexual harassment complaints in 2014/15 and eleven in 2013/14 (VIU, 2015-b; VIU, 2014-a). It is
important to note that this does not directly indicate that incidents themselves have been decreasing, but simply that the number of incidents being reported has decreased.

In an attempt to help prevent discrimination and harassment on campus, all VIU employees are required to take the Preventing and Addressing Workplace Harassment: Rights and Responsibilities course (VIU, 2018-DDD). Additionally, in cooperation with Haven Society and Ending Violence Association of BC, VIU has offered cost-free training sessions for faculty and staff to learn how to receive disclosures of sexual violence (VIU, 2018-T).

With regard to gender equality in employment, the Collective Agreement between VIU and the Canadian Union of Public Employees states that VIU, as an employer, “shall not discriminate between male and female employees by employing a person of one sex for any work at a rate of pay that is less than the rate of pay at which a person of the other sex is employed for similar or substantially similar work” (VIU, 2019-aa, p. 51). As of the 2018/19 academic year, VIU’s senior positions have a fairly equal proportion of women and men (VIU, 2018-U), suggesting that the hiring process does not appear to be discriminatory. In VIU’s Executive Team, three out of six are women and four out of six of the Senior Administrators are women (VIU, 2018-U). Out of 60 managerial positions at VIU, 40 of them are held by women (VIU, 2018-U). Nineteen (19) out of 26 Deans are women and almost half of the Department Chairs are women (26 out of 55) (VIU, 2018-U). Through ongoing assessment of employee statistics, VIU Human Resources has noticed a shift in gender-based representation at VIU over the last few years with women now being well represented at VIU (Human Resources, personal communication, October 28, 2019). For example, three out of five of VIU’s Research Chairs are women (Equity, Diversity and Inclusion, personal communication, November 27, 2019). Human Resources ensures recruitment at VIU follows an inclusive and fair process, and search committees also participate in training to ensure that they follow a defensive process where their hiring decisions are strongly supported (Human Resources, personal communication, October 28, 2019). The Human Resources department also works to get equality and inclusion principles in place, while ensuring that the VIU community is aware of these principles (Human Resources, personal communication, October 28, 2019). In addition, VIU’s Equity, Diversity and Inclusion team plans to collect data on how many women are in leadership positions at VIU (Equity, Diversity and Inclusion, personal communication, November 27, 2019). This data, along with other data, will inform the development of their Action Plan regarding equity, diversity and inclusion at VIU (Equity, Diversity and Inclusion, personal communication, November 27, 2019).

The UN indicates that gender equality is also reflected in access to sexual and reproductive health care. As discussed in Goal 3, every student at VIU has access to the Students’ Benefit Plan. Through this plan, 20% of the cost of contraceptives are covered (Greenshield Canada, 2018). The VIU Health and Wellness Centre, located on the Nanaimo campus, offers various services and information for students to make informed decisions regarding their sexual health (VIU, 2018-V). Pamphlets are provided at the Health and Wellness Centre and their website provides links to services off-campus, in addition to other information related to health services (VIU, 2018-W). Furthermore, PAP tests, STI tests, and contraceptives are available at the Health and Wellness Centre (Health & Wellness Centre, personal communication, August 15, 2018). Interestingly, prescriptions for contraceptives are the most written prescriptions at the Centre (Health & Wellness Centre, personal communication, August 15, 2018).
However, students must go off campus to get their prescriptions filled, as there are no pharmacies available on the Nanaimo campus (Health and Wellness Centre, personal communication, August 15, 2018), which may create a barrier to students with limited transportation options.

**Departmental focus**

Programs at VIU—such as Sociology, Studies in Women and Gender, Political Studies, Criminology, Business Administration, History, and Child and Youth Care—educate students on topics related to gender inequalities (Appendix H). Students in these programs also build their capacities and learn the skills that will support them to take on leadership roles (Political Studies, personal communication, September 18, 2018; Arts & Humanities, personal communication, September 11, 2018; Sociology, personal communication, September 25, 2018). Women in these programs are encouraged to have a public voice and perceive their roles in society differently (Arts & Humanities, personal communication, September 11, 2018). Criminology students learn about gender representation within governments and are encouraged to think critically about the current state of equality within legal institutions (Criminology, personal communication, September 28, 2018).

**Research**

Projects within the Centre for Community Outreach and Care have focused on bringing awareness to sexual abuse and exploitation, as well as supporting young families who have experienced abuse (Appendix H) (Centre for Community Outreach and Care, personal communication, September 27, 2018). The Youth Sexual Exploitation Prevention program brings awareness to the prevalence of youth sex trafficking in Nanaimo (Centre for Community Outreach and Care, personal communication, September 27, 2018). Projects such as Sanala Housing and Friday Night Lights provide youth with activities that help to reduce their exposure to harmful situations that might lead to sexual violence (Centre for Community Outreach and Care, personal communication, September 27, 2018).

VIU’s Canada Research Chair in the Historical Dimensions of Women’s Health is researching how women experience birth and are treated during labour (CBC News, 2019). This research aims to provide support for ongoing inequities and policy efforts in women’s health by looking at the historical roots of medical attitudes toward women’s bodies and pain experiences (CBC News, 2019; VIU, 2019-dd). The Research Chair also plans to host a conference at VIU exploring themes such as medical violence, childbirth trauma, the history of women’s pain, and perceptions of women’s health (VIU, 2019-dd).

**Engagement**

VIU has taken on several public engagement initiatives to address discrimination and harassment on campus (Appendix H). The **Know More** Campaign has two main components to it: Know Support and Know Consent (VIU, 2018-Y). The campaign aims to bring awareness and start conversations on the topic of support and consent, as well as provide individuals with information about services (VIU, 2018-Y). Although the campaign is a good initial step to address harassment, further steps could be taken to ensure its effectiveness (Students’ Union, personal communication, August 28, 2018). For example, VIU could establish a committed team and an office on campus (e.g. Women’s Resource Centre) that
provides immediate support and resource guidance for victims (Students’ Union, personal communication, August 28, 2018). Another initiative, the Positive Space Alliance, addresses discrimination and harassment based on sexual orientation and gender identity (VIU, 2018-Z). The Positive Space Alliance promotes “the creation of a space defined by equality, free from discrimination and hate” and supports lesbian, gay, bisexual, transgendered, and questioning (LGBTQ+) members of VIU (VIU, 2018-Z, para. 2). Together, the Positive Space Alliance, VIU Administration, VIU Students’ Union, and VIU Residence created the rainbow staircase as a visual representation of support on the Nanaimo campus (VIU, 2018-Z). The VIU community shows support for survivors and allies of gender-based violence and sexism by participating in the 16 Days of Activism Against Gender Based Violence, facilitated by the VIU Students’ Union (VIU, 2018-ill; Center for Women’s Global Leadership, 2019). In 2019, a number of events such as the Clothesline Project, consent based training, and a self-defence seminar, were hosted at VIU during the 16 Days of Activism from November 25 to December 10 (Center for Women’s Global Leadership, 2019). VIU also has an ongoing partnership with the RCMP for reporting sexual harassment and misconduct experiences (Human Rights and Respectful Workplace Office, personal communication, May 27, 2019). The HRRWO hosts a series of workshops each year related to harassment and discrimination for students and employees (VIU, 2016). In addition, VIU has hosted a presentation from West Coast Leaf on the topic of consent (West Coast Leaf, 2018). The presentation looked at the legal definitions, frequently asked questions on the law of consent and sexual assault in Canada, and legal rights and procedures following sexual assault (Counselling Services, personal communication, August 7, 2018).

Additionally, in the fall of 2018, three VIU History professors volunteered to be co-editors of the Gender & History journal for the next five years (VIU, 2018-X). The Gender & History journal is the world’s leading journal on the history of gender relations (VIU, 2018-X). In this role, the co-editors must publish three issues per year and host an international conference on a topic related to gender every second year – the first Gender & History symposium hosted by VIU will be held in 2020 (VIU, 2018-X).

Discussions from VIU community engagement events

Goal 5 was not specifically discussed at the Powell River Rural Café and Accelerating the SDGs, however, discussions from the World Café revolved around continuing to promote and create a safe and supportive environment at VIU. It was suggested that VIU should have more “safe place” stickers – stickers that indicate the space is free of judgement – around campus to promote VIU being an inclusive place. Participants felt that classrooms should be identified as safe places where students can feel comfortable to talk about gender and LGBTQ+ topics. The idea that gender and gender roles are socially constructed was discussed at the table and participants felt that promoting the knowledge of this would be beneficial to help reduce discrimination. Similarly, it was also discussed that gender identity is a cultural concept; participants suggested that this topic needs to be discussed in settings specifically targeted towards international students. Participants also felt that VIU should help to make topics and ideas related to gender identity more internationally understandable in order to increase awareness and understanding. This could also be accomplished by requiring students to take specific courses or having students obtain a more interdisciplinary education in their first year – by requiring students to take
courses from other disciplines, VIU would be opening students to new ideas and ways of thinking. Participants also talked about creating a gender-based research centre at VIU and having this centre work through community-based partnerships.

Other university initiatives

Both the University of Northern British Columbia (UNBC) and U of T provide examples of how universities can meet Goal 5. UNBC houses the Northern Feminist Institute for Research and Evaluation (known as FIRE). FIRE aims to create a women-centred approach to examining the determinants of health, raise awareness about equality for the health of women in rural and remote communities, and engage in research that addresses northern women’s needs (University of Northern British Columbia, 2018). Affiliated with U of T, the Women’s College Research Institute is a multidisciplinary research institute located at the Women’s College Hospital (WCH) (Women’s College Hospital, 2018). The institute and hospital, as one of very few across the world that focus specifically on women’s health, is a world leader in women’s health (Women’s College Hospital, 2018). Education and scientific research at WCH explores unique conditions for women such as diabetes, heart disease, and arthritis with a goal to “reinvent healthcare for women and their families” (Women’s College Hospital, 2018, para. 4).

Goal 6: Ensure availability and sustainable management of water and sanitation for all

Water is essential for life; however, many people around the globe do not have sufficient access to clean water and proper sanitation (United Nations, 2018-m). In 2015, approximately 29% of the population did not have safe drinking water and 61% were without proper waste management services (United Nations, 2018-m). In Canada, access to drinking water and proper sanitation is generally not considered an issue (Government of Canada, 2018). Yet, some Indigenous peoples and other remote communities across Canada have experienced long-standing health issues related to poor water and sanitation (Government of Canada, 2018). In order to address these challenges, the Government of Canada has created policies (e.g. Safe Drinking Water for First Nations Act) and long-term strategies for drinking water on Indigenous peoples’ reserves (Government of Canada, 2018).

Although VIU does not control water management within the City of Nanaimo, it does have a large impact on the water system due to increasing demand from students and employees (Facilities Services & Campus Development, personal communication, September 21, 2018). Indicator topics for Goal 6 focus on access to safe water and sanitation, wastewater treatment, water-use stress and efficiency, and change in water-related ecosystems (United Nations, 2018-h). For the purpose of this project, the research team approached this Goal by looking at what role VIU plays in the water systems in Nanaimo and how VIU may be impacting water management through research and initiatives.

How VIU currently contributes to Goal 6

At VIU, all people have access to clean drinking water. The campus has water fountains and 33 water bottle filling stations installed at a variety of locations (Appendix I) (VIU, 2018-aa). Additionally, all tap water is safe to drink (City of Nanaimo, 2017). In terms of water consumption, VIU records its usage as it
is billed quarterly by the City (Facilities Services & Campus Development, personal communication, September 21, 2018). Most of the water consumed is at the individual level rather than the industrial level (Facilities Services & Campus Development, personal communication, September 21, 2018). Water consumption at VIU has increased over the years due to more people on campus, however, the University has been taking steps to be more efficient (Facilities Services & Campus Development, personal communication, September 21, 2018). For example, in 2017, all of culinary refrigeration systems that used water for cooling were replaced to reduce water consumption (Facilities Services & Campus Development, personal communication, September 21, 2018). Furthermore, all toilets on campus have been changed to low-flow toilets (Facilities Services & Campus Development, personal communication, September 21, 2018). Each time a product breaks or needs replacing, VIU Facilities replaces it with a new, updated, and more efficient product (e.g. new refrigerators, toilets, shower heads, and sinks) (Facilities Services & Campus Development, personal communication, September 21, 2018). On Residence, old hot water heaters are being replaced with newer, more sustainable models (Residence, personal communication, July 22, 2019). Other VIU buildings, such as the Cowichan Campus, the G.R. Paine Horticultural Centre, and the Deep Bay Marine Field Station, also use water efficient methods such as low-flow plumbing fixtures and rainwater collection for irrigation and reduced water usage (VIU, 2018-ff; Horticulture, personal communication, August 21, 2018; Deep Bay Marine Field Station, personal communication, August 7, 2018). The Cowichan campus also participates in other water-use efficiency practices through a few other methods. For example, native, drought resistant plants are used for the landscaping and require minimal irrigation (Cowichan campus, personal communication, September 4, 2019; VIU, 2019-ff). When the Cowichan campus needs to irrigate, rainwater that has been collected from their water capture system is used (Cowichan campus, personal communication, September 4, 2019; VIU, 2019-ff). The Cowichan campus also has a monitor board that shows the campus’ water consumption and energy use in order to track consumption patterns (Cowichan campus, personal communication, September 4, 2019). Lastly, VIU follows the Regional District of Nanaimo’s water regulations, during times of drought VIU will adhere to the necessary water restrictions (Facilities Services & Campus Development, personal communication, September 21, 2018).

With respect to sanitation, every building has at least one set of bathroom facilities that include basic handwashing setups (e.g. sink, soap dispenser, and paper towels) (VIU, 2015-a). VIU also has hand sanitizer stations throughout campus. There are two main wastewater streams at VIU’s Nanaimo campus, the sanitary sewer and the storm sewers, both of which are managed by the City of Nanaimo (Facilities Services & Campus Development, personal communication, September 21, 2018). However, VIU is conscious of its wastewater and makes attempts to help maintain rain water flow on site through the use of permeable materials and water diversion to make sure run off does not overwhelm Nanaimo’s infrastructure (Facilities Services & Campus Development, personal communication, September 21, 2018).

**Departmental focus**

Courses offered within the Biology, Fisheries and Aquaculture, and the Resource Management and Protection departments focus on the topic of water resources and quality through classroom discussions
and hands-on experience (Appendix I). For example, in RMOT 306 (Environmental Monitoring), students annually measure water quality parameters in a variety of local water systems, such as Millstone River, Cottle Creek, Richards Creek, Beck Creek, and Englishman River (Resource Management and Protection, personal communication, September 11, 2018). As well, students in BIOL 320 (Aquatic Ecosystems) have been monitoring local lakes for over 10 years (Biology, personal communication, September 10, 2018).

Research

Currently, there are research projects at MABRRI that address ambient water quality and quantity: Wetland Mapping in the Regional District of Nanaimo (RDN) and Lake Monitoring in the Little Qualicum Region (Appendix I) (VIU, 2018-bb). The Wetland Mapping project, through a partnership with the RDN’s Drinking Water and Watershed Protection program, is aimed towards gaining a better understanding of the water resources in the region, specifically wetlands, and their relationship to groundwater recharge/discharge (VIU, 2018-bb). The Lake Monitoring project focuses on the Little Qualicum Water Region and is training student research assistants to monitor lake health following the BC Lake Stewardship Society’s (BCLS) standards (VIU, 2018-bb). In addition to MABRRI, the Coastal Hydrology and Climate Change Research Lab at VIU has many projects related to monitoring watersheds in various areas along the west coast of North America (Coastal Hydrology and Climate Change Research Lab, 2018). The lab is also engaged in the Kwakshua Watersheds project on Calvert Island, which involves monitoring discharge from seven small watersheds in an attempt to determine how much freshwater is entering the ocean (Coastal Hydrology and Climate Change Research Lab, personal communication, October 10, 2018). Another project conducted by the Coastal Hydrology and Climate Change Research Lab has been monitoring the long-term effects (started in 1992) of climate on snow in Russell Creek, thereby attempting to understand water quantity in the region (Coastal Hydrology and Climate Change Research Lab, personal communication, October 10, 2018). In addition, a collaborative project between VIU’s Coastal Hydrology and Climate Change Research Lab and UNBC has received funding to understand the role that seasonal snow cover and glaciers play in the hydrology of key watersheds along BC’s Central and Southern Coast, and their influence on the transport of vital nutrients through coastal watersheds to the ocean (VIU, 2019-ii). The research team has installed a weather station and camera at Klinaklini Glacier, one of North America’s largest, to provide flood and avalanche forecasting, showcase the dynamic conditions of glaciers, and improve an understanding of the importance of freshwater discharge to the ocean (VIU, 2019-ii).

Several other research projects relating to water quality exist at VIU. Research in VIU’s Earth Science department, on Quadra Island karst systems, is working towards a better understanding of karst aquifers and catchments in the region (VIU, 2018-rrrr). A permanent water monitoring site was installed at the Stramberg Spring to understand how it is recharged, which will provide land management recommendations for the spring catchment and assist in protecting the water resource (VIU, 2018-rrrr). Another project conducted by VIU’s Earth Science department aimed to improve groundwater management for the Nanaimo region (VIU, 2018-rrrr). This project involved a partnership between two VIU faculty members, 75 VIU students, the RDN, and the RBC Foundation (VIU, 2018-rrrr). To gain an understanding of subsurface geological conditions that relate to groundwater recharge, faculty and
students conducted geophysical surveys and borehole data analyses to develop geological models of the subsurface (VIU, 2018-rrrr). The aim of the project was to guide groundwater management by making recommendations to the RDN, while determining areas that are vulnerable to contamination (VIU, 2018-rrrr). Through the AERL, a VIU Biology graduate is working to develop a measurement technique that will analyze water quality in rivers, lakes, or oceans immediately on-site (VIU, 2019-P). The technique will determine if the water has been contaminated with toxic chemicals (VIU, 2019-P). Lastly, a research project relating to water quality involves a Geography professor and a Master of Geographic Information Systems Applications student who have partnered with the Government of BC and local municipalities to develop a water budget for Vancouver Island (VIU, 2018-cc). The water budget will help water managers (i.e. BC Government and regional governments) and the public understand how much water is available in BC. Inputs and outputs of water within the region will be monitored and a publicly accessible interactive map of the water available will be developed (VIU, 2018-cc).

Engagement

Over the years, VIU has been taking action towards water efficiency through initiatives such as the VIU Water Pledge and the Water Wise Challenge (Appendix I) (VIU, n.d.; VIU, 2018-aa; VIU, 2018-dd). The VIU Water Pledge was implemented in 2011 to eliminate the sale and use of single-use plastic water bottles at all VIU campuses (VIU, n.d.). The initiative promotes the use of public water fountains and water bottle refilling stations (VIU, n.d.). The Water Wise Challenge is an annual contest that encourages less water and natural gas consumption (VIU, 2018-dd). Students that sign up for the challenge are required to track their shower duration and pledge to wash their laundry in cold water for a week and a half (VIU, 2018-dd). After completing the challenge, the winner is awarded with a gift card to the VIU Campus Store or Food Services (VIU, 2018-dd). Additional engagement comes from VIU Residence, who are working to educate students about sustainable water use practices (Residence, personal communication, July 22, 2019).

Discussions from VIU community engagement events

During the World Café, the majority of participants agreed that education and awareness were top priority. In particular, it was noted that students should be educated on where their water is coming from, what activities take place in the Nanaimo River Watershed, and how to reduce daily water consumption. It was also suggested that VIU should establish a wastewater program or build grey water systems and rain gardens on campus.

Other university initiatives

TRU offers a diploma in Water and Wastewater Technology (Thompson Rivers University, 2018-b). Students in this program gain skills to protect drinking water quality, safeguard water resources, and ensure the sustainability of water supplies (Thompson Rivers University, 2018-b). The program educates on operating treatment and water systems, environmental law, and occupational health and safety (Thompson Rivers University, 2018-b). Another example is the Nursing program at MacEwan University
In 2017, students from the program participated in an advocacy project to raise awareness about water sanitation conditions in First Nations communities (MacEwan University, 2018). They brought awareness through social media actions (e.g. campaigns, videos, and infographics) and connected with governments and community organizations to share their social media resources (MacEwan University, 2018).

**Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all**

Access to affordable, reliable, and sustainable energy is essential for the economy and our well-being (Government of Canada, 2018). Globally, the proportion of people with access to electricity increased 9% from 2000 to 2016, with just under 1 billion people living without electricity in 2016 (United Nations, 2018-n). In Canada, electricity is among the least expensive and cleanest in the world due to abundant hydro power, development of fossil fuels, and nuclear technology (Government of Canada, 2018). In addition, the energy sector contributes to thousands of jobs and almost 10% of Canada’s GDP (Government of Canada, 2018). At the same time, however, Canada is one of the largest per-capita consumers of energy (Government of Canada, 2018). This is attributed to Canada’s size and proximity to the north. As a result, Canada is making investments in clean energy as well as introducing policies to accelerate renewable energy (Government of Canada, 2018). Canada’s initiatives towards sustainable energy provide significant progress toward Goal 7.

VIU has 42 institutional buildings on the Nanaimo campus alone, which plays a large role in energy usage (VIU, 2018-ee). With indicator topics for Goal 7 focused on renewable energy, energy use and efficiency, and financial support to developing countries for clean energy, the research team approached this Goal from two perspectives (United Nations, 2018-h). The first was to investigate whether VIU is keeping track of its current energy usage and what that usage is. The second was to understand how VIU is taking steps to become more sustainable with regards to energy, whether through structural upgrades, initiatives, education, and/or research.

**How VIU currently contributes to Goal 7**

To help define VIU’s sustainability goals, the Energy Management Policy was created (VIU, 2018-e). The policy includes four main objectives, which aim to (1) reduce energy consumption; (2) reduce waste/emission; (3) seek environmentally neutral sources of heating, cooling, and energy; and (4) reduce pollution (VIU, 2018-ff). VIU has also taken steps towards sustainable energy within its infrastructure (Appendix J) (VIU, 2018-gg). Currently on the Nanaimo campus, the Faculty of Management Centre (building 250) and the new Dr. Ralph Nilson Centre for Health and Science (building 210) are LEED (Leadership in Energy and Environmental Design) certified (VIU, 2019-gg; VIU, 2019-hh). This certification means that the buildings were designed to use less energy and water, avoid waste and save on maintenance costs, and create improved indoor air quality (Canada Green Building Council, 2020). The Nanaimo campus does not use solar energy for any of its buildings, due to financial feasibility; however, it does utilize solar streetlights and crosswalks (Facilities Services & Campus Development, personal communication, September 21, 2018). As of June 2018, VIU has implemented a geo-exchange system at the Nanaimo campus that heats and cools the buildings from the energy stored
in water trapped within the Wakesiah mine (VIU, 2018-hh). The Dr. Ralph Nilson Centre for Health and Science and Shq’apthut (the Gathering Place) are the first buildings to be connected to the geo-exchange system (VIU, 2017-g). The Cowichan campus (building 700) is also LEED certified; it uses daylight as 90% of its lighting source, has a green roof, and uses a geo-exchange system (VIU, 2018-gg). Additionally, VIU’s Deep Bay Marine Field Station is LEED Platinum certified, which is the highest standard of LEED certification that can be achieved (Deep Bay Marine Field Station, personal communication, August 7, 2018; Canada Green Building Council, 2020). The Station also uses a system similar to geo-exchange, in which seawater is used to heat and cool the building (Deep Bay Marine Field Station, personal communication, August 7, 2018). The Campus Master Plan anticipates a range of new projects: there are plans to use as much as four times the amount of geo-exchange as there is today at VIU (Facilities Services & Campus Development, personal communication, September 21, 2018; VIU, 2009). Following provincial regulations and VIU’s vision, any new buildings built will be LEED-certified or better (Facilities Services & Campus Development, personal communication, September 21, 2018).

To encourage fossil fuel-free transportation, VIU’s Health and Safety Office partnered with Bikes for Kids in 2018, a local non-profit organization, which works with the RCMP and two local bike repair shops to acquire bikes, service them, and donate them to children in need (VIU, 2018-AAAA). Bikes for Kids also agreed to provide bikes to VIU’s Campus Security to distribute to VIU students and employees (VIU, 2018-AAAA). To encourage more efficient transportation to VIU campuses, VIU’s Sustainability Advisory Committee has a website dedicated to carpooling information, tips, and links to finding potential carpoolers (VIU, 2018-ccc). VIU’s Nanaimo campus has designed carpool parking spaces reserved for vehicles that park with two or more people (VIU, 2018-ccc).

**Departmental focus**

VIU offers Geography and Science courses that include the topic of renewable energy (Appendix J) (VIU, 2018-j). Additionally, students in the Horticulture program learn about greenways and applying green roofs; for example, they learn how to use trees to cool (using shade) or warm buildings (Horticulture, personal communication, August 21, 2018). In the course SCIE 350 (Technologies for the Developing World), students learn about renewable energy and consider examples where science and technology have been applied to assist the developing world (Engineering, personal communication, November 7, 2019; VIU, 2018-j). Management students also learn about renewable energy in MGMT 494 (Strategies for Sustainable Development) and MBA 541 (Corporate Social Responsibility) (Business Administration in Management and Law, personal communication, June 4, 2019; VIU, 2018-j). Additionally, VIU’s ElderCollege offers courses such as *How Green (Energy Efficient) Is My Home?* and *Photovoltaics: Solar Electric Power*, which look at energy efficiency and effectiveness of solar energy (ElderCollege, personal communication, October 16, 2019; VIU, 2019-II). VIU Carpentry students learn about clean technology through topics such as solar power, air movement, and recognizing energy inefficiencies, while looking at examples from other countries (Carpentry, personal communication, October 22, 2019). Guest lectures about sustainable practices are also delivered by local industry partners to Carpentry students (Carpentry, personal communication, October 22, 2019). Students in the Carpentry program also had the opportunity to gain hands-on, community-based experience by helping build a footbridge (to
increase accessibility) for the *Green Point Project* (Carpentry, personal communication, October 22, 2019). The *Green Point Project* is working to rebuild The Green Point home, an Archeological site that was home to the Cowichan First Nation’s Chief Tzouhalem (The Green Point Project, 2019-a). The project is using sustainable approaches to attain Living Building Challenge, Passive Home, and Green Shores for Homes certifications (The Green Point Project, 2019-b; The Green Point Project, 2019-c).

**Research**

In 2018, students in a Cultural Geography course had the opportunity to research the enablers and constraints of biodiesel use in commercial, industrial, and institutional vehicles within the RDN (VIU, 2018-nnnn; VIU, 2018-wwww). The research aimed to reduce greenhouse gas emissions in the region and increase awareness about the use of biodiesel as an alternative to fossil fuels (VIU, 2018-nnnn). Additionally, a graduate student in VIU’s Master of Community Planning program received a Canada Graduate Scholarship award to determine the attitudes of Nanaimo residents toward e-bikes (VIU, 2019-kk). The research aims to assess whether e-bikes are supported and should be included in the City of Nanaimo’s future plans (VIU, 2019-kk).

**Engagement**

Throughout 2019, VIU Sustainability hosted two energy conservation incentive programs on campus (Appendix J). The first program, *Energy Naughty or Nice?*, promotes energy use awareness during the holiday season by having individuals take a picture of themselves being energy “nice” (i.e. turning off computer monitors, taking the stairs, sorting waste, etc.) (VIU, 2018-ii). Participants upload their picture on a social media platform for a chance to win a prize (VIU, 2018-ii). The other program, the *Energy Nice Shutdown Challenge*, was created for students who live in residence as an incentive to use less energy over the Christmas break (VIU, 2018-jj). The floor with the most participants won a pizza party (VIU, 2018-jj). In 2020, additional energy conservation initiatives include *Hunting for Heat Loss* and the *BC Cool Campus Challenge* (VIU, 2020-e). *Hunting for Heat Loss* challenges the VIU community to borrow infrared cameras from the library to detect heat loss across campus (VIU, 2020-f). The *BC Cool Campus Challenge* is a friendly competition between VIU, Selkirk College, Simon Fraser University, and Thompson Rivers University that challenges each institution to reduce natural gas usage by encouraging community members to turn down the heat, layer up in warmer clothing, take shorter showers, and do laundry in cold water (VIU, 2020-g).

In 2009, a VIU faculty member from the Physics department established LED Africa, a charitable organization which promotes science education and provides solar powered lighting to rural schools in Malawi, Africa (Physics, personal communication, November 7, 2019; LED Africa, 2019). Between 2009 and 2018, LED Africa installed lighting systems in 21 rural schools in Malawi and launched the *Science for All* project in 2013 (LED Africa, 2019). The *Science for All* project provides educational materials such as science textbooks, equipment, and demonstration manuals to schools in Africa (LED Africa, 2019). VIU faculty and students also host an annual *Extreme Science* show at VIU to fundraise for LED Africa (Physics, personal communication, November 7, 2019; VIU, 2011-b; VIU, 2015-c).
VIU’s student group, Awareness of Climate Change through Education and Research (ACER) educates the VIU and surrounding communities on climate change (Awareness of Climate Change through Education and Research [ACER], personal communication, October 3, 2019). A major focus of their work is on education about alternative and renewable energy and other sustainable practices (ACER, personal communication, October 3, 2019). ACER students track the cost comparisons between fossil fuel energy and renewable energy such as wind and solar to inform the public on the feasibility of renewable energy (ACER, personal communication, October 3, 2019).

Discussions from VIU community engagement events

At the World Café, many participants recommended expanding education on clean and affordable energy across many disciplines for both VIU employees and students. Outdoor classrooms were also suggested as a way to reduce energy use. Another idea was to introduce more bike-powered chargers as the Nanaimo campus currently has only one bike charger located in the library for short-term display and use (Sustainability Advisory Committee Meeting, 2018). The bike uses the rotational movement of the wheels to generate a battery capable of charging cell phones, laptops, tablets, etc. An additional suggestion was to organize campus-wide awareness campaigns. World Café participants discussed ideas that included tangible numbers and targets, such as counting paper towel usage or establishing an energy consumption competition between departments. Participants at all community engagement events noted that the implementation of the District Geo-Exchange system on the Nanaimo campus has been a beneficial improvement for conscious energy consumption, however, the majority of VIU buildings still rely on fossil fuel-derived energy. During the Powell River Rural Café, it was noted the Powell River campus is located within an older building, demonstrating the need to move towards a heating and cooling system that does not use fossil fuels.

Other university initiatives

In Ottawa, Carleton University has a Sustainable and Renewable Energy Engineering undergraduate degree (Carleton University, 2018). The program has two education streams: Smart Technologies for Power Generation and Distribution; and Efficient Energy Generation and Conversion (Carleton University, 2018). Clean energy areas of focus in this program include nuclear, wind, solar, geothermal, hydropower, and biomass energy (Carleton University, 2018). Students in the program gain experience designing, building, operating, and enhancing sustainable energy systems (Carleton University, 2018). Another program is U of T’s Institute for Sustainable Energy (ISE) (University of Toronto, 2018-b). ISE immerses students and researchers in cutting edge research and education geared toward sustainable energy (University of Toronto, 2018-b). Some major areas of focus are alternative fuels, bio energy, carbon management, computational sustainability, electricity transmission, energy transmission, and energy policy (University of Toronto, 2018-b). ISE is also actively involved in providing research opportunities in the areas of clean combustion and energy distribution to remote locations (University of Toronto, 2018-b). At the University of Ottawa (U of O), there are many sustainability programs and initiatives (University of Ottawa, 2018-a). For example, The EcoProsperity program attempts to retrofit their campus to reduce energy consumption and lower costs (University of Ottawa, 2018-a). A main
component of the program is monitoring all infrastructure on campus to see where consumption can be reduced (University of Ottawa, 2018-a).

**Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all**

To achieve global economic sustainability, labour productivity must increase and the unemployment rate must decrease – particularly for people who have disabilities, are young, or are not men (United Nations Development Programme, 2018-a). Although the number of extremely impoverished workers has declined in the last 25 years, there is still progress to be made in terms of: increasing employment opportunities, reducing informal employment, ensuring the safety and security of employment, and improving access to financial services (United Nations, 2018-o). In Canada, the nature of work is rapidly changing in response to globalization, technology, and shifting demographics (Government of Canada, 2018). To keep up with this evolution, Canada has devoted many initiatives towards investing in the well-being of its workers, such as initiating the Canada Child Benefit and the middle-class tax cut (Government of Canada, 2018). Overall, unemployment fell from 7.1% in 2015 to 5.8% in 2018 – the lowest level in national history (Government of Canada, 2018).

As a post-secondary institution, VIU contributes to these efforts by training young Canadians for skilled employment, and is a source of employment for over 2,000 people in the local community (VIU, 2018-kk). Indicators for Goal 8 examine unemployment rates, sustainable tourism, youth not in education, employment or training, and domestic material consumption (United Nations, 2018-h).

**How VIU currently contributes to Goal 8**

VIU’s 2018 *Analysis of the Economic Impact and Return on Investment of Education* indicates that VIU’s total impact on the regional economy during 2016/17 amounted to $624.5 million (VIU, 2018-oooo). During the 2016/17 fiscal year, VIU also supported 17,040 jobs in the Vancouver Island economy, and the top industries impacted by VIU were Health Care, Social Assistance, Finance, and Insurance (VIU, 2018-oooo). Since 2017, *Imagine VIU*, the largest charitable giving campaign in Central Vancouver Island’s history, raised $5.5 million in funds for campus buildings, programs, equipment, and students (VIU, 2019-mm). In addition to raising funds, the campaign created an opportunity for VIU to build strong, enduring relationships with community members and businesses who rely on VIU to provide an education workforce to the region’s economy (VIU, 2019-mm).

Individuals employed at VIU also contribute to the achievement of employment and decent work for all. Particularly, in the 2016/17 fiscal year, VIU employed 1,242 employees, and total payroll amounted to $99.8 million, equal to 69.6% of the University’s total expenses (VIU, 2018-pppp). Through on-campus employment, a total of 656 students were employed in 2018/19 (Centre for Experiential Learning, personal communication, December 17, 2019). Of the 656 students, 266 were employed through work-op programs, 371 were employed through individual departments, and 19 were employed with Canada Summer Jobs funding (Centre for Experiential Learning, personal communication, December 17, 2019). Additionally, the Centre for Experiential Learning offers work-integrated learning co-ops and internships for VIU students with a community partner or organization (VIU, 2019-nn). These opportunities have proven to benefit students’ professional development in various ways (Appendix K), and in 2018/19,
1,355 students participated in work-integrated learning (Centre for Experiential Learning, personal communication, December 17, 2019). One example is VIU’s Indigenous Intern Leadership program which provides Indigenous students with opportunities to apply for intern positions with BC companies, assisting in building foundational experience towards a lasting career (VIU, 2019-oo). The program encourages businesses to provide paid internships for Indigenous students and provides a database for students to see which businesses are available for internships (Aboriginal Education and Engagement, personal communication, July 12, 2019).

In general, the completion of academic programs at VIU contributes to a decreased unemployment rate as graduates are qualified for work in their desired professions (VIU, 2018-oooo). In return for their investment in post-secondary education, VIU’s students develop the skills required to be employed in higher-paying jobs (VIU, 2018-oooo). For example, the average graduate with a bachelor’s degree from VIU is likely to see increased earnings of $16,400 per year in comparison to someone without post-secondary education (VIU, 2018-oooo). In addition to education and training for skills development, VIU offers many services and opportunities for students in regard to finding employment (Appendix K). Through Career Services, students have access to job and opportunity postings, career advisors, and personal or professional development events, and for recent graduates who need help with applying for jobs, the Office of Advancement and Alumni offers Job Seekers workshops (VIU, 2018-ll; Advancement and Alumni, personal communication, November 14, 2019). Additionally, VIU works to reduce the proportion of youth (age 15-24) not currently engaged in education, employment, or training by inviting potential students to Discovery Days, which showcases programs and supports at VIU to students in grades 10-12 (VIU, 2018-P). In 2016/17, 677 students under the age of 18, 4,152 students from 18-21 years, and 2,318 students aged 22-24 years attended sessions on campus (VIU, 2018-d). VIU also hosts similar Open House and Spring Break Days programs for the wider community (VIU, 2018-Q; VIU, 2018-R). Faculty Open Houses allow high school students to meet professors and other students and gain perspective on what each program has to offer (VIU, 2019-pp). In additional efforts to encourage high school students to consider post-secondary education, the Peter Cundill Foundation has partnered with VIU’s Office of Aboriginal Education and Engagement to offer free camps at VIU to Indigenous high school students every summer since 2017 (VIU, 2019-uu). The camps introduce university life and focus on Indigenous youth education, health and wellness, literacy, cultural awareness, and creating familiarity and connections (Appendix K) (Aboriginal Education and Engagement, personal communication, July 12, 2019).

VIU also contributes to economic growth by purchasing goods and services for the campus. In accordance with Policy 42.31 (Purchasing), the Purchasing department is “responsible for sourcing, negotiating, and administering the purchase of goods and services” for all of VIU except the Library and Campus Store (VIU, 2018-e, Policy 42.31, p. 1; Purchasing, personal communication, August 24, 2018). The Purchasing department must abide by the guidelines of North American Free Trade Agreement, The New West Partnership Trade Agreement, the Agreement on Internal Trade (Canada), and the Purchasing Management Association of Canada’s Code of Ethics (NAFTANOW, 2018; New West Partnership Trade Agreement, 2018; Canadian Free Trade Agreement, 2018; Supply Chain Management Association, 2018; Purchasing, personal communication, August 24, 2018). Following these agreements, VIU is required to have a competitive, open public bidding process for the purchase of all goods and services over $75,000 or $200,000 for construction (Purchasing, personal communication, August 24, 2018). Due to this public bidding process, VIU cannot actively seek out products from local distributors (Purchasing, personal
There are two outlets where products are sold at VIU, the Campus Store and Food Services. The Campus Store deals with companies in the Workers’ Rights Consortium, of which VIU is an affiliate (Worker Rights Consortium, 2018; Campus Store, personal communication, August 17, 2018). Although the Campus Store prioritizes selling local goods when possible, the price-point and demand can be inhibiting, so only a small percentage of local products are currently offered (Campus Store, personal communication, August 17, 2018). Some of these products include Hornby Island Bars, handmade soaps, and local jewellery (Campus Store, personal communication, August 17, 2018). In November and December, the Store features local artisans, in hopes that this will increase interest in local goods and allow more local stock to be added in the future (Campus Store, personal communication, August 17, 2018). Food Services faces a similar struggle, in that the capacity to sell local products is limited by price-points and demand from customers (Food Services, personal communication, October 2, 2018). This is further complicated by the seasonal availability of food products and consumer expectations (Food Services, personal communication, October 2, 2019). For example, customers expect a variety of fruits on platters from VIU Catering which may not be in season locally, forcing purchases to be made from foreign companies (Food Services, personal communication, October 2, 2018). However, they are able to provide some local options, such as local ham from Port Alberni, cheese from Qualicum Beach, potato chips from the Cowichan Valley, and popsicles from Comox (Food Services, personal communication, October 2, 2018). VIU Powell River’s Culinary Arts program is also engaged in ongoing efforts to increase the proportion of campus food that is locally sourced, by using local ingredients as much as possible for catering events and for the restaurant that runs on Wednesday evenings as previously described in Goal 2 (Powell River Campus, personal communication, July 23, 2019). The Culinary Arts program at the VIU Cowichan campus also works to source food locally and has formed a partnership with Providence Farm to open the Farm Table Restaurant, which offers a farm-to-table dining experience (VIU, 2019-qq). The partnership is all about sourcing, gathering, and using local food, not just from Providence Farm, but from local fisheries and poultry farms as well (VIU, 2019-qq). Close to 100% of ingredients used in the restaurant are locally sourced (Cowichan campus, personal communication, September 4, 2019). Additionally, VIU Nanaimo’s Good Food Box program, described in Goal 2, almost always also uses locally sourced food from the Nanaimo Foodshare Society (Residence, personal communication, July 22, 2019).

**Departmental focus**

As tourism becomes an increasingly important economic sector in Canada, it is critical to promote sustainability within the field. The Recreation and Tourism department in the Faculty of Management achieves this by requiring all students to take a course on sustainability (Appendix K) (VIU, 2018-mm; VIU, 2018-nn; VIU, 2018-oo). Furthermore, VIU offers both a Graduate Diploma and Master of Arts in Sustainable Leisure Management that is designed around sustainability in the field (VIU, 2018-pp). To improve employment rates post-graduation, students in this department are required to participate in the Cooperative Education program, where they engage in either a co-op placement or internship (VIU, 2018-qq). Students who have completed a degree or diploma in the Recreation and Tourism department
at VIU have gone on to find employment locally with the RDN, or with cruise lines, recreation and sport companies, and local governments (VIU, 2018-qq).

To help make employment opportunities accessible to all, including persons with disabilities, VIU offers the WEST program, which is specifically designed for students with developmental and cognitive disabilities, as well as those with self-disclosed barriers to employment (Workplace Essential Skills Training, personal communication, September 19, 2019; VIU, 2018-JJ). In addition to teaching these skills, the WEST program partners with approximately 90 different employers in the Nanaimo and Cowichan communities that provide students with hands-on experience in the workplace, from which many students obtain employment (Workplace Essential Skills and Training, personal communication, September 19, 2019). The WEST program provides employability skills training and has proven successful among graduates, with at least 50% obtaining employment and the rest going into volunteer work or continuing in post-secondary studies (Workplace Essential Skills and Training, personal communication, September 19, 2019). At the Nanaimo campus, the WEST program also provides direct work experience for students through the WEST Café Training Lab, which opened in September 2019, serving coffee and snacks in building 205 (Workplace Essential Skills and Training, personal communication, September 19, 2019). WEST students are employed in the Café where they get experience with customer service, handling money, and restaurant operations (Workplace Essential Skills and Training, personal communication, September 19, 2019). Another program that provides training to individuals with barriers to employment is the Cooperative Entrepreneur Training program. The program provides students who want to be self-employed with the opportunity to create their own business plans (Workplace Essential Skills and Training, personal communication, September 19, 2019). In addition to providing VIU students with employability skills, professional development and training programs are offered off-campus to local First Nations communities, which are tailored to achieve specific community goals set out by the First Nations communities (VIU, 2019-rr). In particular, partnerships between the Bachelor of Science in Nursing program and Indigenous communities sometimes involve employment development for community members, such as skills and training workshops, as well as help with developing grants (Nursing, personal communication, September 20, 2019).

Research

VIU researchers are working to discover the challenges and benefits of the artisan economic sector in support of the success of local businesses, as a VIU Recreation and Tourism professor found that consumer demand for artisanal products has been increasing (VIU, 2018-qqqq). This led to a partnership between VIU and the Société de développement économique de la Colombie-Britannique (SDÉCB) to evaluate how an ÉCONOMUSÉE© model for artisans will have an economic impact (VIU, 2018-qqqq). ÉCONOMUSÉE© promotes the preservation of traditional knowledge and local entrepreneurship by encouraging the purchase of locally produced artisanal products (VIU, 2018-qqqq; Société de développement économique, 2019).

Further work towards promoting sustainable tourism and local culture is being done by another VIU Recreation and Tourism professor. This professor was awarded a Social Sciences and Humanities Research Council (SSHRC) Connection Grant in support of their work on the 6th annual International
Polar Tourism Research Network conference (VIU, 2018-rrrr). Topics at the conference included tourism and community-related issues and concerns, economic diversification, the cultural and creative economies, and climate change. Some VIU students presented on their work at the conference held in Yukon, and approximately 35% of attendees were undergraduate or graduate students from around the world doing research in polar tourism (VIU, 2018-rrrr).

Discussions from VIU community engagement events

Members of the VIU community voiced their suggestions on how VIU can better meet Goal 8 at the World Café. Most of these recommendations stressed the need for more co-op programs. While the Recreation and Tourism department is an example of successfully incorporating mandatory co-ops into an academic program, other departments at VIU have fewer opportunities, or no co-ops at all. Furthermore, participants asserted that these co-ops should be paid placements, or students should otherwise be provided with financial support while engaging in a placement. Other feedback from the World Café regarded compensation for field time spent at university, ensuring tuition is affordable, and offering free childcare for student parents. Powell River Rural Café participants suggested that VIU could place more emphasis on social procurement by focusing on the promotion of de-growth economies and co-operatives, as well as hosting more workshops and training sessions in support of creative economy and social enterprises.

Other university initiatives

At Ryerson University, the Ryerson’s Student Emergency Response Team is tasked with protecting the safety of all students (Ryerson University, 2018). The team is made up of student volunteers who have experience as firefighters, paramedics, lifeguards, first responders, or are otherwise trained in CPR and advanced first aid (Ryerson University, 2018). The volunteers provide emergency medical care to students living in residence and at Ryerson events (Ryerson University, 2018). This initiative is an effort to make Ryerson University a safe and secure environment, which advances the pursuit of Goal 8.

The University of Victoria (UVic) is a supporter of sustainable food purchasing and does so through purchases from local farmers and food producers (University of Victoria, 2018-a). For example, 100% of their baked goods and breads come from local bakeries, 100% of their salmon is BC-wild caught, and 100% of their pizza served is either made fresh daily at their market or a local pizzeria (University of Victoria, 2018-a). UVic Food Services is committed to ethical sourcing, green eating, and composting and recycling (University of Victoria, 2018-a). These purchasing and Food Service policies help increase local employment in agriculture, fisheries, and food production (University of Victoria, 2018-a).

Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Progress has been made worldwide towards achieving more inclusive and sustainable industrialization (United Nations, 2018-p). For example, from 2000 to 2015, carbon intensity decreased around the globe by 19% (United Nations, 2018-p). The United Nations has recognized that in order to achieve inclusive and sustainable industrialization, nations need to develop competitive economic forces and engage in international trade (United Nations, 2018-p). In Canada, industry is strong due to the rich natural
resources in the country and a long history in manufacturing (Government of Canada, 2018). However, a changing economy has encouraged the Canadian government to shift its approach and double its public infrastructure funding to generate long-term economic growth (Government of Canada, 2018). Every year the Government of Canada invests more than $2 billion to help unemployed and underemployed Canadians access training and supports and continues to work with industries to support growth and innovation (Government of Canada, 2018).

VIU, as an educational institution, has a direct influence on infrastructure and industrialization by producing educated citizens for the workforce. Indicators for Goal 9 focus on CO$_2$ emissions, research and development, and access to technology (United Nations, 2018-h). To approach this Goal, the research team investigated VIU’s access to technology and research, and development opportunities. The team also examined how VIU is reducing greenhouse gas emissions and educating its students to become effective citizens in helping to build resilient infrastructure and sustainable industrialization. With a variety of academic programs and increasing research efforts at VIU, innovation is fostered through numerous student and faculty initiatives and research projects. To understand how VIU is contributing to the enhancement of research and technology capabilities, the research team investigated innovative initiatives and research projects within the VIU community.

How VIU currently contributes to Goal 9

VIU is taking action to help decrease greenhouse gas emissions (Appendix L). Annually, the University is required to produce a Carbon Neutral Action Report that illustrates the amount of greenhouse gases emitted each year by the University. In 2017, VIU produced a total of 3,034 tonnes of greenhouse gas emissions from a combination of carbon dioxide, methane, and nitrous oxide (VIU, 2017-a). The 2018 Carbon Neutral Action Report demonstrated that VIU’s total greenhouse gas emissions decreased by 2018 to 2,995 tonnes (VIU, 2018-ccc). In both years, the majority of these emissions were offset by paying a mandatory fee of $25 per tonne to the BC Government, a fee that other universities, schools, and hospitals in the province are required to pay (VIU, 2017-a; Government of British Columbia, 2018-c). Other ways that VIU offsets its emissions is by becoming more efficient with its energy use over time, such as by replacing building controls and heating fixtures with new efficient ones (Facilities Services & Campus Development, personal communication, September 21, 2018). In addition, Facilities Services uses efficient and sustainable methods and products when infrastructure on the Nanaimo campus requires an upgrade (Facilities Services & Campus Development, personal communication, September 21, 2018). VIU is also making an effort to replace large service vehicles with smaller ones that produce less emissions (Facilities Services & Campus Development, personal communication, September 21, 2018). Furthermore, the geo-exchange systems used to heat and cool the Cowichan campus, the Deep Bay Marine Field Station, and buildings 210 and 205 on the Nanaimo campus are effective in offsetting VIU’s greenhouse gas emissions (Facilities Services & Campus Development, personal communication, September 21, 2018). The innovative design and construction of the Deep Bay Marine Field Station won the National Green Building Award from the Sustainable Architecture and Building Magazine in 2011 for its use of green technologies (VIU, 2011-c). The 1,200 m$^2$ Field Station has sustainability designed throughout the entirety of the site, with a high proportion of recycled and renewable materials used for construction (VIU, 2011-d). The landscaped area surrounding the building has also been innovatively
designed by using crushed oyster shells instead of asphalt for the roadways and parking, and mixing construction wood waste into the topsoil (VIU, 2011-d).

With respect to technology, students and staff have access to computers in the library and other computer labs across campus (VIU, 2019-a), as well as WiFi that is freely available for everyone (VIU, 2018-rr). Classrooms and lecture theatres are equipped with computers, projectors, and other needed technology (VIU, 2019-b). Employees are given access to a VIU email account and all offices and classrooms have phones. Information Technology Services, designed to help facilitate the use of technology, is also available for all students, faculty, and staff (VIU, 2019-c). In 2012, VIU introduced the Assistance Phone System on the Nanaimo campus, which provides access to phones that are strategically placed all over campus in the case of an emergency (VIU, 2018-ss).

In relation to fostering innovation, VIU has partnered with Innovation Island to offer VI Solutions, an initiative that aims to match organizations with students from different backgrounds to explore operational or business opportunities and challenges (VIU, 2019-zzz). An existing labour gap was identified across Vancouver Island in 2018, which VI Solutions aims to respond to (VIU, 2019-zzz). For students, this initiative provides opportunities to develop solutions, concepts, and sustainable business ideas supporting a variety of social innovation or social enterprise models (VIU, 2019-yy). Community partners that engage in the initiative also benefit through gaining creative solutions and innovative ideas from multidisciplinary teams of students, and linking their industry to academic work (VIU, 2019-zz). In addition, VIU hosted two events in 2019 to assist with developing a social enterprise system on Vancouver Island that uses business strategies to maximize its social, environmental, or cultural impact (Recreation and Tourism Management, personal communication, September 20, 2019; Social Enterprise Catalyst, 2019-a). The events are run by Social Enterprise Catalyst (seCatalyst), a network of people and organizations interested in building a strong social enterprise sector on Vancouver Island, and VIU has been involved with seCatalyst initiatives since 2014 (Recreation and Tourism Management, personal communication, September 20, 2019; Social Enterprise Catalyst, 2019 - b). The first event, held in May 2019, was the 3-day Social Venture Bootcamp which brought together budding social entrepreneurs from across Vancouver Island and the Sunshine Coast, including two social enterprises started by VIU alumni (Recreation and Tourism, personal communication, September 20, 2019). The Bootcamp aimed to prepare individuals and groups to launch their business ideas, ensure that they both are successful financially, and generate a positive social, environmental, or cultural impact (Social Enterprise Catalyst, 2019 - c). A follow up event in June 2019, Connect. Money. Impact, connected Bootcamp graduates and other social enterprise start-ups across the island with lenders and impact investors from a dozen organizations providing capital for social ventures (Recreation and Tourism, personal communication, September 20, 2019).

**Departmental focus**

There are many courses offered at VIU that touch on the topics of CO₂ emissions and technology (Appendix L). Students in the Chemistry department learn about chemical toxicology, green chemistry, and greenhouse gases, and Forestry students learn about forests as carbon sinks. Various other programs educate students on topics related to technology and media (VIU, 2018-j). Some of these
departments include: Media Studies, Computing Sciences, and Sociology (VIU, 2018-j; Media Research Lab, personal communication, October 3, 2018; Computing Sciences, personal communication, September 25, 2018; Sociology, personal communication, September 25, 2018).

Research

The University helps provide and support research opportunities for students and faculty (Appendix L). There is a total of twelve research centres, one research institute, and nine research labs at VIU (VIU, 2018- tt; Psychology, personal communication, May 17, 2019). To assist with the management of each research entity, Policy 31.11 (Research and Scholarly Activity Centres and Institutes), was created, which outlines governance, accountability, reporting structures, and responsibilities (VIU, 2018-uu). To improve the amount of available space for faculty and student research and creative activity, the Nanaimo campus recently built the Dr. Ralph Nilson Centre for Health and Science (building 210) and the Discovery Centre for marine, automotive and trades (VIU, 2019-HH). The new buildings house state-of-the-art research and education equipment for Canadian sectors in high demand (VIU, 2019-HH). Aside from research centres, institutes, and labs, many faculty and students are conducting individual research projects. Unfortunately, the total number of faculty members at VIU that engage in research is hard to quantify as a lot of research is done in addition to existing roles at the University. However, the research team did discover that nine faculty members were granted assisted leaves in 2018/19 to pursue research (VIU, 2018- ttttt), and many more engage in research in addition to their full-time teaching positions (Appendix L).

Similarly, there are many students that partake in research through directed studies or applied courses, but the total number is difficult to quantify. However, through VIU’s work-op program, the University employs approximately 35 to 47 research assistants and work-ops in the fall and spring semesters (VIU, 2017-c). VIU also currently has six Master degree programs, all of which are comprised mainly of graduate research projects, and in 2018/19, 1,630 graduate students engaged in research (VIU, 2019-ii).

In 2016/17, VIU spent over $2.8 million on research and development activities with significant help from external funding (approximately 33% of research funding was received from federal and other outside sources) (VIU, 2018-pppp) (Appendix L). Overall, from 2017/18 to 2018/19, VIU saw a 29% increase in federal research funding and a 53% increase in external grants and contracts (VIU, 2019-ii). One example of an important externally-funded research project is a $1 million investment from the Canada Foundation for Innovation and the BC Knowledge Development Fund which allowed the AERL research team to develop a one-of-its-kind mobile mass spectrometry lab (VIU, 2018-ssss). The lab’s innovative technology provides local and regional benefits as it allows researchers to measure atmospheric contaminants from a moving vehicle (VIU, 2018-ssss).

Over $1 million of VIU’s budget goes towards the Scholarship, Research and Creative Activity (SRCA) office, which works to promote and support research and creative activity on campus (VIU, 2018-vv; VIU, 2018-ww). The office provides students and employees with information about how to engage in research on campus and hosts numerous events such as Research Week, Community Partner Series, and Lunch and Learns. Research Week began in 2018 with the purpose to share and celebrate student scholarship and research through several events (VIU, 2018-xx). During this week, VIU hosts the annual
CREATE Conference, which provides students an opportunity to present their research (VIU, 2018-yy). The 2019 CREATE Conference and Research Week was the largest yet, with 340 student participants and 25 faculty presentations (VIU, 2019-ii). In addition, the Community Partner Series brings local organizations to campus to share information with the goal of increasing collaboration and gaining student involvement (VIU, 2018-zz), while the Lunch and Learn series provides students and employees with an opportunity to share and learn about various topics (VIU, 2018-AA). About $35,000 of SRCA’s annual budget goes towards scholarships and bursaries directly helping student research (VIU, 2018-vv). In addition, through SRCA, students have access to workshops aimed at helping them throughout their research endeavours, such as *Etiquette and Tips for your First Conference* (VIU, 2018-BB). In 2018/19, SRCA hosted 15 training sessions to build research capacity and developed an e-news publication, *Curious Minds*, enabling regular communication and knowledge sharing among student researchers (VIU, 2018-jjjj; VIU, 2019-ii). Furthermore, the SRCA website provides students with a list of many funding opportunities related to research (VIU, 2018-CC). In addition to supporting on-campus research and creative activity at VIU, SRCA also provides a total of $34,000 per year in Travel and Conference funding to members of the British Columbia Government and Service Employees’ Union (BCGEU) and the Vancouver Island University Faculty Association (VIUFA) (VIU, 2019-vv). Student Travel and Conference Funding is also available to help students offset the costs of attending a conference (Appendix L) (VIU, 2019-vv).

Over the 2017/18 academic year, VIU embedded scholarship, research, and creative activity into its new Academic Plan, *Access to Excellence*, as well as in a SRCA’s new *Strategic Research Plan for 2017-2022* (VIU, 2018-tttt). To explore ways to enrich curricula and culture with SRCA, VIU hosted a Council for Undergraduate Research Institute on June 12-14th, 2018, which brought together teams from seven different Canadian institutions (VIU, 2018-tttt). To support the *2017-2022 Strategic Plan*, Gather Grants are offered and provide up to $3,000 to eligible VIU Faculty to enable hosting events and gatherings that mobilize knowledge to academic or non-academic audiences (VIU, 2019-ww) (Appendix L). Additionally, the Regional Initiatives Fund (RIF) was launched in 2017/18, as a partnership between VIU and the Province of BC to support communities on Vancouver Island to collaborate on innovation and sustainability (VIU, 2018-rrrr). In 2017/18, RIF funded 17 projects with 29 community partners, resulting in $880,311 in leveraged funding for research, involving 253 VIU students (VIU, 2018-rrrr). In 2018/19, RIF leveraged $996,878 in funding to support 20 research projects, which involved 255 students and 41 community partners (VIU, 2019-ii).

In 2017/18, VIU also signed onto a consortium of Canadian Institutions, CALAREO, to promote research opportunities for graduate students from Latin America (CALAREO, 2019). The aim of the program is to establish a scholarship program, elevate funding, and support student mobility and research collaborations between Canadian and Latin American institutions (VIU, 2018-rrrr). VIU also received $300,000 to expand research through the Queen Elizabeth Scholars program, allowing more students to travel to partner countries, pursuing internships and research under the theme of *Building Resilience in Coastal Communities* (VIU, 2018-rrrr; VIU, 2019-xx). In addition, REACH awards, which financially support undergraduate and graduate students to conduct their own original research, were given out to 10 students, of $2000 each, in Spring 2018 (VIU, 2018-rrrr).

Five Research and Innovation Chairs were secured at VIU in 2018/19. Three are Canada Research Chairs, one in Shellfish Health and Genomics, another in Community Research in Art, Culture and Education, and the third in Historical Dimensions in Women’s Health (VIU, 2019-w). The two other Chairs are BC
Regional Innovation Chairs, one in Aboriginal Early Childhood Development, and one in Tourism and Sustainable Rural Development (VIU, 2019-w). There will also soon be two new Canada Research Chairs, one in Human Dimensions of Sustainability and Resilience, and one in Kinesiology and Physical Literacy (VIU, 2019-w). VIU has also joined other leading Canadian universities in signing the Dimensions Charter, a Canadian pilot program that emphasizes a focus on increasing equity, diversity, and inclusion through research, innovation, and creativity within all disciplines of post-secondary institutions (Government of Canada, 2019). Over the next five years, this program aims to engage VIU in collaborative education to foster equity, diversity and inclusion across the institution (VIU, 2019-ii).

**Engagement**

VIU has developed numerous initiatives that aim to reduce greenhouse gas emissions emitted by students, faculty, or staff (Appendix L). A few include: Bike to Work Week, Active Commute Day, and the CarShare program (VIU, 2018-DD). Bike to Work Week is an annual event organized by GoByBike BC Society that originated in 1995 (GoByBikeBC, 2018) and VIU has participated since 1997 (VIU, 2018-EE). Throughout the week, participants are offered incentives, such as free coffee and baked goods, to promote using alternative methods of getting to work (VIU, 2018-EE). Active Commute Day was a day-long event in 2017 where individuals could win prizes and learn more about alternative transportation from community groups and organizations (e.g. BC Transit and Hub City Cycles Community Co-op) (VIU, 2018-FF). VIU’s CarShare program is a network where individuals can connect and organize carpooling (Facebook, 2018). In addition, ACER hosts an annual public symposium on various topics related to climate change. The fifth annual symposium was entitled *Climate Change: Policy for a Sustainable Future*, which brought awareness of greenhouse gas emissions to the community (VIU, 2018-GG). The sixth annual symposium was entitled *Local Solutions to a Global Problem*, which focused on local efforts being made to reduce greenhouse gas emissions (VIU, 2019-ccc). ACER’s primary mandate is to share information across campus and to the wider community by providing cost-free presentations, which include scientific demonstrations, on the topics of climate change and CO₂ emissions (VIU, 2018-HH).

VIU Powell River’s Professional Development and Training Program Coordinator is leading the Powell River Creative Economy and Innovation Initiative which aims to create strategies for creating a community-based innovation and co-working hub by utilizing the region’s existing cultural sector (VIU, 2019-ii). The initiative, a joint partnership between the City of Powell River, Tla’amin, VIU, quathet Regional District, and Powell River Educational Services Society, has received funding to co-design and deliver an entrepreneurial ecosystem development program (VIU, 2019-ii). This program was offered beginning in September 2019 with a format consisting of community members being invited to participate in any number of workshops, training opportunities for entrepreneurial skills, and innovation design training (VIU, 2019-ii).

**Discussions from VIU community engagement events**

A common suggestion at all three community engagement events was that VIU should create a common online platform for the community to share ideas about research and initiatives on campus, as well as develop a co-working space that acts as a centre for projects, research, and development at VIU. To
work towards increasing capacity for research and development, Rural Café participants suggested expanding on VIUSpace by publishing research findings in an academic journal.

For VIU’s CO₂ emissions and sustainability in general, participants suggested there needs to be more incentives and public awareness. For example, awareness could be addressed with recycling by requiring students to submit electronic copies of reports rather than paper copies, or simply recycling their reports after they have been graded. One participant advocated for including the topic of sustainability in every class. Another participant mentioned that Nanaimo does not offer suitable alternative modes of public transportation. As a result, many people drive and contribute to greenhouse gas emissions. To solve this, it was suggested that VIU could provide free e-bikes on campus or a bike share program. It was also mentioned that people often drive to the top of the Nanaimo campus because there is no incentive to bike or walk to the top – in other words, the steepness of campus itself is hindering people from using alternative modes of transportation. Furthermore, VIU has limited shower locations on campus with no showers at all in the buildings at the top of campus (VIU, 2013-b). Participants stated that if there were showers and lockers at the top of campus, students and staff would be more inclined to walk or bike so that they can shower before class or work.

Other university initiatives

U of O and the University of Calgary (U of C) have made progress in reducing CO₂ emissions. U of O Facilities office is committed to help mitigate climate change by reducing greenhouse gas emissions through the use of solar panels and the purchase of hybrid fleet vehicles (University of Ottawa, 2018-b). Overall, the school has set a goal of reducing their greenhouse gas emissions by 34% from 2005 to 2020 (University of Ottawa, 2018). U of C’s 2010 Climate Action Plan set goals to reduce greenhouse gas emissions 49% by 2020 and 80% by 2050 (University of Calgary, 2018). Since 2010 they have installed a cogeneration system (i.e. a different form of gaining heat with a lower carbon footprint), monitored the energy use of each new building, and upgraded lighting or ventilation systems to energy efficient ones (University of Calgary, 2018). They also have focused on outreach and engagement to get people to use sustainable forms of transportation (University of Calgary, 2018). In addition, it is mandatory for students and staff to print double-sided, which has made some inroads on reducing waste (University of Calgary, 2018).

Goal 10: Reduce inequality within and among countries

In an era where the richest 10% earn up to 40% of the total global income, policies must be adopted to empower the bottom percentile and promote economic inclusion regardless of sex, race, or disability (United Nations Development Program, 2018-b). Canada is not an exception to this global issue, as national income inequality has reached historically high levels (Government of Canada, 2018). Canada’s Gini coefficient, a measure of wealth distribution as a statistical dispersion where 0 indicates complete equality and 1 indicates a single individual holds all the wealth, was estimated at 0.306 in 2016 (Government of Canada, 2018). This was a decrease of 0.008 from 2015, potentially induced by government investments into housing, home care, mental health services, public transit, and skills training and employment programs (Government of Canada, 2018).
While VIU has little control over national inequality, there are steps that an educational institution can take to create a culture of equality and a zero-tolerance policy for discrimination on campus. Indicators for Goal 10 address topics related to discrimination, inclusion, and empowerment for all (United Nations, 2018-h). For the purpose of this project, the research team approached this Goal by looking at how VIU is addressing these topics through education, policies, and campus environments.

How VIU currently contributes to Goal 10

As previously mentioned in Goal 5, VIU’s Policies 21.05 (Personal Harassment) and 21.03 (Human Rights), in addition to Procedures 21.05.001 (Responding to Complaints of Personal Harassment) and 21.03.001 (Human Rights Education Initiatives & Complaint Resolution), aim to provide a working and learning environment that is free of harassment and discrimination at all times (Appendix M) (VIU, 2018-S). As a preventative measure, all VIU employees are required to take the Preventing and Addressing Workplace Harassment: Rights and Responsibilities Course (VIU, 2018-DDD). Furthermore, there is an online Toolkit for Addressing Workplace Harassment available to anyone at VIU (VIU, 2018-II). As mentioned previously in Goal 5, VIU’s HRRWO produces an annual report, which showcased a total of just one alleged harassment and/or discrimination complaint for the 2016/17 academic year—a decrease from 35 alleged complaints in the 2015/16 academic year (VIU, 2016). HRRWO also uses climate audit strategies to gain a better understanding of possible discrimination cases (Human Rights and Respectful Workplace Office, personal communication, May 27, 2019). The climate audits consist of confidential interviews with members of a workplace where workplace conflicts have been identified with unknown causes (Human Rights and Respectful Workplace Office, personal communication, May 27, 2019). HRRWO and Human Resources both facilitate custom-designed workshops available to faculty, staff, and students that focus on issues such as conflict and inclusiveness (Human Rights and Respectful Workplace Office, personal communication, May 27, 2019; Human Resources, personal communication, October 28, 2019).

In terms of fair and inclusive recruitment, VIU Human Resources ensures equity and inclusion principles are in place at VIU (Human Resources, personal communication, October 28, 2019). VIU’s job postings include a statement that encourages applications from all groups and during the interview process, Human Resources tries to accommodate all accessibility needs (Human Resources, personal communication, October 28, 2019). In 2020, a new, confidential Human Resources system will be implemented to track how the VIU community identifies themselves in regard to gender and ethnicity (Human Resources, personal communication, October 28, 2019).

As previously discussed in Goal 4, recent and ongoing infrastructural upgrades across VIU campuses have helped increase access to education for people with disabilities or barriers to education on campus (Universal Access Committee, personal communication, January 7, 2020). This increased access to education provides inclusion of all for in political, economic, and social rights (Universal Access Committee, personal communication, January 7, 2020). There are also several campus-wide initiatives that address discrimination and harassment at VIU. The Know More Campaign raises awareness and educates on the impacts of sexual violence, as well as identifies support services within the community (VIU, 2018-Y). The Positive Space Alliance exists to foster a more accepting environment for VIU’s LGBTQ+ community by developing and increasing the visibility of positive, supportive spaces (VIU, 2018-Z). Additionally, the HRRWO hosts a series of workshops that address discrimination and harassment: in
2015/16 they presented 51 educational events and 16 general events related to discrimination and harassment (VIU, 2016). The numbers for the most recent academic year (2016/2017) were not available on VIU’s website.

As also mentioned in Goal 4, VIU has taken many steps to ensure equity and inclusion for Indigenous peoples. For example, the *Vancouver Island University Library – 2018 Strategic Plan* highlights VIU’s commitment to indigenization work through the guidance of local Indigenous communities, the recommendations of the Truth and Reconciliation Commission, and the United Nations Declaration of the Rights of Indigenous Peoples (VIU, 2018-uuuu). Additionally, VIU’s *Aboriginal Education Plan* is an annual report that includes planning and priorities to create a holistic experience for Indigenous students on campus (VIU, 2018-vvvv). VIU’s Office of Aboriginal Education and Engagement reports annually to the VIU Planning and Priorities Committee on the implementation of the *Aboriginal Education Plan* in order to assess recommendations (VIU, 2018-vvvv). VIU’s 2019 *Institutional Accountability Plan and Report* also discusses intentions of creating a Faculty of Indigenous Engagement and Learning to further support VIU’s decolonization-driven agenda (VIU, 2019-HH). As of 2018, in further support of the UN Declaration on the Rights of Indigenous Peoples and the Jay Treaty of 1795, VIU recognizes any Indigenous peoples whose ancestral lands are within Canada as domestic students rather than international students, with the corresponding difference in tuition fees (VIU, 2018-wwww).

*Departmental focus*

As previously described in Goals 1 and 4, VIU offers the WEST certificate program, which is designed to assist students with developmental and cognitive disabilities in acquiring skills necessary to obtain and maintain employment (VIU, 2018-JJ). Students in this program learn skills that foster personal growth and independence: WEST graduates can be employed in several sectors of the workforce, such as customer service, retail, and hospitality (VIU, 2018-JJ).

The VIU Student Organization for Social Change is an activist club that aims to raise social consciousness and give students access to networks and resources to facilitate social change (Facebook, 2015). The club is anti-sexist, pro-feminist, anti-racist, pro-diversity, anti-homophobic, and pro-LGBTQ (Facebook, 2015).

*Research*

In 2018, a professor from VIU’s Nursing program collaborated with a team from Island Health to receive a grant for conducting research on healthcare workers’ experiences with hostile work environments (VIU, 2018-KK) (Appendix M). Their aim is to develop a strategy to improve work environments and build resiliency for healthcare workers (VIU, 2018-KK). This project will help reduce the proportion of healthcare workers who have felt discriminated against or harassed, reducing inequality in the local region (VIU, 2018-KK).

VIU has been selected to participate in two federal grant programs under the Government of Canada’s pilot program, *Dimensions: Equity, Diversity and Inclusion Canada*. These programs, the Equity Diversity and Inclusion (EDI) Capacity Building Grant and the Dimensions Program, are both Canadian Granting Agency Initiatives supported by the SSHRC, the Natural Sciences and Engineering Research Council.
(NSERC), and the Canadian Institutes of Health and Research (CIHR) (Equity, Diversity and Inclusion, personal communication, November 27, 2019; VIU, 2019-KK; Natural Sciences and Engineering Research Council of Canada, 2019). The Dimensions Program is a two year pilot program that looks at all underrepresented groups in all academic disciplines, with an aim to eliminate barriers and inequities within Canadian post-secondary research communities (Equity, Diversity and Inclusion, personal communication, November 27, 2019; Natural Sciences and Engineering Research Council of Canada, 2019; Government of Canada, 2019). Funding received from the EDI Capacity Building Grant has also supported the development of VIU’s EDI team (Equity, Diversity and Inclusion, personal communication, November 29, 2019; Natural Sciences and Engineering Research Council of Canada, 2019). The team is composed of an EDI Advisor, Policy Analyst, Postdoctoral Fellow, and a Student Assistant (Equity, Diversity and Inclusion, personal communication, November 27, 2019; VIU, 2019-GG). The team is working to review and analyze VIU’s policies and data, including statistics of visible minorities, pay equity, and aspects that facilitate a sense of inclusion, in order to create new policies reflecting an equitable, inclusive, and diverse institution (Equity, Diversity and Inclusion, personal communication, November 27, 2019). Research undertaken by EDI will also involve collecting data through surveys, focus groups, and interviews with the VIU community to gain an understanding on where VIU currently stands with equity, diversity, and inclusion in order to develop an action plan (Equity, Diversity and Inclusion, personal communication, November 27, 2019).

**Engagement**

To provide social and cultural support within the VIU community, the Nanaimo and Powell River campuses both have Shq’apthut (A Gathering Place), and the Nanaimo, Powell River, and Cowichan campuses all have an Elders-in-Residence program (Powell River Campus, personal communication, July 23, 2019; VIU, 2018-xxxx; VIU, 2019-ii). Shq’apthut provides is a safe space for Indigenous services and connections, where cultural, academic, and social activities are also celebrated (VIU, 2018-zzzzz). Elders at VIU are considered a very valuable resource as they provide counselling and guidance to students and employees, and support the use of Indigenous knowledge and language within the VIU community (VIU, 2019-JJ).

In addition to Aboriginal cultures, VIU celebrates other cultures on campus as international students make up 14% (2,013) of the population (VIU, 2018-d). As mentioned briefly in Goal 4, VIU’s Nanaimo campus hosts WorldVIU Days, an annual week-long event that explores and celebrates diverse cultures on campus (VIU, 2018-O). The theme of WorldVIU Days 2019 was *Creating a Connected Community at VIU*, which showcased initiatives of faculty, staff, and students that increase social connections on and off campus, especially between international and domestic students or between people from different cultural backgrounds (Education Abroad, personal communication, November 21, 2019 (Appendix G). Similarly, Global Citizens Week takes place each year with events, visiting speakers, films, and classroom dialogues that explore global development issues (VIU, 2018-N). Global Citizens Week 2020 focused on showcasing the work of students, staff, and faculty who are making positive change locally and globally as it relates to topics such as global health, human rights, political engagement, migration, science and technology, social justice, and climate change (VIU, 2020-i). Another event at VIU is the Cultural Couch Series, which aims to enhance cross-cultural understanding (VIU, 2018-XX). Students can also participate in Cultural Connections – day trips and activities that allow students to discover Vancouver Island’s vibrant communities and local culture (VIU, 2018-YY).
Discussions from VIU community engagement events

At the World Café, VIU community members offered suggestions for reducing inequalities at VIU in tandem with Goal 5. Several participants expressed a desire for improved support from counselling services, as students have indicated the need for more services. One solution offered was to provide more holistic counselling services, potentially including the guidance of Elders. Another issue identified at both the World Café and Rural Café was the lack of accessibility for individuals with limited mobility. It was acknowledged that work is being done to improve campus accessibility, but it was recommended that continuing infrastructural upgrades should be considered top priority so that all spaces in general, but particularly offices and washrooms, are made more accessible. Another suggestion from *Accelerating the SDGs* was to implement the offering of satellite lectures to bring education to vulnerable populations or those who have difficulty with travelling to a VIU campus. As mentioned previously, VIU employees are required to take the *Preventing and Addressing Workplace Harassment: Rights and Responsibilities* course, however, students are not required to take a similar program. Participants at the World Café and *Accelerating the SDGs* agreed that VIU students should also be required to take a course on discrimination and harassment. Finally, participants discussed creating a mandatory first year course on the subject of inequality, so that all graduates of VIU will be conscious of the issues and their role in making the world more equitable for all.

Other university initiatives

Examples of how universities can meet this Goal are demonstrated at Simon Fraser University (SFU) and UW. The department of Gender, Sexuality, and Women Studies at SFU educates students on LGBTQ+ issues and supports local LGBTQ+ programs and organizations (Simon Fraser University, 2018-a). Additionally, the department organizes an annual Pride display in Surrey City Hall (Simon Fraser University, 2018-a). The displays focus on LGBTQ2SIA+ topics such as addressing sexual orientation and gender identity resources for BC schools, and supporting the needs of LGBTQ+ newcomers (Simon Fraser University, 2018-a; Simon Fraser University, 2020). UW has an Equity Office in order to create an equitable learning, teaching, working, and living environment for all people including people that identify as LGBQTITQQIPA+ (University of Waterloo, 2018-c). The Equity Office also supports the working group of Provost’s Advisory Committee on Equity (PACE), which aims to address campus climate and promote equitable environments for LGBTTTQQIPA+ members (University of Waterloo, 2018-d).

**Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable**

Some of the key components of a healthy city are social inclusion and good urban mobility (Government of Canada, 2018). In 2015, almost 54% of the global population lived in cities and this number is predicted to increase substantially by 2030 (United Nations, 2018-q). In Canada, more than 82% of the current population live in cities and this is also expected to grow (Government of Canada, 2018). With rapid population growth, cities are prone to inadequate infrastructure and more vulnerable to disasters (United Nations, 2018-q). Urban planning and management will be essential for the future in order to make urban spaces more inclusive, safe, and resilient.
Indicators for this Goal address open space, access to public transportation, and the preservation, conservation, and protection of cultural and natural heritage (United Nations, 2018-h). Additionally, one target looks at policies associated with disaster risk reduction strategies (United Nations, 2018-h). The research team approached this goal by looking at the services and education VIU provides to students and employees to help them feel safe and included. Indigenous engagement and reconciliation efforts are prevalent at VIU, and since these topics are not specifically addressed by targets and indicators of the SDGs, much of the data related to VIU’s work on this has been placed under Goal 11.

How VIU currently contributes to Goal 11

In the event of a disaster, VIU has adopted disaster risk strategies (VIU, 2017-d) (Appendix N). The University follows the *British Columbia Emergency Response Management System* and the *Incident Command System*, which are provincially developed strategies to ensure coordinated responses to emergencies and disasters (VIU, 2017-d). In addition, VIU’s own Emergency Preparedness Plan states that in the case of a Level 3 Catastrophic Emergency (e.g. natural disasters), the University “requires coordinated response with local governments, departments, and outside agencies” (VIU, 2017-d, p. 8). VIU also has an Emergency Operations Centre, comprised of employees across campus, to provide immediate emergency support and resources (VIU, 2017-d).

VIU has various services related to accessing transportation (Appendix N). The Students’ Union offers students discounted transit passes to utilize the Regional District of Nanaimo Transit System (Vancouver Island University Students’ Union, 2018-b). VIU Residence offers new students a free day bus pass on orientation day to provide students an opportunity to learn how to navigate the Nanaimo transit system (Residence, personal communication, July 22, 2019). Another service available for students without access to a vehicle is the VIU Grocery shuttle sponsored by International Education and VIU Residence (VIU, 2018-LL). The Grocery Shuttle drives students to and from grocery stores twice a week (VIU, 2018-LL). For those driving themselves to campus, VIU has recently implemented a new parking pass system that allows for easier carpooling options than the previous system (Facilities Services & Campus Development, personal communication, September 21, 2018). In addition, individuals are allowed to share parking passes, which encourages carpooling (Facilities Services & Campus Development, personal communication, September 21, 2018). Students who require accessible parking on campus can purchase a S.P.A.R.K. parking permit for $25 per year (VIU, 2018-MM). Additionally, VIU offers bike lockers and racks to employees and students to promote alternative transportation (VIU, 2018-NN; VIU, 2018-OO). There are three bike lockers located at buildings 190, 300, and 370 and several bike racks located on the Nanaimo campus (VIU, 2018-NN; VIU, 2018-OO). In 2018, VIU’s Health and Safety Office partnered with Bikes for Kids, a local non-profit organization (VIU, 2018-AAAA). This partnership provides replacement bikes to VIU students and employees in need (VIU, 2018-AAAA).

In 2018, VIU initiated a review of the transport systems in Nanaimo, which was administered by Watt Consulting Group (Watt Consulting Group, 2018). The final product was a document entitled *Vancouver Island University TDM Strategy Update*, which aimed to provide VIU with feedback on its current status of the transportation systems and recommended actions (Watt Consulting Group, 2018). Since then, VIU Facilities has implemented 25 of the 200 recommendations, some of which include increasing carpooling, administering variable pricing in parking lots, and increasing bike lockers and racks (Facilities
Although VIU is a stakeholder, the transit system in Nanaimo is managed by the RDN and BC Transit (Facilities Services & Campus Development, personal communication, September 21, 2018). The service is continually being expanded: a 5,000-hour service expansion was implemented for the Route 40 VIU Express in June 2018, and as of January 2020, the RDN added 5,900 hours of transit service throughout the region (Facilities Services & Campus Development, personal communication, September 21, 2018; Nanaimo News Bulletin, 2019-c; Nanaimo News Now, 2019).

On the Nanaimo campus, all outdoor spaces are available for public use. VIU’s Facilities has a focus on creating “destination spaces” or places for people to gather (Facilities Services & Campus Development, personal communication, September 21, 2018). VIU’s main campus in Nanaimo is located on 92 acres of land, and the Nanaimo VIU community has easy access to over 880 hectares of community parks within close proximity (City of Nanaimo, 2018; City of Nanaimo, 2016). Furthermore, the Cowichan campus offers students and employees access to open spaces with a sheltered seating area and garden on the roof (Vancouver Island University Cowichan, 2018-c). The Nanaimo campus currently has a number of these spaces, including the Okayama and Tamagawa Japanese Gardens, the Kwulasulwut Gardens, the Jarden des Quatorze, and the main courtyard in the centre of campus (i.e. the Library Quad) (VIU, 2018-OO). The Tamagawa Garden was donated to VIU by Tamagawa University in Japan, and the Okayama Garden was funded by the Okayama Women’s College in Japan and designed and constructed by VIU Horticulture students (VIU, 2020-c). In these spaces, people have access to green areas, benches, and tables.

VIU values cultural diversity, which is made apparent through its policies (Appendix N). Particularly, policies and procedures have been implemented to address discrimination and harassment, which are discussed in more detail in Goal 10 (Appendix M). For example, Policy 11.30 (Governance Policy) states that VIU values “human diversity in all its dimensions” and is committed to “maintaining learning and working environments that are equitable, diverse, and inclusive” (VIU, 2018-e; Policy 11.30, p. 48). In addition, VIU aims to enhance collaborative relationships with Aboriginal communities (VIU, 2018-e). Other policies that are related to this indicator are Policy 44.15 (Smudging and Other Ceremonial Uses of Smoke and Tobacco) and Policy 11.02 (Mission, Vision, and Values) (VIU, 2018-e). Policy 44.15 acknowledges smudging as an integral part of Aboriginal culture and indicates guidelines for smudging, while Policy 11.02 states that VIU aims to enhance collaborative relationships with Aboriginal communities (VIU, 2018-e). VIU also has an Aboriginal Education Plan, which strives to create a holistic experience for Indigenous students on campus (VIU, 2018-vvvv; VIU, 2019-HH). Within this plan, the Office of Aboriginal Education and Engagement is asked to report annually to VIU Planning and Priorities on the implementation of the Aboriginal Education Plan in order to re-evaluate content and recommendations as needed (VIU, 2018-vvvv).

In order to gain feedback on topics related to Goal 11, VIU utilizes a participatory approach. For example, the Canadian University Survey Consortium is completed once a year to understand student experience at VIU (VIU, 2018-PP). Data from the survey is then used to inform decisions regarding improvements (VIU, 2018-PP). VIU has also gained feedback from the 2017/18 VIU People Plan (VIU, 2018-QQ). The plan has allowed the VIU community to share their thoughts and opinions about the University through a survey, a World Café, and focus groups (VIU, 2018-RR). The aim of the plan is to
help employees and students pursue their goals and achieve professional development (VIU, 2018-QQ). Many individual programs such as Philosophy, Forestry, Creative Writing, and Hairdressing undergo their own evaluations through surveying students’ satisfaction with their programs (VIU, 2012-a; VIU, 2012-b; VIU, 2010-b; VIU, 2012-c).

**Departmental focus**

Within VIU’s Faculty of International Education is the Centre for Intercultural Studies (CIS), which offers courses, supports intercultural research, and provides professional development opportunities for VIU students and employees (VIU, 2020-h). The Centre’s main goal is to spark interest in cultural differences, with a key message of “connecting across difference” (VIU, 2020-h). Educating students about various cultures is incorporated into VIU programs and departments such as English, Anthropology, Criminology, Political Studies, Indigenous Studies, Child and Youth Care, History, Management, Social Work, and Nursing (VIU, 2018-j) (Appendix N). For example, within the Faculty of Business, over 50% of the students are international, so understanding culture is woven throughout business programs (Business Administration in Management and Law, personal communication, June 4, 2019). The topic of natural heritage is also discussed in several Geography, Resource Management and Protection, and Political Studies courses offered at VIU (Appendix N) (VIU, 2018-j). VIU’s Early Childhood Education and Care program was designed in reference to the Indigenous Early Learning and Child Care Framework, as well as the BC Early Learning Framework, which has Indigenous content woven throughout (Early Childhood Education and Care, personal communication, October 3, 2019). Therefore, traditional Indigenous knowledge and ways of learning are consistently incorporated into the program (Appendix N). VIU’s Art and Design programs also place a large focus on culture, and regularly collaborate with the Office of Aboriginal Education and Engagement, as well as the campus’ Gathering Place (Art and Design, personal communication, June 11, 2019). Additionally, students in VIU’s Bachelor of Science in Nursing program often complete their placements in Indigenous communities, during which traditional ways of knowing and learning are frequently incorporated into approaches to healthcare (Nursing, personal communication, September 20, 2019). VIU’s Indigenous/Xwulmuxw Studies program, which was designed in collaboration with First Nations of Vancouver Island and BC, addresses the topic of preserving, protecting, and conserving Indigenous culture in every course (Indigenous Studies, personal communication, September 23, 2019). Cultural technicians from local Indigenous communities are also hired to assist with teaching, as well as facilitation of cultural activities such as Indigenous and settler’s relations, language, drumming, and singing (Indigenous Studies, personal communication, September 23, 2019).

**Research**

The VIU@Cowichan Innovation Lab engages in research relating to cultural and natural heritage (VIU@Cowichan Innovation Lab, personal communication, September 20, 2018). Many of the projects highlight the importance of Indigenous teachings and revitalize Aboriginal languages (VIU@Cowichan Innovation Lab, personal communication, September 20, 2018). Notable projects include the Digital Storybook project and the Language Revitalization and Digitization project. The Digital Storybook aims to create an open access interactive digital storybook that focuses on the Uummarmiut linguistic group of
the Inuvialuit people (VIU@Cowichan Innovation Lab, 2018-a). The Language Revitalization and Digitization project has been working with a Penelakut Elder and Hul’q’umi’num’ Instructor to digitize the Hul’q’umi’num’ language for use in school curriculum (VIU@Cowichan Innovation Lab, 2018-b). Similarly, a VIU Public History class, in collaboration with the VIU library, is creating an easily searchable record of Nanaimo’s history, which aims to allow researchers, students, and the greater community to take steps towards reconciliation (VIU, 2019-ii). VIU was also selected by Libraries and Archives Canada and the National Heritage Digitization Strategy to receive funding for the digitization of this collection, in order to preserve Canadian cultural heritage (VIU, 2019-ii).

In 2016, VIU became home to the first Fulbright Canada Jarislowsky Visiting Research Chair in Aboriginal Studies (VIU, 2016-c). The support of this position focuses on engaging VIU’s Aboriginal students in the research process, and strengthening relationships between the University, First Nations, Métis, Inuit, and the broader community (VIU, 2016-c). VIU has hosted four visiting researchers since the program’s implementation, and the 2019/20 Visiting Research Chair in Aboriginal Studies is exploring the similarities and differences between how Indigenous scientific and cultural issues are covered by the media in Canada and the United States (VIU, 2019-LL). This research will help VIU further its efforts to ensure Indigenous voices and perspectives are present in academia.

With respect to open space, graduate students in VIU’s Master of Community Planning program initiated an evaluation of VIU’s campus gathering spaces in 2017 (VIU, 2018-SS). The evaluation was conducted using public engagement from the VIU community (VIU, 2018-TT). The objective was to provide VIU Facilities Services and Campus Development with a final report for consideration in developing future gathering spaces and work is currently underway (VIU, 2018-UU).

Engagement

VIU is a place where history and traditions are acknowledged (Appendix N). VIU has nine Elders-in-Residence and 1,569 Aboriginal students enrolled in a variety of programs (VIU, 2018-VV). According to the 2017/18 Consolidated Resource Plan, VIU spends $814,697 on Aboriginal Education and Engagement per year (VIU, 2018-vv). A report titled Elders-in-Residence at Vancouver Island University: Transformational Learning was produced in 2011 for the Elders-in-Residence program (VIU, 2011-a). Through surveys and interviews with VIU students and employees, the report showed that students valued the Elders’ time, knowledge, and support (VIU, 2011-a). Another prominent aspect of Aboriginal Education and Engagement is Shq’apthut – A Gathering Place, located on both the Nanaimo and Powell River campuses (VIU, 2018-WW; Powell River, personal communication, July 23, 2019). The Gathering Place is home to the Services for Aboriginal Students and is also a place where cultural, academic, recreational, and social activities are promoted and celebrated (VIU, 2018-WW). Each year, the Gathering Place on Nanaimo’s campus hosts approximately 26 cultural and social events (Aboriginal Education and Engagement, personal communication, August 17, 2018) (Appendix N).

To celebrate and symbolize VIU’s ongoing commitment to nurturing and maintaining relationships with Snuneymuxw First Nation and Métis Nation, the Snuneymuxw and Métis flags were raised on the Nanaimo campus on June 21, 2019, National Indigenous Peoples Day (VIU, 2019-MM). To further
strengthen community and support on campus, VIU’s ‘su’luqw’a’ Community Cousins program is an Indigenous student mentor program with the goal of elevating students and recognizing and celebrating culture (VIU, 2019-NN; VIU, 2017-f). The Celebration of Learning event is also hosted by the Community Cousins program, which brings people together to share their stories and experiences of being a VIU student (VIU, 2017-f; Aboriginal Education and Engagement, personal communication, November 14, 2019). Another resource for students and faculty is VIU’s Indigenous Perspectives Learning Circle group (VIU, 2019-OO). The student group is made up of Indigenous, international, and domestic students, and the faculty group is open to all faculty members who are seeking guidance in supporting Indigenous culture (Aboriginal Education and Engagement, personal communication, July 12, 2019). In addition, a variety of programs were implemented in 2018/19 to facilitate student success, retention, program completion, and support to Indigenous communities (Appendix N). Another initiative to address the importance of culture at VIU is Reconciliation Road: Join the Journey with VIU (VIU, 2019-PP). This initiative demonstrates VIU’s commitment in the responsibilities laid out by Canada’s Truth and Reconciliation Commission (VIU, 2019-PP). VIU’s Reconciliation Road consists of a series of events and activities that aim to engage the VIU community in the reconciliation process (VIU, 2019-PP). Additionally, in partnership with CBC Radio One Ideas and the Laurier Institution, VIU’s Nanaimo campus hosts an annual Indigenous Peoples Speakers Series (VIU, 2015-d). This is one of several initiatives VIU is undertaking to demonstrate its commitment to and respect for Indigenous people in response to the Truth and Reconciliation Commission (VIU, 2015-d). The 2018 talk was titled Re-Imagining Reconciliation: Confronting Myths and The Future of Canada, and the 2019 talk was The Promised Land: In Search of Freedom, Prosperity, and #LandBack for Indigenous Peoples (VIU, 2018-zzzz; VIU, 2019-QQ). Furthermore, in 2019 VIU hosted an Indigenous activist, author and educator, to speak to students at the Nanaimo and Cowichan campuses about Indigenous resurgence in the era of reconciliation (VIU, 2019-RR).

VIU’s Cowichan and Powell River campuses are also involved in numerous initiatives to preserve, protect, and conserve Indigenous culture. For example, the Cowichan campus hosts film nights that look at cultural issues and topics (Cowichan campus, personal communication, September 4, 2019). Recently, two new totem poles were raised on the Cowichan campus, one of which was carved by an instructor in Cowichan’s Indigenous Education department (Cowichan campus, personal communication, September 4, 2019). In addition to the totem poles, Indigenous art, such as Salish weave collections and a traditional whaling kayak, are displayed on campus (Cowichan campus, personal communication, September 4, 2019). It is estimated that approximately 25% of the student population at the VIU Cowichan campus self-identify as Indigenous (Cowichan campus, personal communication, September 4, 2019). Similarly, the VIU Powell River campus has been awarded funding to provide traditional skill building workshops related to medicine, food, and cultural protocols (Powell River campus, personal communication, July 23, 2019). The campus has also engaged with the Powell River community by hosting community conversation circles that aim to bring awareness to the non-Indigenous population around the topic of Treaty responsibilities (Powell River campus, personal communication, July 23, 2019).
Discussions from VIU community engagement events

At the World Café, Rural Café, and Accelerating the SDGs, participants proposed new ideas for how VIU can meet Goal 11. A common concern was the current state of accessibility and affordability of public transportation. Suggestions included reducing the public transit costs for VIU students and employees, as well as implementing the U-Pass program at VIU. U-Pass is a universal transit program for post-secondary students, for which a fee is included in tuition costs, which gives students unlimited access to all transit routes in the region (BC Transit, 2019; Translink, 2020). A participant at the World Café also recommended that VIU should implement a bus pass sharing program so multiple people can use one bus pass. It was also suggested that a shuttle between campus locations (i.e. that runs between the Nanaimo, Cowichan, and Parksville-Qualicum campuses) and the surrounding residential areas would help reduce personal vehicle use. Another common suggestion was to decrease the number of parking spaces available on campus or increase the cost of parking passes to encourage use of public transit instead of driving a personal vehicle. For those who reside outside of public transit routes, a suggestion from Accelerating the SDGs was to promote incentives for carpooling, such as discounted parking passes. The University could also invest in an all-electric VIU vehicle fleet and an increased number of electric vehicle charging stations, as well as e-bike stations on campus.

Other university initiatives

VIU can examine other Canadian universities for inspiration on how an educational institution can address inequality on campus. For example, the University of British Columbia (UBC) has founded the Really? Campaign, which promotes intercultural understanding, empowerment, and respect through workshops, training, and information (University of British Columbia, 2018-a). This campaign educates students on the role of bystanders – it encourages individuals to step up and safely respond to discriminatory situations (University of British Columbia, 2018-a). To promote religious equality, U of T has a Multi-Faith Centre where students of any religion or spirituality can access facilities and programs, and students can practice their religion, traditions, and rituals in designated rooms across campus (University of Toronto, 2018-c). The Centre and rooms increase understanding and respect of various religions on campus (University of Toronto, 2018-c).

Goal 12: Ensure sustainable consumption and production patterns

Sustainable development can only be achieved if economic growth is decoupled from resource use, which requires changing the way goods are produced and consumed (United Nations, 2018-r). Currently, global consumption and production is occurring at a rate beyond Earth’s resource capacity (United Nations, 2018-s). If the global population reaches 9.6 billion by 2050, it will take three planets to sustain current lifestyles (United Nations, 2018-s). Improving these conditions requires decreasing material extraction, pollution, and wastefulness (United Nations, 2018-r). As a developed consumer nation that also participates in large-scale resource extraction, Canada must hold itself accountable for its contribution to this global issue. Some national strategies that have been adopted to improve Canadian consumption and production practices include investments in clean technology and energy, establishing sustainable resource management policies, and improving education on alternative energy and waste management (Government of Canada, 2018).
As an educational institution, VIU can advance these efforts by limiting its own consumption and increasing awareness on campus. Goal 12’s indicators addressed topics such as sustainable development, domestic material consumption, waste and recycled material, global citizenship education, environmentally sound technology, and sustainability reports (United Nations, 2018-h). For the purpose of this project, the research team approached this Goal by examining VIU’s efforts at being sustainable with its consumption and waste management habits, if VIU keeps track of its consumption patterns, and if VIU is educating students on sustainable development and other topics related to this Goal. Additionally, in regard to domestic material consumption, the research team looked at VIU’s efforts in supporting local suppliers.

How VIU currently contributes to Goal 12

VIU has undertaken several initiatives to reduce waste on campus (Appendix O). In regard to reducing paper usage and waste, VIU implemented PaperCut in 2019, a secure print release system that places print jobs in a holding state until the user authenticates and releases the job at the printer (VIU, 2019-XX). Also, to acknowledge and address the University’s high consumption of paper, toner, and electricity, VIU’s Managed Print Services (MPS) program is designed to support environmental initiatives, reduce waste, and optimize printing output (VIU, 2019-YY). Through the MPS project, VIU is in the process of introducing new Multi-Functional Devices across campus that will offer significant cost and energy savings (VIU, 2019-YY). Additionally, printed parking permits were entirely replaced in 2018 with a License Plate Recognition system that uses less paper (VIU, 2018-ZZ). Between 2010 and 2018, VIU reduced its paper usage by 20% (Sustainable Advisory Committee, personal communication, August 24, 2018). Additionally, VIU’s Forestry program has been able to help VIU reduce waste by shifting away from paper and textbooks in 2014, relying primarily on iPads and digital technology instead (VIU, 2018-fff; VIU, 2018-ggg).

VIU has various other waste reduction strategies, including making an effort to sustainably deal with waste and recyclable materials by providing garbage, compost, and recycling bins, as well as separately recycling products such as batteries and Styrofoam (Facilities Services & Campus Development, personal communication, September 21, 2018). To reduce the amount of food that may be thrown away, Food Services offers a buffet every Friday in the cafeteria that sells leftovers from throughout the week (Food Services, personal communication, October 2, 2018). Another waste reduction strategy Food Services implemented is an Eco-Tainer program, which replaces single-use food containers with reusable containers (Food Services, personal communication, October 2, 2018). As mentioned previously in Goal 3, VIU’s Janitorial Services is operated by BEE-Clean Building Maintenance which is committed to sustainable standards set out by CIMS (BEE-Clean Building Maintenance, 2020).

The standards for disposing of hazardous and chemical waste in VIU’s labs are controlled by Health and Safety Services and monitored by Principal Investigators who ensure labs are adequately meeting the criteria (VIU, 2018-aaa). These standards comply with municipal, provincial, and national legislation (VIU, 2018-aaa). As required by WorkSafe BC, all persons dealing with hazardous materials on campus follow the Workplace Hazardous Materials Information System (WHMIS) (WorkSafeBC, 2018; Canadian Centre for Occupational Health and Safety, 2018). All full-time faculty and staff, in addition to any students who deal with chemicals, are WHIMIS-certified (Facilities Services & Campus Development, personal communication, September 21, 2018). Accordingly, hazardous waste is always stored in
separate storage rooms with specialized ventilation systems located near loading bay areas; and chemical waste is properly labelled and disposed into separate waste containers (VIU, 2018-aaa; VIU, 2014-b).

In 2017, VIU joined the Green Chemistry Commitment (GCC), which prompted the Chemistry department to undergo a green transformation, making it the second Canadian university to do so at the time (VIU, 2018-bbb). The GCC was developed by Beyond Benign and it aims to design and develop innovative, efficient, and environmentally sound chemical solutions to the health, safety, and effectiveness of chemical products and processes (Beyond Benign, 2018). Beyond Benign develops green chemistry and sustainable science educational resources for the use of educators, students, and community members (Beyond Benign, 2018). Each year, VIU must report back to Beyond Benign about what has been done to reduce the impacts of the chemicals used (Chemistry, personal communication, September 12, 2018). To date, the Chemistry department has eliminated their use of chlorinated chemicals and recycles and reuses the acetone that is used in labs (Chemistry, personal communication, September 12, 2018).

As mentioned in Goal 9, VIU also produces an annual Carbon Neutral Action Report (VIU, 2018-ccc). This report contains VIU’s emissions profile, offsets, as well as actions taken and plans to continue reducing greenhouse gas emissions; these reports are publicly available on VIU’s website (VIU, 2018-ccc).

VIU also has the capacity to reduce consumption and waste through its purchasing power. As previously stated in Goal 8, the Purchasing department oversees the purchase of all goods and services at VIU (VIU, 2018-e). There are several national and international trade agreements that the Purchasing department must adhere to that require a competitive, open public bidding process (Purchasing, personal communication, August 24, 2018) (Appendix O). This process prevents VIU from intentionally and only purchasing goods from local providers, although their proposals often contain criteria that is intended to support local companies (Purchasing, personal communication, August 24, 2018). Concerning goods sold at VIU, the Campus Store and Food Services both find that local items are difficult to sell due to high price-points and lack of demand, but try to offer local options whenever possible (Food Services, personal communication, October 2, 2018; Campus Store, personal communication, August 17, 2018).

Another aspect of achieving this goal is ensuring that all people are aware of sustainable development and lifestyles, regardless of background or culture (United Nations, 2018-s). To address this, events are hosted on campus such as Global Citizens Week and WorldVIU Days that focus on citizen education (VIU, 2018-N; VIU, 2018-O) (Appendix G). VIU also offers funding to faculty and staff for international teaching and working opportunities through the Global Engagement Grant program and the International Work Opportunity Grant (VIU, 2018-ddd; VIU, 2018-eee). These initiatives align with the fifth objective (community engagement) in VIU’s Academic Plan, which outlines that VIU is committed to fostering awareness of global cultures, issues, and conditions (VIU, 2018-D). As well, VIU aims to provide appropriate responses to regional cultural, economic, environmental, and social needs through relationships with business and industry communities, educational partners, governments, and Indigenous communities (VIU, 2018-D).
**Departmental focus**

Many departments at VIU offer courses that educate on sustainable development (Appendix O). As an example of how departments can offer different perspectives on the same topic, SCI 350 (Technologies for the Developing World) focuses on technology that assists the developing world with an emphasis on renewable energy (VIU, 2019-d), while the Horticulture program educates students on how climate change impacts soils and plants (Horticulture, personal communication, August 21, 2018). VIU’s Diploma in Tourism Studies, Bachelor’s degree in Tourism Management, Diploma in Recreation and Sport, Aboriginal Ecotourism Training program, and Master’s degree in Sustainable Leisure Management all educate students on the social and cultural contexts of and relationship between tourism, recreation, and sustainable development (Appendix O).

VIU also has several programs that focus on sustainable resource management and efficient use of natural resources. The Diploma in Resource Management Officer Technology and Bachelor’s degree in Natural Resource Protection programs at VIU are both designed to prepare students for careers in the protection and management of Canada’s fisheries, wildlife, and parks resources (VIU, 2020-b). The Bachelor of Arts Major in Geography also features two specializations which students can choose from – Sustainable Resource Management or Urban and Social Sustainability (VIU, 2020-k). In the Sustainable Resource Management stream, students take courses that provide them with a general understanding of the environment, along with more specialized courses (Appendix O) which prepare them for a career in Natural Resource Management (VIU, 2020-k). VIU’s Natural Resource Extension Program (NREP) also offers professional development and training courses in a variety of disciplines such as riparian, shellfish, fisheries, safety training, water quality, and environment (VIU, 2019-ZZ). NREP, in collaboration with VIU’s Office of Aboriginal Education and Engagement, delivers courses across BC, and offers the First Nations Stewardship Technicians Training program in partnership with Coastal First Nations-Great Bear Initiative (VIU, 2019-eee; Natural Resource Extension Program, personal communication, October 21, 2019). The First Nations Stewardship Technicians Training Program provides students with skills and knowledge required to work for an Indigenous community in jobs such as Coastal Guardian Watchman, fisheries technician, heritage surveyor, or environmental monitor (VIU, 2019-eee).

In regard to global citizenship education, VIU’s Education Abroad department and Faculty of International Education are actively engaged in international cooperation projects (Education Abroad, personal communication, August 29, 2018). International cooperation projects often address global citizenship, sustainable development, sustainable tourism, and include challenges associated with climate change (International Education, personal communication, August 15, 2018; Education Abroad, personal communication, August 24, 2018). For example, an international project in Ukraine offers civil servants training in digital Spatial Data Infrastructure to better manage resources, urban areas, and habitats (VIU, 2018-hhh). For this project, VIU shared its ArcGIS license and helped provide the required software and servers (Education Abroad, personal communication, August 29, 2018). VIU is also a part of the Kenya Education for Employment Program (Colleges and Institutes of Canada, 2018). Through this program, VIU is working with three Kenyan universities to develop and enhance training programs in mechanical engineering, renewable energy, and building technology (VIU, 2018-jjj), with the primary goal of increasing employment and economic development opportunities for Kenyan youth (Colleges and Institutes of Canada, 2018). The Education Abroad department is involved in several other international projects, most of which have components of environmental sustainability (VIU, 2018-kkk). For example, the department is currently working on a project in Tanzania that focuses on sustainable...
tourism, domestic procurement of products, and employment (VIU, 2018-lll). Another component of this project is developing a compost program (Education Abroad, personal communication, August 29, 2018). Furthermore, Education Abroad recently completed a five-year recreation and tourism internship program in Ghana (VIU, 2018-mmm) that aimed to reduce poverty through environmental education (VIU, 2018-nnn).

The Master of Community Planning (MCP) program teaches on global citizenship education as well – topics taught are globally applicable and about one quarter of their student population is international, who bring their own experiences into the classroom (Master of Community Planning, personal communication, September 18, 2018). Sustainable development is used as a foundational structural element in the design of courses in the MCP program (Master of Community Planning, personal communication, September 18, 2018). Other VIU programs that educate students on global citizenship education and education for sustainable development include: Art and Design, Master of Arts in Sustainable Leisure Management (MASLM), Academic and Career Preparation, and ElderCollege (Appendix O). Global citizenship education is a key component in Art and Design programs as the topics of climate change and human rights are brought into courses through projects, guest speakers, and community engagement (Art and Design, personal communication, June 11, 2019). Various courses offered through ElderCollege, as well as the ElderCollege book club, also touch on climate change, global citizenship, and human rights (ElderCollege, personal communication, October 16, 2019). As an additional approach to address the need for implementation of sustainable tourism strategies, VIU signed the charter for the VIU World Leisure Centre of Excellence in September 2009 (VIU, 2019-ggg). This charter represents a partnership between VIU and the World Leisure Organization, and includes the creation of a network that engages in dialogue on sustainability and innovation in leisure, collaborative research, and the delivery of the MASLM program at VIU (Masters of Arts in Sustainable Leisure Management, personal communication, June 10, 2019; VIU, 2019-ggg; World Leisure Organization, 2019). The MASLM program focuses on sustainable tourism by looking at social entrepreneurship, tourism monitoring and evaluation, and relating the three pillars of sustainability, as well as the SDGs, to tourism (Recreation and Tourism, personal communication, July 11, 2019).

Another important component of education for sustainable development includes topics related to material footprint and domestic material consumption. To address this, the Culinary Arts program at the Cowichan campus, in partnership with Providence Farm, runs the Farm Table Restaurant which offers a farm-to-table experience (Cowichan campus, personal communication, September 4, 2019; VIU, 2019-qq). The Farm Table Restaurant sources almost 100% of its food locally from Providence Farm and other local fisheries and farms (Cowichan campus, personal communication, September 4, 2019; VIU, 2019-qq). Powell River’s Culinary Arts program also reduces food waste by donating extra food to Food for Thought, the Powell River campus café (Powell River campus, personal communication, July 3, 2019). Additionally, VIU’s Carpentry program is conscious of its material consumption and aims to reduce the amount of waste generated on campus and in the classroom (Carpentry, personal communication, October 22, 2019). The program tries to work on real-life projects within the surrounding community so projects don’t have to be built on campus and then torn down to produce waste (Carpentry, personal communication, October 22, 2019). For example, Carpentry students sided the electrical building on the Nanaimo campus and built an arbour for Shq’apthut, which provided them with hands-on project experience that was applicable to the real world (Carpentry, personal communication, October 22, 2019). To further help reduce waste and raise awareness of unsustainable material use, a VIU Graphic
Design professor challenges students each fall to re-design product packaging into a more sustainable and ecologically responsible model (VIU, 2019-bbb). Student projects are then showcased at The View Gallery on the Nanaimo campus as the *Unwrapped Exhibit* (VIU, 2019-bbb).

**Research**

VIU faculty and students are engaged in research related to sustainable tourism. In 2019, two VIU faculty members received funding from the SSHRC Insight Development Grant for a study that looks into the role of the cultural sector and creative tourism in the sustainability of rural cities, specifically in northern BC and Yukon (VIU, 2019-GGG). VIU also has a BC Regional Innovation Chair in Tourism and Sustainable Rural Development who is focusing on three areas of innovation in tourism – Indigenous tourism, creative tourism, and tourism evolution (VIU, 2019-iii). Research over the next five years will focus on developing tourism for sustainable rural development, engaging in capacity-building, and creating a long-term alliance of BC rural tourism researchers (VIU, 2019-ii).

**Engagement**

VIU’s Powell River campus has undertaken effective initiatives to reduce consumption and raise awareness of the environmental impacts of the fast fashion industry. In Powell River, *Fibre Space* acts as an open community space located on the VIU campus that aims to bring together individuals who have an interest in reducing their material footprint (Powell River campus, personal communication, July 23, 2019). At *Fibre Space*, community members can upcycle garments into new clothes and textiles, work collaboratively, and learn the basics of working with textiles (Powell River campus, personal communication, July 23, 2019). *Fibre Space* has hosted the eCouture Wearable Art Fashion Show for the past 5 years, which showcases pieces designed in *Fibre Space* (Powell River campus, personal communication, July 23, 2019; Powell River Community Calendar, 2019). A series of educational films and talks on upcycling, textile waste, and the impacts of the fast fashion industry are hosted in Powell River leading up to the eCouture Fashion show (Powell River campus, personal communication, July 23, 2019). VIU’s Nanaimo campus also hosted its first Slow Couture Fashion Show in September 2019 where individuals showcased up-cycled clothing (VIU, 2019-aaa).

**Discussions from VIU community engagement events**

Participants at *Accelerating the SDGs* identified Goal 12 (Responsible Consumption and Production) as one of VIU’s weakest areas. The most agreed upon suggestions for improving this included making composting and recycling more accessible across VIU campuses, as well as eliminating the sale of single use plastics and products with plastic packaging. Discussions at the World Café also indicated concern that recycling and composting is not universal on campus – a few participants mentioned that the buildings at the top of the Nanaimo campus do not have recycling bins, and some faculty and employees mentioned that if recycling and composting is done in their department, it is their own responsibility. It was also noted through all events that composting was not available widely available other than in washrooms, and compost bins should be provided for all catered events.

Discussions from the all three community engagement events primarily focused on increasing awareness around the best practices of sustainability, the impacts of material consumption, and the
importance of supporting local goods. Participants felt that sustainability should be taught in every program and be made a required course in order to promote and raise awareness on the topic. With various departments at VIU, methods for handing in assignments are not universal — some faculty members ask for printed papers while others accept assignments online. It was noted that faculty members should be encouraged to move toward online submissions and for hard copies, students should be encouraged to recycle completed submissions. Participants also felt that larger scale changes should be made, and VIU as a whole should transition to a paperless institution. It was also acknowledged that VIU has been making efforts to support local businesses, but more can be done to increase these efforts, make them more efficient and cost effective, and promote awareness for supporting local businesses and organizations.

Other university initiatives

The U of O has made efforts to reduce waste on their campus, setting the target of being the first institution in Ottawa to be free of both bottled water and plastic bags (University of Ottawa, 2018-c). However, some plastic bags are still used on campus, but these are biodegradable or people are charged to use them (University of Ottawa, 2018-c). The campus promotes and encourages students and employees to carry reusable bags (University of Ottawa, 2018-c). Another example of a university that is meeting Goal 12 is UBC, which is “committed to sustainable food procurement” (University of British Columbia, 2018-b, para. 1) and prioritizes acquiring local and seasonal food, buying Fair Trade products, and supporting the UBC Farm (University of British Columbia, 2018-b). UBC sources as much food as they can within a 150m radius of campus (in 2010/11 this was 48% of their food) (University of British Columbia, 2018-b). They also try to purchase as much as they can from UBC Farm, a 24 ha farm and forested area that is part of the Faculty of Land and Food Systems at UBC (University of British Columbia, 2018-c). They also became the first Fair Trade Campus in Canada in 2011, meaning that all coffee and food offered by UBC Food Services and the AMS Food and Beverage Department are Fair Trade (University of British Columbia, 2018-b). Additionally, they use only Ocean Wise seafood products (University of British Columbia, 2018-b). Finally, UBC offers the UBC Sustainable Campus Food Guide – a guide for people to download that shows where sustainable places to eat on campus are located (University of British Columbia, 2018-d).

Goal 13: Take urgent action to combat climate change and its impacts

Evidence of climate change is undeniable. In 2017, temperatures were among the warmest in recorded history, with an average global temperature of 1.1°C above pre-industrial periods (United Nations, 2018-t). According to the World Meteorological Organization, the five-year average global temperature from 2013 to 2017 was also the highest on record (United Nations, 2018-t). In addition to temperature change, the world is experiencing challenges related to sea level rise, extreme weather, and increased greenhouse gas concentrations (United Nations, 2018-t). Subsequently, the Government of Canada is initiating policies and plans to reduce greenhouse gases and increase climate resilience (Government of Canada, 2018). However, immediate action is required by all countries to help combat climate change and its impacts (United Nations, 2018-t).

To take action, education and awareness is key (Government of Canada, 2018) and VIU can have a major influence on mitigating climate change. Indicators for Goal 13 address topics related to disaster risk
reduction strategies and climate action education and awareness. The research team approached this 
Goal by investigating what VIU is doing to actively mitigate climate change, as well as how it is educating 
students, faculty, and staff on this pressing global issue.

How VIU currently contributes to Goal 13

As mentioned in Goal 11, VIU has disaster risk reduction strategies (VIU, 2017-d) (Appendix P). VIU 
follows the British Columbia Emergency Response Management System and the Incident Command 
System (VIU, 2017-d). The campus also has its own procedures and plans to deal with emergency events 
on campus (VIU, 2017-d). Also as previously mentioned in Goals 9 and 12, VIU produces an annual Carbon Neutral Action Report to outline the actions that the University is taking to reduce its 
greenhouse gas emissions (VIU, 2018-ccc). Between 2014 and 2018, VIU’s total emissions (tCO₂e) from 
mobile combustion, electricity, and office paper have decreased, but combustion of natural gas is 
significantly higher (VIU, 2018-CCCC).

With respect to mitigating climate change, VIU has implemented carbon offset strategies – the 
Cowichan campus, the Deep Bay Marine Field Station, and two buildings on the Nanaimo campus are 
LEED-certified, all of which use a geo-exchange system along with other sustainable and energy-efficient 
methods of maintenance (Facilities Services & Campus Development, personal communication, 
September 21, 2018; VIU, 2018-a; VIU, 2018-hh) (Appendix P). These topics are discussed more 
thoroughly in Goals 7 and 9.

Departmental focus

Various programs and courses at VIU include topics related to climate change in the curriculum 
(Appendix P). For example, the Horticulture program educates students on the impact of climate change 
on soils and plants (Horticulture, personal communication, August 21, 2018). Political Studies and Global 
Studies students partake in climate change negotiation exercises, where they represent different 
countries and negotiate on topics such as carbon emissions (Political Studies, personal communication, 
September 18, 2018). Additionally, VIU’s Geography department is dedicated to climate change 
education, as the topic comes up in almost all courses (VIU,2018-j; Geography, personal communication, 
October 11, 2018). Specifically, GEOG 372 (Climatology), educates students on local and global 
atmospheric dynamics and understanding the science of climate change (VIU, 2018-j).The Earth Science 
department also offers a course, GEOL 412 (Climate Change: Past, Present, and Future), dedicated to 
taking an interdisciplinary approach to understanding climate change and promoting climate action 
(VIU, 2018-j). Other programs that often include discussions and education on climate change include 
Chemistry, English, History, Physics, Astronomy, Engineering, Tourism and Recreation, and Forestry 
(Appendix P). Bachelor of Science in Nursing students have also been learning to understand the impacts 
of climate change from new perspectives as they complete community placements with Indigenous 
communities (Nursing, personal communication, September 20, 2019).

Engagement

VIU has hosted events to promote climate change awareness (Appendix P). In 2017, two presentations 
were held discussing climate change: Climate Science and Beyond Climate Change (VIU, 2018-ooo). As
mentioned previously in Goal 6, ACER provides cost-free presentations to classrooms and the public on the topic of climate change (VIU, 2018-HH). The majority of ACER’s work involves educational initiatives focusing on conveying information to the public by following the best practices in scientific communication and using the most current peer-reviewed literature (ACER, personal communication, October 3, 2019). This requires members of ACER to understand the social, environmental, cultural, and economic factors of climate change, and share this knowledge with various audiences (ACER, personal communication, October 3, 2019). Since 2008, ACER has presented to approximately 17,000 people, providing roughly 20 presentations per year (ACER, personal communication, October 3, 2019). Every year, ACER also hosts a public symposium on topics related to climate change. The focus of past symposiums have ranged from understanding the science of climate change, how policies impact climate change, the relationship between climate change and human health, debunking climate change myths, and sharing local efforts being made to reduce greenhouse gas emissions (VIU, 2018-ppp; VIU, 2018-GG; CHLY, 2017; VIU, 2019-ccc).

Another student group, the VIU Eco Club, aims to increase VIU’s positive impact on the environment and encourage more sustainable behaviours by promoting local change (Facebook, 2019-c). As an act of promoting local change, climate strikes have been occurring across the world throughout 2019, and in September, VIU faculty, employees and students were encouraged by the Office of the President to attend if they felt inclined (VIU, 2019-ijj).

Research

Research conducted by the Coastal Hydrology and Climate Change Research Lab at VIU examines the influence of climate change on the hydrology of watersheds (Coastal Hydrology and Climate Change Research Lab, 2018) (Appendix P). One project in particular, the High Elevation Weather Station Network, consists of a network of weather stations frequently collecting data on climate variables such as snow depth, total precipitation, wind, relative humidity, and solar radiation (Coastal Hydrology and Climate Change Research Lab, personal communication, October 10, 2018). Collecting climate variable data over a long period of time is essential for climate change analysis (Karl et al., 2010).

Researchers at MABRRI are working to monitor the potential effects of climate change on local plant species (VIU, 2018-bb). By monitoring the growing seasons of local plants over a long period of time, researchers can identify how the growing seasons are shifting with changing climate patterns (VIU, 2018-bb). Plants are monitored at three locations: VIU’s Milner Gardens and Woodland, Thetis Lake Regional Park, and near the summit of Mount Arrowsmith (VIU, 2018-bb). Each of the sites have weather stations installed in order to compare data to local climate regimes (VIU, 2018-bb).

Discussions from VIU community engagement events

Improving VIU’s efforts toward climate action was a common concern at the World Café, Accelerating the SDGs, and the Rural Café. At the World Café, participants suggested that all programs should engage students in outdoor education, not just the physical education courses. In doing so, students will be more involved with the environment and sustainability. At Accelerating the SDGs, a popular suggestion was to implement an annual Climate Action Week at VIU that includes all faculties and departments, with a focus on education, awareness, and promotion of climate action initiatives. Another popular
suggestion was to implement a mandatory course for all students in environmental literacy. It was also acknowledged that in order to accelerate VIU’s climate action, an Office of Sustainability needs to be established to act as the coordinating body that provides resources, guidelines, and policy recommendations. At the Powell River Rural Café, one of the main concerns was related to VIU’s carbon footprint. Most participants suggested that VIU should intend to become carbon neutral, make public transit more accessible and affordable to help reduce greenhouse gas emissions, and make environmentally sustainable infrastructure upgrades.

Other university initiatives

At TRU students can earn a certificate of Leadership in Environmental Sustainability (Thompson Rivers University, 2018-c). This certificate allows students to gain formal recognition of their knowledge, skills, awareness, and attitudes regarding environmental sustainability through educational experience (Thompson Rivers University, 2018-c). Another example of climate change education and awareness is SFU’s Climate Change Research and Energy Solutions Program (Simon Fraser University, 2018-b). In this program, areas of research include greenhouse gas mitigation, sustainable energy systems, climate change impacts, adaptation, and alternative energy solutions (Simon Fraser University, 2018-b). SFU also helped to establish the Pacific Institute for Climate Solutions in 2008 (Simon Fraser University, 2018-c). At the institute, researchers evaluate potential impacts of climate change and develop mitigation strategies (Simon Fraser University, 2018-c).

**Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development**

Oceans and marine resources play an essential role in economic development and human well-being (United Nations, 2018-u). Around the world, levels of ocean acidification have increased approximately 26% since pre-Industrial times (United Nations, 2018-u). Impacts of ocean acidification in conjunction with overfishing and pollution are making it difficult to protect the world’s oceans (United Nations, 2018-u). To address this, Canada invested $1.5 billion into the Oceans Protection Plan in 2016, which was the largest investment ever made to protect the health and resilience of Canada’s waters (Government of Canada, 2018). The plan aims to protect marine ecosystems, improve marine safety, create stronger Indigenous relationships, and invest in oil spill research and clean-ups (Government of Canada, 2018). In the future, it will be important for Canada to continue placing high priority on its oceans in order to meet Goal 14.

Due to VIU’s proximity to the coast of BC, it is in the prime location to address Goal 14. Indicators address topics related to eutrophication, marine debris, marine technology, and sustainable fish populations (United Nations, 2018-h). For the purpose of this project, the research team was interested in not only how VIU is educating on these topics, but also in the research underway through the institution.
How VIU currently contributes to Goal 14

Departmental focus

A variety of courses at VIU offer topics related to marine conservation, resources, and sustainability (Appendix Q). Some Biology, Fisheries and Aquaculture, and Resource Management and Protection courses touch on marine debris and eutrophication (VIU, 2018-j). In addition, the Resource Management and Protection program addresses government regulations and enforcement associated with fish harvesting (Resource Management and Protection, personal communication, September 11, 2018). In the past, Resource Management and Protection students have engaged in applied research through stock assessments of Coho Salmon (Resource Management and Protection, personal communication, September 11, 2018). In the Fisheries and Aquaculture program, students learn about sustainable fishing methods, fish life cycles, and the benefits of aquaculture (Fisheries and Aquaculture, personal communication, October 2, 2018). Furthermore, some courses in Geography touch on the topic of marine conservation and management (VIU, 2018-j).

Engagement

VIU has many initiatives geared towards marine conservation and sustainability (Appendix Q). To prevent marine debris, the VIU Students’ Union banned bottled water sales on campus and single-use straws in the Student Pub (Students’ Union, personal communication, August 28, 2018; VIU, 2018-ttt). The Students’ Union also offers cost-free promotions for beach clean-ups and other environmentally focused campaigns initiated by students (Students’ Union, personal communication, August 28, 2018). For example, beach clean-ups are organized by VIU Fisheries and Aquaculture at Chase River to get students actively involved in caring for the local environment (Fisheries and Aquaculture, personal communication, October 2, 2018). Beach clean-ups are also organized by the Deep Bay Marine Field Station to reduce marine debris pollution in the Deep Bay area (Deep Bay Marine Field Station, personal communication, August 7, 2018). The Field Station also runs a Perils of Plastic program and various other events to educate on the ecological importance of shellfish as filter feeders and the impacts of marine plastic pollution (Deep Bay Marine Field Station, personal communication, August 7, 2018).

In regard to increasing education and awareness about ocean acidification, ACER (described in Goal 13) places a large emphasis on the effects of climate change on ocean acidification during public presentations and demonstrations (ACER, personal communication, October 3, 2019). The topic of ocean acidification is included in every presentation to emphasize the extreme negative impacts that changes in marine acidity have on the environment (ACER, personal communication, October 3, 2019).

VIU is also engaged in an international initiative relating to the health of coastal communities. The Queen Elizabeth Scholars program supports students in pursuing international internships in partner countries under the theme of Building Resilience in Coastal Communities (BRiCC) (VIU, 2019-xx). The goals of BRiCC are to enhance coastal communities’ response to climate change, develop sustainable local fisheries and agriculture production, enhance the management of potable water in coastal zones, develop and manage protected areas in coastal communities, and improve the capacity to foster a sustainable and resilient economy (VIU, 2019-xx).
Research

The Deep Bay Marine Field Station is a marine research facility operated by VIU (VIU, 2018-qqq) (Appendix Q). The Field Station is an active site for shellfish aquaculture within the Deep Bay area, and is committed to public education on sustainable development and marine conservation (VIU, 2018-rrr). The Deep Bay Marine Field Station is self-funded, and does not receive an annual budget from VIU, but works with industry and other researchers to fund research programs and activities (Deep Bay Marine Field Station, personal communication, August 7, 2018). In 2018/19, the Field Station received funding from the BC Ministry of Agriculture for research aimed at understanding what is causing commercial oyster mortalities (VIU, 2019-ii). The research team is working towards selectively breeding an oyster that is resistant to the pathogen causing the mortalities, in order to support the local shellfish industry (VIU, 2019-ii). Student researchers that are involved in the project are also testing the water quality of the ocean to monitor the acidity, temperature, and chemicals in the environment (VIU, 2019-ii). Similar to Deep Bay’s research, VIU’s Canada Research Chair in Shellfish Health and Genomics is researching diseases in Pacific oysters that are linked to climate change and ways to make oysters more resilient to environmental changes (VIU, 2018-rrrr). The Research Chair has already discovered a method to help oysters and their offspring become less susceptible to climate change-induced diseases (VIU, 2018-rrrr).

Aside from the research occurring at Deep Bay, the CBAIR program conducted research in partnership with the Ocean Legacy Foundation on the topic of marine debris pollution (VIU, 2018-r; Bowns & Pastro, 2018). In 2017 and 2018, CBAIR students developed recommendations to guide the development of policies regarding single-use and disposable plastic products (Bowns & Pastro, 2018). Another VIU project, initiated by a Fisheries and Aquaculture student, researched the impacts of plastic intake levels in oysters (Fisheries and Aquaculture, personal communication, October 2, 2018). Additional marine research in 2018 involved a VIU Fisheries and Aquaculture professor receiving a Discovery Grant from NSERC to support five years of research aimed at understanding how climate change is affecting white sturgeon and salmon populations (VIU, 2018-nnnn). The funding has also allowed undergraduate and graduate students to work on the research project (VIU, 2018-nnnn). MABRRI researchers are also working on an ongoing project to identify fish spawning habitats along the eastern coastline of Vancouver Island that may be vulnerable to changing environments (VIU, 2019-kkk). The research aims to understand the timing and location of spawning to fill gaps in baseline data and identify areas in need of protection and implementation of policy and management strategies (VIU, 2019-kkk).

In addition to marine sustainability, some projects investigate marine technology. VIU’s AERL has developed an advanced underwater mass spectrometer prototype (AERL, personal communication, August 3, 2018). The spectrometer is lowered off the side of a boat into the water column to collect real-time water quality samples (AERL, personal communication, August 3, 2018; VIU, 2018-uuu). The VIU@Cowichan Innovation Lab has created an Underwater Remotely Operated Vehicle (OpenROV) (VIU@Cowichan, 2018-c). The OpenROV has the ability to remotely record underwater visuals to depths of 300 feet and was developed with the intention of introducing youth to marine life (VIU@Cowichan Innovation Lab, personal communication, September 20, 2018). Additionally, a Fisheries and Aquaculture faculty member is conducting research on shellfish traps in partnership with a local organization (Fisheries and Aquaculture, personal communication, October 2, 2018). Their research focuses on redesigning shellfish traps to reduce bycatch (Fisheries and Aquaculture, personal
communication, October 2, 2018). Furthermore, the Deep Bay Marine Field Station invests money into hatchery technology and the development of better practices, such as solar powered Floating Larval Upwelling System (Deep Bay Marine Field Station, personal communication, August 7, 2018). This system, essentially an incubator for oysters, pumps nutrient-filled ocean water up to feed young, growing oysters (Massachusetts Oyster Project, 2018). Although the Deep Bay Marine Field Station is not currently focused on investment in marine technology, they plan to be in the future (Deep Bay Marine Field Station, personal communication, August 7, 2018).

Regarding an increase in marine knowledge and research, a VIU Indigenous Studies professor was awarded a SSHRC grant in Indigenous Research Capacity and Reconciliation Connection (VIU, 2019-ii). This grant will be used to support the creation of a Secwepemc (Shuswap) youth program to educate youth about the importance of protecting the Pacific salmon and the Fraser River (VIU, 2019-ii). This project, We Will Survive if the Salmon Survive, is a long-term approach to bring Indigenous youth and Elders together to connect and share traditional knowledge, emphasize the cultural importance of salmon and the Fraser River, as well as preserve livelihoods and culture (VIU, 2019-ii). Also, to help encourage school-aged children to learn about marine life, researchers at the Deep Bay Marine Field Station are working with a VIU Education professor to develop an app that helps facilitate on-site learning at the marine facility (VIU, 2018-rrrr).

Discussions from VIU community engagement events

Goal 14 was not specifically discussed at Accelerating the SDGs or the Rural Café, however, recommendations were made at the World Café on how VIU can improve initiatives for Goal 14, particularly in terms of what VIU can do to increase awareness of watershed impacts and health. One participant proposed introducing the Yellow Fish Road program at VIU to increase education and awareness of water pollution (Trout Unlimited Canada, 2019). The program would involve students in marking campus storm drains with a yellow fish, which helps to educate the VIU community that storm drains are directly connected to rivers, lakes, and streams, and that substances other than rainwater can be harmful to aquatic life, as well as people who rely on clean water (Trout Unlimited Canada, 2019). Another suggestion was to create a contest to decorate the storm drains on campus. The competition would be designed to both build engagement and contribute to the sense of place on campus.

Participants also supported increasing the number of courses/improving course content related to watersheds and VIU’s impacts on the local watersheds. In particular, participants believed that students should be educated on where the water on campus comes from and where it goes after it has been used. One participant noted that some programs study water as part of field study courses, but do not spend time learning this on campus. In other words, students were being taught about the health of fresh water in areas not necessarily affected by campus. Lastly, participants suggested that VIU could implement better landscape designs on campus to remove pollution and debris out of surface runoff water, potentially through the use of bioswales and rain gardens (Soil Science Society of America, 2018).
Other university initiatives

Other universities provide examples of water conservation and marine technology initiatives. For instance, the Rochman Lab at U of T is actively engaged in micro-plastics research (University of Toronto, 2018-d). The lab researches and investigates sources and sinks of plastics into urban watersheds across North America (University of Toronto, 2018-d). One notable project created an inventory of plastic litter in the Don River to determine how much trash enters Lake Ontario (University of Toronto, 2018-e). Another example of a university initiative is the Oceans Network Canada established by UVic in 2007 (Ocean Networks Canada, 2018). Oceans Network Canada is comprised of two observatories, which collect real-time data (e.g. temperature, salinity, direction/intensity of water currents, dissolved oxygen distributions, and pH) from instruments along BC’s coast (Ocean Networks Canada, 2018). Long-term data from the Oceans and Network Canada contributes to research on climate change, earthquakes, tsunamis, pollution, and ocean management (Ocean Networks Canada, 2018).

Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Protecting the diversity of life and environments on land is imperative for our own sustenance and livelihood (United Nations Development Programme, 2018-c). Between 1999 and 2013, 24 million square kilometers, or one fifth, of Earth’s land surface showed persistent decline in biological productivity (United Nations, 2018-v). To prevent this trend from continuing, efforts must be targeted towards protecting, restoring, and promoting the conservation and sustainable use of terrestrial ecosystems (United Nations, 2018-v; VIU, 2018-w). As a nation that houses 9% of the world’s forests, land and biodiversity are essential components of Canadian culture and economics (Government of Canada, 2018). Therefore, Canada is devoted to supporting diversity and mainstreaming it into productive sectors (Government of Canada, 2018). In 2018, the federal government committed $1.3 billion over five years to protect Canada’s Nature Legacy, which has been allocated to progress in securing land for conservation, protection of species, and supporting Indigenous capacity to conserve land and species (Government of Canada, 2018).

VIU has access to an abundance of forested areas and biodiversity as BC is the most ecologically diverse province in Canada (Government of British Columbia, 2003). About two-thirds (almost 60 million hectares) of BC is forested area (Government of British Columbia, 2003). Indicators for Goal 15 address topics related to forested area, sustainable forest management, invasive, threatened, or endangered species, and sustainable ecosystems and biodiversity (United Nations, 2018-h). For the purpose of this project, the research team primarily focused on how VIU is educating on topics related to Goal 17, as well as how VIU is contributing to Goal 17 through access to forested areas and research.

How VIU currently contributes to Goal 15

VIU’s Nanaimo campus contains several small forested areas that have been developed with trails for connectivity (VIU, 2018-OO). Off campus, VIU owns a private 694 hectare woodlot which is primarily used and managed by the Forestry program, but is also used by students in Geography, Biology, and Resource Management and Protection as an outdoor classroom (VIU, 2018-vvv; Forestry, personal
communication, May 23, 2019). Approximately 93% of the woodlot is forested land and the remaining area is used for roads and access (Forestry, personal communication, May 23, 2019). VIU is also required to submit a stewardship plan to the Ministry of Forests, which indicates how the woodlot and VIU will protect and accommodate the values of a forest outlined by the Ministry (Forestry, personal communication, May 23, 2019). Additionally, Milner Gardens and Woodland is 28.34 hectares of VIU property located in Qualicum Beach, the majority of which (24.28 hectares) is under the protection of a forest management plan (Milner Gardens & Woodland, personal communication, August 23, 2018; VIU, 2018-www; Hopwood, 1999).

In an effort to reduce the impact of invasive species, Goal 15 recommends adopting legislation to prevent and control them (United Nations, 2018-h). VIU Facilities does not place a specific focus on removing and controlling invasive species, however when Facilities workers encounter them, they are removed, thereby helping to prevent the spread of invasive species on campus and beyond (Facilities Services & Campus Development, personal communication, September 21, 2018). To further help with this issue, Facilities uses native species when planting new areas (Facilities Services & Campus Development, personal communication, September 21, 2018).

In efforts towards protecting biodiversity, VIU was designated as a Bee Campus through Bee City Canada in 2019, and is the first post-secondary institution in BC to receive the designation and the seventh across Canada (VIU, 2019-lll). Through this designation, VIU has indicated its commitment to create, maintain, and improve pollinator habitats, educate on the importance of pollinators, and participate in National Pollinator Week (VIU, 2019-lll). As a Bee Campus, VIU’s MCP students and the VIU Peace Garden Educational Ecosystem Club aim to collaboratively host workshops and colloquiums on pollinator-friendly plants and habitats and the importance of pollinator health (VIU, 2019-lll). VIU also has a Parks Canada Club and an Eco Club, which aim to bring students together to engage in environmentally sustainable actions and conservation efforts (Facebook, 2017; Facebook, 2019-c).

**Departmental focus**

The Forestry department is at VIU’s forefront for the sustainable management of forested land (Appendix R). This program educates students on forest ecosystems, surveying, spatial data, mapping, inventory, and other concepts that contextualize forest area as a proportion of total land area (VIU, 2018-xxx). The Forestry program offers courses on protected areas, land degradation, ecosystem disturbances, invasive species, and conservation strategies (VIU, 2018-xxx). The Geography and Resource Management and Protection departments also offer courses that touch on these subjects (VIU, 2018-j) (Appendix R). In fact, the Resource Management and Protection program has a heavy focus on Goal 15, and educates students on wildlife poaching and hunting methods, and the control of invasive plant species through field projects (VIU, 2018-j; Resource Management and Protection, personal communication, September 11, 2018). Biology students are also educated on Species at Risk and invasive species, while VIU’s NREP program considers ecosystem conservation through courses such as *Riparian Area Regulation* and *Erosion and Sediment Control* (VIU, 2018-j; Natural Resource Extension Program, personal communication, October 21, 2019; VIU, 2019-ZZ). VIU’s Horticulture department also
contributes to education for students on biodiversity and land conservation by having students work with both invasive and native species at the G.R. Paine Horticultural Training Centre (VIU, 2018-yyy).

Students in the Indigenous Studies program also learn about sustainable forest management and practices through cultural teachings (Indigenous Studies, personal communication, September 23, 2019). The program hires local Indigenous cultural technicians who share their knowledge with students, including harvesting methods and protecting the environment (Indigenous Studies, personal communication, September 23, 2019). In general, VIU's Indigenous population and engagement with Indigenous communities helps to increase awareness of the importance of ecosystem conservation and protection. For example, in the Aboriginal Ecotourism Training program there is a large focus on creating a connection to land, which students learn from traditional knowledge shared by Elders (Aboriginal Education and Engagement, personal communication, July 12, 2019). Similarly, VIU's Cowichan campus offers a Land-based Sustainability course where Elders from Cowichan Tribes teach a holistic, experiential, and land-based approach to sustainability (VIU, 2018-DDDD; VIU, 2019-P). Key outcomes of the course are to foster a deeper appreciation for the culture of local First Nations communities, and a strong connection between humans and nature (VIU, 2018-DDDD).

Land degradation is another important issue that is addressed through Goal 15. Various programs and courses teach students about the importance of preventing land degradation and approaches to land reclamation. For example, courses in the Forestry and Natural Resources Extension Program teach students about land degradation related to forestry and construction operations (Forestry, personal communication, May 23, 2019; Natural Resource Extension Program, personal communication, October 21, 2019). Geography and Resource Management Officer Technology students are also educated on the effects of land degradation on natural resources and ecosystems (VIU, 2019-p). Several History courses also highlight historical cases in which humans have had negative impacts on the environment (History, personal communication, August 27, 2019).

Research

Species at risk and conservation is a major focus of research among VIU students and faculty (Appendix R). Students in the Biology and Geography programs have conducted research projects on several different species at risk (Biology, personal communication, September 10, 2018; Geography, personal communication, October 11, 2018) (Appendix R). Undergraduate Biology projects are often conducted in collaboration with regional partners, who have the capacity to use resulting data to take action on issues (Biology, personal communication, September 10, 2018). Additionally, in 2018, a VIU Biology professor was awarded a grant to expand their research on the Vancouver Island marmot population (VIU, 2018-zzz). For the next five years, this research will look at inbreeding, genetic rescue, and the consequences of captive breeding on the marmot species (VIU, 2018-zzz). Biology and RMOT students are also engaged in VIU’s Bird Banding Project, which conducts bird monitoring and banding programs in the VIU region to contribute to understanding declines in Canada’s bird populations (VIU, 2020-j). In addition to monitoring changes in population levels, the project provides education and training opportunities for both VIU students and members of the public (VIU, 2020-j). Biology students have also conducted the Bird-Window Collision project, that identified buildings on the Nanaimo campus which have proven to
be problematic for causing significant bird deaths due to high percent glass coverage, window reflectivity and transparency, and proximity and type of vegetation among other factors (VIU, 2019-III).

MABRRI is also engaged in projects that aim to conserve biodiversity and inform sustainable management of essential terrestrial ecosystems. For example, the Global Observational Research Initiative in Alpine Environments (GLORIA) project involves long-term alpine monitoring of Mount Arrowsmith as part of an international network. The purpose of this initiative is to develop standardized observations of alpine biodiversity, vegetation patterns, and mountain top temperatures (VIU, 2018-bb). GLORIA is a national long-term observation network that monitors trends in species and temperature to assess and predict losses in biodiversity in alpine ecosystems (GLORIA, 2018). In partnership with Milner Gardens & Woodland and the Ministry of Forests, Lands, Natural Resource Operations and Rural Development, another MABRRI initiative is the Coastal Forest Plant Phenology Research and Monitoring Pilot Project (VIU, 2018-bb). This project is working to understand the effects of climate change on local plant phenology to identify potential changes in growing seasons of Vancouver Island’s ecosystems (VIU, 2018-bb).

In relation to conservation and sustainable use of freshwater ecosystems, the ICSS engages in research directed toward conserving white sturgeon (ICSS, personal communication, August 24, 2018). The Centre is exploring sustainable ways to produce sturgeon for consumption while also conducting research to aid in the conservation of wild populations (ICSS, personal communication, August 24, 2018). Since 1984, when the Centre started working with sturgeon, they have seen an increase in the numbers of wild tagged sturgeon in the Fraser River (ICSS, personal communication, August 24, 2018). MABRRI is also involved in research related to freshwater ecosystems (VIU, 2018-f; VIU, 2018-bb). As previously described in Goal 6, the Wetland Mapping and Monitoring project involves conducting a five-year research initiative to map and classify wetlands within the RDN for the purpose of informing future policy around wetland ecosystems and freshwater management (VIU, 2018-bb). Additional research efforts through VIU’s RMOT program engage students in RMOT 306 (Environmental Monitoring) in a Water Quality and Stream Invertebrate Assessment project (Resource Management and Protection, personal communication, September 11, 2018). This project, which initiated in 2008 in partnership with the RDN and Fisheries and Oceans Canada, has involved annual water quality and stream invertebrate assessments to determine the health of local streams within the RDN (Demers, 2016).

**Engagement**

Through Milner Gardens and Woodland and the Mount Arrowsmith Biosphere Region (MABR), community engagement events have taken place to educate the public on native species, including species at risk. The *Shoots with Roots* program is hosted at Milner Gardens and Woodland and educates children from kindergarten to grade 3 about basic plant and animal identification (VIU, 2018-AAA). Milner Gardens also provides guided tours for the public and informally educates guests about plants and animals (Milner Gardens & Woodland, personal communication, August 23, 2018). The annual MABR BioBlitz also educates attendees on plant and animal species (VIU, 2018-BBB). The BioBlitz, organised by the MABR and MABRRI, has members of the public conduct a rapid biological survey of plant and animal species (VIU, 2018-BBB), leading to increased awareness of local vegetation and annual
records of species composition at the sites where the BioBlitz is held (Mount Arrowsmith Biosphere Region Research Institute, 2018).

Discussions from VIU community engagement events

Members of the VIU community contributed recommendations as to how this institution can better support terrestrial ecosystems. They agreed that VIU’s Nanaimo campus is an important corridor between the Millstream and Chase River watersheds, and that VIU should serve as a corridor between green spaces for animals living in the surrounding area. Furthermore, participants believed all students attending VIU should be learning about protecting the environment in classrooms, and that a mandatory course on environmental literacy could help achieve this. Another suggestion was to utilize the outdoor spaces available on campus as classrooms to promote connections between humans and nature and implement land-based learning stemming from Indigenous ways of knowing.

Other university initiatives

Other universities across Canada provide examples of initiatives VIU could replicate to contribute to Goal 15. York University, through the Faculty of Environmental Studies, has partnered with Wildlife Preservation Canada (WPC) to take steps towards saving animal species at risk of extinction in Canada (York University, 2018). This partnership provides students with hands-on experience with WPC’s species recovery programs and the opportunity to work on the conservation and management of at-risk species (York University, 2018). U of C is an active partner in the Vancouver Island Marmot Breeding program (Wildlife Preservation Canada, 2018). U of C helps to investigate the reproductive behaviours of Vancouver Island marmots, which provides valuable information to conservation breeding facilities to improve management techniques (Wildlife Preservation Canada, 2018). Finally, other universities such as UVic, U of O, UBC, and SFU have published on the Species at Risk Act (SARA) and the need for further research and policy changes in order to better protect endangered species (University of Victoria, 2018-b; Brassard, 2014; Bird & Hodges, 2017; Westwood et al., 2018).

Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Many regions around the globe suffer from conflict and violence at both societal and domestic levels (United Nations, 2018-x). Data acquired from 2005 to 2017 suggests that nearly 8 in 10 children between the ages of 1 to 14 years were exposed to domestic violence (psychological or physical) in 81 countries (United Nations, 2018-x). In 2015, between 5.2 and 6.7 persons per 100,000 persons were victims of homicide worldwide (United Nations, 2018-x). In contrast, the majority of citizens in Canada are satisfied with their personal safety from crime (Government of Canada, 2018). As well, Canadian homicide rates have been declining since the 1990s (Government of Canada, 2018). However, Canadians continue to experience discrimination and harassment (Government of Canada, 2018). Internationally, people need to come together to support peaceful and inclusive societies, for both the safety of citizens and for sustainable development (Government of Canada, 2018).
The indicators for Goal 16 address topics related to physical, psychological, and sexual violence, the number of homicide victims, human trafficking, and proportions of positions (i.e. sex and age) in public institutions (United Nations, 2018-h). To approach this Goal, the research team investigated what steps VIU is taking to ensure campus safety, what initiatives exist to raise awareness of these issues, and what programs are in place to help support victims of violence. In addition, the team was interested in how VIU educates on topics related to Goal 16.

How VIU currently contributes to Goal 16

VIU has taken steps to ensure that students and employees both feel safe and are safe on campus (Appendix S). According to the Health and Safety Policy (41.09), VIU is committed to promoting a safe and healthy working and learning environment (VIU, 2018-CCC). To address this, VIU requires that all full-time employees take the Preventing and Addressing Workplace Harassment: Rights and Responsibilities course (VIU, 2018-DDD). Additionally, VIU – in collaboration with Haven Society and Ending Violence Association of BC – offers training sessions for faculty and staff to learn how to receive disclosures of sexual violence (Haven Society, 2018; Ending Violence Association of BC, 2018; VIU, 2018-EEE). VIU also has a Violence Prevention program, which outlines the requirements and procedures for the prevention, management, and investigation of violence in the workplace (VIU, 2018-FFF). Moreover, the Nanaimo campus, Cowichan campus, and Deep Bay Marine Field Station all have emergency telephones (VIU, 2018-GGG). These telephones are available 24/7 and are located in general locations for anyone to use (VIU, 2018-GGG). For individuals who are cautious about walking alone in the dark, VIU has the Safe Walk program in which campus security officers escort students around campus at their request (VIU, 2018-HHH). The VIU Safety app is also available to download for free and has features that include emergency procedures, a flashlight, campus map, alert systems, safety toolbox, safe walk, and reporting suspicious activity (The Nav, 2018-b) (Appendix S). Furthermore, VIU’s HRRWO has an online toolkit for Addressing Workplace Harassment (VIU, 2018-II). The toolkit provides summaries on bullying in the workplace, tips for receiving complaints, options for intervening, and complaint resolutions (VIU, 2018-III). As discussed in Goals 5 and 10, HRRWO produces an annual report related to incidents reported on campus (VIU, 2016). In 2016/17, there was just one alleged harassment complaint – a decrease from the 35 alleged complaints in the 2015/16 academic year (VIU, 2016). In the 2015/16 report, one of these 35 complaints was related to sexual harassment (VIU, 2016). HRRWO, Human Resources, and the Universal Access Committee are services that are all open to anyone at VIU to discuss a need they have (Human Rights and Respectful Workplace Office, personal communication, May 27, 2019; Universal Access Committee, personal communication, January 7, 2020).

VIU is also actively involved in supporting victims of physical violence (Appendix S). The Scholars at Risk Network invites scholars fleeing danger from their home country to be guest lecturers at VIU (Education Abroad, personal communication, August 29, 2018). The network not only protects scholars from dangerous conditions, but also allows them to continue their research or academic work in a safe place (Education Abroad, personal communication, November 21, 2019). With this program, VIU is looking to build a regional approach that would allow the scholars to move between universities to share their experiences (Education Abroad, personal communication, August 29, 2018). In 2017, VIU hosted an Iranian scholar of law and human rights for a two-week residency, who delivered a public lecture series and a keynote presentation titled “Speaking Truth to Power in Iran” (Scholars at Risk Network, 2019-b). Another initiative is the Student Refugee Program in partnership with the World University Service of
Canada, which aims to provide refugee students permanent residency and higher education (World University Service of Canada, 2018-b). Since 2008, VIU has sponsored two students per year (VIU, 2018-I).

To address a target under this Goal that seeks to ensure responsive, inclusive, participatory, and representative decision-making, the proportion of positions that make up an institution are investigated (United Nations, 2018-x). At VIU, in Nanaimo, and in Canada, sex and age vary among the population. At VIU, there were a total of 1,227 employees in the 2016/17 academic year (VIU, 2018-d). Of these employees, 63% (773) were female and 37% (454) were male (VIU, 2018-d). A demographic overview prepared for the 2010 Campus Master Plan found that approximately 20% to 30% of staff and faculty at VIU were over the age of 55 years (VIU, 2009). In Nanaimo, data shows that 48,215 people aged 15 years and older were employed (Statistics Canada, 2018-e). Of these people, 50% (24,260) were male and 50% (23,955) were female (Statistics Canada, 2018-e). In Canada, data shows that 17,230,040 people were employed in 2016 and of this employed population, 52% (923,540) were males and 48% (8,306,490) were female (Statistics Canada, 2018-f). Comparing VIU’s population to both Nanaimo’s and Canada’s, one can see that in the 2016/17 school year VIU had a higher proportion of employed females than in Nanaimo and Canada (63% versus 50% and 48%, respectively), which contributes to a lower proportion of employed males than Nanaimo and Canada (37% versus 50% and 52%, respectively).

To ensure public access to information and protect fundamental freedoms, VIU is one of the first five universities in Canada to offer the Inside-Out Prison Exchange program (VIU, 2019-FFF). The program originated in the United States to bring together university students and incarcerated students for semester-long learning, providing both inside and outside students with meaningful academic and experiential learning opportunities (The Inside-Out Prison Exchange Program, 2020; VIU, 2019-FFF). The expansion of the program across the United States and to multiple other countries has developed an international network of various stakeholders that have strong commitments to social justice (The Inside-Out Prison Exchange Program, 2020). VIU’s Inside-Out program has been running at the Nanaimo Correctional Centre since 2016 and funding from the Vancouver Foundation has helped the program expand to the Vancouver Island Regional Correctional Centre in Victoria (VIU, 2019-nnn). VIU’s Criminology department currently offers two courses for the program: CRIM 299 (Exploring Issues of Crime and Justice Behind the Walls) and CRIM 499 (From Social Exclusion to Social Inclusion) (VIU, 2019-nnn).

Departmental focus

Courses in VIU’s Criminology department address homicide victims, physical violence, and human trafficking (VIU, 2018-j) (Appendix S). In particular, students learn about statistics, law, and social factors that contribute to homicide, homicide prevention, and mental health as a form of intentional homicide reduction (Criminology, personal communication, September 28, 2018). After graduation, some students work for non-governmental organizations that create policies to reduce human trafficking (Criminology, personal communication, September 28, 2018). In addition to Criminology, courses in departments such as Child and Youth Care, Studies in Women and Gender, and Psychology cover topics related to youth who experience physical punishment or psychological aggression (VIU, 2018-j). In particular, a Child and Youth Care Course, CYC 362 (Child Abuse and Neglect Concerns) is a mandatory course in the program, informing students of the best practices in child safety and how to take
disclosures from children (Child and Youth Care, personal communication, September 18, 2019). Additionally, the MCP program educates students on the topic of Crime Prevention Through Environmental Design, an area of study that proves neighbourhoods can be designed to be safer by changing aspects such as lighting and visibility (VIU, 2018-j; Master of Community Planning, personal communication, September 18, 2018).

**Engagement**

VIU has engaged in initiatives to address discrimination and harassment (Appendix S). As mentioned in Goals 5 and 10, the Know More Campaign aims to bring awareness and start conversations on the topic of support and consent (VIU, 2018-Y). As well, the Positive Space Alliance addresses discrimination and harassment based on sexual orientation and gender identity (VIU, 2018-Z). Another VIU supported initiative, the Moose Hide Campaign, is a grassroots movement to stand up against violence towards women and children (Moose Hide Campaign, 2018). To support and raise awareness for the campaign, VIU fundraised approximately $100,000 during the 2017 MBA (Master of Business Administration) games (VIU, 2018-JJJ). In addition, all VIU athletes are required to attend an annual presentation on sexual harassment and consent, as athletes are considered at high-risk for sexual harassment (Student Affairs, personal communication, September 10, 2018). To further promote non-discrimination, VIU and UVic collaboratively created a travelling banner display entitled 150 Years and Counting: Fighting for Justice on the Coast (VIU, 2018-EEEE). The banner provides stories from different perspectives of those who have faced discrimination, such as Indigenous communities and Asian Canadians, who fought for justice in the face of colonialism and racist exclusions (VIU, 2018-EEEE).

To promote an understanding of international politics and cooperation, one of VIU’s student clubs, Model United Nations, is an interdisciplinary club which was created to address critical local and global issues (VIU, 2019-ooo). The interactive club operates by role-playing as international delegates for United Nations simulation conferences, providing students an opportunity to build leadership, public speaking, cooperation, and critical thinking skills (Facebook, 2018-b). Furthermore, two VIU students, along with 500 other Peace Ambassadors from over 40 countries, travelled to the 2018 Peace Summit of Emerging Leaders’ in Bangkok to learn how to implement strengthening peace efforts around the world (VIU, 2019-ppp). Youth that attended the summit committed to leading peace initiatives of their own, as well as encouraging other youth to become active in creating inclusive communities (VIU, 2019-ppp). The two students who attended the summit also helped organize VIU Model United Nations events during Global Citizens Week in February 2018.

**Research**

VIU’s Intellectual Property Policy promotes openness, sharing of ideas, academic freedom, safeguarding proprietary rights, and recognizing principles of scholarly integrity (VIU, 2018-e). Following shifts in Canadian policy about open access to information, the University administered VIUSpace, which digitally preserves and showcases research done at VIU to the public (VIU, 2018-KKK). In addition, the SRCA Office is working towards making more information and research publicly available (Scholarship, Research and Creative Activity, personal communication, September 6, 2018). Furthermore, the VIU Library takes intellectual and academic freedom seriously, and protects the privacy and rights of student and faculty researchers at VIU (Library Administration, personal communication, August 30, 2018). VIU
does not monitor search trend analysis, nor does it share personal data of students or faculty with vendors (Library Administration, personal communication, August 30, 2018).

As another effort to increase public access to information, VIU History students started *The Canadian Letters and Images Project* in 2000 (VIU, 2019-qqq). The project is an online archive that digitizes any correspondences, diaries, photos, or other personal materials of Canadians at war (VIU, 2019-qqq). Since the start of the project, History students have made approximately 30,000 letters available to the public on the *Canadian Letters and Images Project* website (History, personal communication, August 27, 2019). One of the main goals of this project is to achieve peace by helping the public understand the hardships that were faced during wars (History, personal communication, August 27, 2019).

**Discussions from VIU community engagement events**

Goal 16 was not included at the World Café as the indicators related to discrimination and violence were discussed in other Goals, causing potential redundancies in the conversations at the World Café tables. Additionally, the limited resources and space only allowed for a specific number of tables in the venue, thus causing the team to eliminate one table (with Goals 16 and 17). At *Accelerating the SDGs* and the Powell River Rural Café, participant discussions took more of a broad approach, focusing on the major areas in which improvements can be made at VIU, and Goal 16 was not specifically addressed.

**Other university initiatives**

Other North American educational institutions provide examples on how to improve Goal 16. For example, the College and Graduate School of Arts and Sciences at University of Virginia hosts the *Democracy Initiative* (University of Virginia, 2018-a). The purpose of the *Democracy Initiative* is to promote research and projects that study the success and failures of democracy, opportunities and threats of democracy, and policies that strengthen them (University of Virginia, 2018-b). The University of Virginia has plans to host a summit in the next few years to bring together scholars, policy experts, and world leaders to discuss issues relating to democracy (University of Virginia, 2018-a). Additionally, students at Peter A. Allard School of Law at UBC constructed a research paper that led to the development of the *Breaking New Ground* manual (University of British Columbia, 2018-d). The manual was presented to the International Criminal Court – the world’s highest criminal court – and provides guidance on how to prosecute against “land grabbing” (i.e. large companies seizing land for mass scale cultivation) for crimes against humanity as well as help for vulnerable populations (Peter A. Allard School of Law, 2018, p. 10; University of British Columbia, 2018-e).

**Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development**

Each Goal of the previous 16 United Nations SDGs has ambitious targets; Goal 17 was specifically developed to support and achieve these targets through the strengthening of global partnerships (United Nations, 2018-y). It has been globally recognized that the SDGs cannot be achieved without inclusive partnerships or without the mobilization of resources to assist each other, in particular developing nations, in the pursuit of the Goals (United Nations, 2018-z). In addition, Goal 17 tracks the
efforts made towards sustainable development by nations (United Nations, 2018-h). One way that Goal 17 tracks efforts is through data collection, monitoring, and accountability from nations, such as through census reporting (United Nations, 2018-h). For example, during 2008-2017, 89% of countries conducted at least one people census and in 2017, 102 counties were implementing national statistical plans (United Nations, 2018-y).

Canada is committed to contributing to social, economic, and environmental sustainability both locally and abroad and sees Goal 17 as an opportunity to pursue new partnerships (Government of Canada, 2018). VIU, as an educational institution, has the ability to engage in local, regional, and international partnerships, as well as educate surrounding communities on the SDGs. Indicators for Goal 17 address topics related to cooperation agreements between countries, financial and technical assistance to developing countries, public-private or civil society partnerships, and multi-stakeholder partnerships to achieve the SDGs (United Nations, 2018-h). For the purpose of this project, the research team approached this Goal by looking at how VIU is establishing partnerships with other countries.

How VIU currently contributes to Goal 17

Although it is difficult to quantify partnerships, it is clear that VIU does engage in public-private and civil society partnerships (Appendix T). VIU has various partnerships internationally, within Canada, and on Vancouver Island (VIU, 2018-LLL). Many of the local partnerships are departmentally focused or based off of research – many of these have been discussed throughout Goals 1 to 16.

Departmental focus

As discussed in Goal 12, VIU’s Education Abroad and International Education departments are currently engaged in international cooperation projects in Tanzania, Kenya, Ukraine, Trinidad, Indonesia, and Vietnam (Education Abroad, personal communication, August 29, 2018) (Appendix T). A number of these international partnerships are actively aiding developing countries, while also providing learning opportunities for VIU students and faculty involved (Education Abroad, personal communication, August 29, 2018; Education Abroad, personal communication, November 21, 2019). For example, VIU has partnered with a post-secondary institution in Ukraine to help create a Spatial Data Infrastructure, which aims to help the country better manage resources, urban areas, and habitats (VIU, 2018-hhh). For this project, VIU students train citizens on how to use the technology; VIU has also shared its ArcGIS licence and helped to provide the required software and servers (Education Abroad, personal communication, August 29, 2018). The project in Tanzania, involving VIU’s Education Abroad and Recreation and Tourism program, is developing a degree program related to hospitality management (VIU, 2018-Ill; Education Abroad, personal communication, August 29, 2018). In doing so, locals can be trained for managerial positions, which are typically dominated by foreigners (VIU, 2018-Ill; Education Abroad, personal communication, August 29, 2018). VIU’s Professional Esthetics program is partnered with an institution in Trinidad, with the goal of developing a cosmetology program that matches the needs of the country’s growing cosmetology sector (Education Abroad, personal communication, August 29, 2018; VIU, 2018-MMM). VIU’s most recent international cooperation project is in partnership with Kisii National Polytechnic (KNP) in Kenya, to support the development of a new building technology program at KNP (VIU, 2019-fff) (Appendix T). The VIU-KNP partnership is for three to five years and is part of the Kenya Education for Employment Program, funded by Global Affairs Canada (VIU, 2019-fff).
VIU is also working with Humber College, Durham College, and Selkirk College to develop and enhance training at three Kenyan colleges (VIU, 2019-fff).

Additionally, VIU engages in partnerships through international internships offered to students in Anthropology, Global Studies, Nursing, Business, Education, Health and Human Services, and Recreation and Tourism (VIU, 2018-mmm). Field schools and exchange programs also provide students and faculty with opportunities to travel abroad and learn internationally. Each year, 15 field schools are held with approximately 300 student participants and 20 faculty members (Education Abroad, personal communication, November 27, 2019). In 2018/19, there were 38 incoming exchange students, 46 outgoing exchange students, and 32 international internships (Education Abroad, personal communication, November 27, 2019). VIU currently has partnerships with 17 universities for international student exchange programs (Appendix T). VIU’s Centre for Experiential Learning has also developed strong relationships with local, national, and international employers who have provided learning opportunities for students through co-operative entrepreneur education and internships (VIU, 2019-uuu) (Appendix T). In 2018/19, VIU had 556 community partners who sponsored work-integrated learning students with work terms in Australia, Canada, China, Egypt, France, Japan, Korea, Tanzania, and USA (Centre for Experiential Learning, personal communication, December 18, 2019). In addition to international engagement through the Faculty of International Education, many of VIU’s departments and faculties are engaged in local and international partnerships (Appendix T). For example, the Faculty of Management partners with several international universities, Recreation and Tourism partners with local and international organizations, and the Forestry and Child and Youth Care programs work collaboratively with local organizations to both enrich student experience and provide community benefits (Business Administration in Management and Law, personal communication, June 4, 2019; Recreation and Tourism, personal communication, July 11, 2019; Forestry, personal communication, May 23, 2019; Health and Human Services, personal communication, July 3, 2019).

Research

Various research projects at VIU have involved local partnerships (Appendix T). The CBAIR program partners student researchers with local organizations in an attempt to simultaneously address local issues while giving students the opportunity to practice their research skills (VIU, 2018-r). For example, students that participated in the program in the 2018/19 academic year partnered with Nanaimo Food Share, Zonta Club of Nanaimo, and Wildwood Ecoforest (Sociology, personal communication, September 25, 2018; Zonta Club of Nanaimo, 2015; TLC, 2016). In 2017, the students partnered with Ocean Legacy Foundation and Central Vancouver Island Multicultural Society (Sociology, personal communication, September 25, 2018). The Centre for Community Outreach and Care has also engaged in various partnerships with organizations like Vancouver Island Health Association, Kids International Development Agency, local elementary schools, Nanaimo Aboriginal Centre, and first responders in Nanaimo (Centre for Community Outreach and Care, personal communication, September 27, 2018). Additionally, the VIU@Cowichan Research Lab has partnered with Queen Margaret’s School and Red Willow Womyn’s Family Society in Duncan to address gender inequalities (VIU@Cowichan Innovation Lab, personal communication, September 20, 2018). MABRRIR also engages in many projects that involve partnerships, such as with the Pacific Biological Station within Fisheries and Oceans Canada, with the Ministry of Forests, Lands, Natural Resource Operations & Rural Development, and with the Village of Gold River, to name a few (VIU, 2018-f; VIU, 2018-bb). Additionally, the MCP program at VIU partners
with local governments, such as the City of Nanaimo and the City of Parksville, as well as First Nation communities to engage in projects (Master of Community Planning, personal communication, September 18, 2018).

As discussed in Goal 9, the Regional Initiatives Fund was launched in 2018 through a partnership between VIU and the Province of BC in support of communities on Vancouver Island (VIU, 2018-rrrr). Funding allows VIU researchers to collaboratively work on innovative and sustainability-related projects with local communities in response to their needs, with a particular focus on supporting Indigenous communities and projects (VIU, 2018-rrrr).

Engagement

VIU holds numerous partnerships related to reconciliation and engagement with Canadian Indigenous Peoples. For example, VIU’s partnership with Yukon College and the McConnell Foundation, supported by Colleges and Institutes Canada and Universities Canada, to host a summer institute, Perspectives on Reconciliation supporting the Canadian post-secondary sector in advancing reconciliation (Yukon College, 2019) (Appendix T). Another institutional partnership is with McGill University, formed in 2018 when McGill and VIU signed a Memorandum of Understanding agreeing to explore how the universities can work together to support research and learning for Indigenous education and studies (VIU, 2018-FFFF). Additionally, VIU is now in its fourth year of funding from the Jarislowsky Foundation as the first home of the Fullbright Canada Jarislowsky Visiting Research Chair in Aboriginal Studies (VIU, 2016-b). As previously described in Goal 11, the support of this position focuses on engaging VIU’s Aboriginal students in the research process and strengthens relationships between the University, First Nations, Métis, Inuit, and the broader community (VIU, 2016-b).

As previously described in Goal 1, the EleV program at VIU is offered in partnership with the MasterCard Foundation as an effort to work collaboratively to ensure Indigenous learners become full partners in their education with a focus on listening, identifying needs, and building a network of support across Canada (Aboriginal Education and Engagement, personal communication, July 12, 2019; VIU, 2019-d). The program is based on a co-creation model where VIU builds proposals for the MasterCard Foundation reflecting community needs (Aboriginal Education and Engagement, personal communication, July 12, 2019). Additionally, as mentioned in Goal 8, VIU offers an Indigenous Intern Leadership program. This program was developed in partnership with the Assembly of First Nations, the Business Council of BC, and VIU (VIU, 2019-oo). Another collaborative program is the Stewardship Technicians Training program, which is a partnership between the Coastal First Nations Great Bear Initiative and VIU (VIU, 2018-GGGG).

To engage employees in international cooperation, VIU is a member of Leave for Change, a program run by Uniterra (a Canadian International Development program that is jointly operated by WUSC and the Centre for International Studies and Cooperation), which offers member employees a personal and professional development opportunity to participate in short term international volunteer assignments (International Education, personal communication, November 21, 2019; Uniterra, 2019). Uniterra operates in 14 countries, particularly where women and youth are underrepresented, working to support the development and expansion of economic opportunities and foster an inclusive environment (Uniterra, 2019). The Uniterra program at VIU aims to engage VIU faculty and staff in high quality international workplace-based experiences that fulfill objectives of VIU’s International Education
Strategic Plan (Uniterra, 2019; VIU, 2019-xxx; VIU, 2017-k). Also, to bring together local and international leaders with students, faculty, and community members, VIU’s Visiting Scholars program brings scholars with research and teaching expertise in leisure, sustainability, innovation, behaviour change, community development, knowledge mobilization, and strategic plan to VIU (World Leisure Organization, 2019). The goal of this program is to help enrich student experience, share research and ideas, and explore possibilities for future collaboration (World Leisure Organization, 2019). Also related to strategic planning and innovation, VIU’s Powell River campus is one of five partners involved with the Powell River Creative Economy and Innovation Initiative, along with Powell River Education Services Society, Tla’amin Nation, City of Powell River, and qathet Regional District (VIU, 2019-CCC). The initiative is working in response to Powell River’s increasing innovation demands by mapping potential growth opportunities in Powell River’s cultural sector, as well as developing a community-based innovation/co-working hub (PR Creative Economy & Innovation Initiative, 2018). As a partner in this initiative, VIU is acting as a convening method for bringing different community members, individuals, and organizations together to synthesize different ideas towards sustainability (Powell River campus, personal communication, July 23, 2019). VIU Powell River is also currently conducting a research project that looks at whether the innovation/co-working hub will support inclusive education with a focus on persons with disabilities, and has raised approximately $35,000 for community engagement and development (Powell River campus, personal communication, July 23, 2019).

Discussions from VIU community engagement events

Goal 17 was not included at the World Café as many of the indicator topics are discussed in other Goals, potentially causing redundancies in the potential conversations at the World Café tables. More importantly, the limited resources and space only allowed for a specific number of tables in the venue, thus causing the team to eliminate one table (with Goals 16 and 17). Therefore, no suggestions were made for Goal 17 from participants at the World Café. As previously mentioned, discussions at Accelerating the SDGs and the Rural Café were not goal-specific, however, participants at both events mentioned that continuing to advance work through partnerships and increasing collaborative work are important in achieving sustainable development. Rural Café participants suggested that VIU community members across all campuses could place more focus on hosting events to share their work and create dialogue in the community, as well as to broadcast and highlight positive change that is occurring.

Other university initiatives

UBC and McGill University provide examples of how universities can meet Goal 17. UBC has partnered with the University of Washington to establish the Cascadia Urban Analytics Cooperative (CUAC), funded by Microsoft (University of British Columbia, 2018-f). The CUAC brings researchers, students, and public stakeholders together to address social issues through interdisciplinary research (Cascadia Urban Analytics Cooperative, 2017). Additionally, UBC implemented the 20-Year Sustainability Strategy for the Vancouver campus in 2014 (University of British Columbia, 2018-g). The Strategy focuses on sustainability in teaching, learning, research, partnerships, operations and infrastructure, and in the UBC community (University of British Columbia, 2018-g). The strategy emphasizes the importance of building and maintaining effective partnerships and addressing present and future sustainability challenges (University of British Columbia, 2018-g). At McGill University, the Institute for the Study of International
Development offers a three-day certificate program on the SDGs (McGill University, 2018). Participants in the program are provided with an overview of the SDGs, integration strategies, and experience evaluating challenging global scenarios (McGill University, 2018). The program is designed for professionals, practitioners, as well as academics to apply new-found SDGs knowledge to their own organizations or sectors (McGill University, 2018).

**Limitations**

As mentioned throughout the *Methodology* section of this report, the research team used SDG indicators as references when collecting data as they identified measurable steps that nations can take towards meeting the SDGs (United Nations, 2018-h). Unfortunately, due to their global context, many of them were deemed *not relevant or not applicable* to VIU as they were designed for UN members and were difficult to relate to from an organizational perspective. For this reason, this report outlines how VIU is meeting the Goals in a more general context – with more detailed analysis that looks at each indicator included as Appendices (Appendices D to T).

Basing the data collection methods on the UN indicators created complications in gathering data for this study, particularly with regards to the meetings with faculty and staff. The questions designed for the meetings were structured around the indicators. While this provided a directional guide to the discussions that took place within the meetings, it may have prevented participants from highlighting things that were not directly asked in the questions. However, as might be expected at a university, the majority of respondents understood that the questions were intended to initiate discussion and provide certain content, and that the respondents were free to add additional information; many did. An alternative approach would have been to show each respondent the 17 Goals and ask them to speak to how they or their department were addressing any of them through their research or teaching. However, this approach may have also overlooked some work towards the SDGs, as the Goals themselves are quite broad. The former approach was selected as it did create a connection between the measurable indicators and activities at VIU, and ultimately provided a level of detail and richness of data to allow for further analysis.

Limited resources and capacity proved to be another limitation of this study that primarily impacted the meetings with faculty and staff, as well as the data collected at the community engagement events. Even though data collection was extended into a second year, the research team feels as though they did not exhaust all of VIU’s achievement towards the SDGs. The research team was unable to meet with all of the departments across VIU - mostly due to conflicting schedules or a lack of response to the meeting invitations. Additionally, due to the capacity of the research team, meeting invitations were extended to Deans or Chairs of departments, rather than a variety of different individuals within a faculty or department. In some cases, Deans or Department Chairs were unable to speak to specific details of how individual employees may be doing work relevant to the SDGs. The research team was also unable to investigate the student population and how their work may be contributing to the SDGs. Therefore, this report does not include a comprehensive understanding of all the courses offerings, research efforts, and community engagement initiatives at VIU and whether or not they relate to SDG topics.
As also mentioned in the *Methodology* section, three community engagement events were hosted to aid in data collection in the form of community feedback on VIU’s progress towards Agenda 2030. However, additional events were hosted throughout the course of this project, but were not included in this report as they were more focused on raising awareness of the SDGs and did not have data collection components. The recommendations that accompany this report would have benefitted from consistent data collection from all community engagement events that were hosted. Additionally, a greater capacity to host more events would have allowed the research team to collect even more data from a larger representation of the VIU community. Also due to limited time and resources, a community engagement event was not hosted at VIU’s Cowichan campus. Spatial capacity and logistics also limited participation at most events. Optimally, the entire campus community could have been involved in the symposium and *Accelerating the SDGs*, however, VIU’s room capacity limited participation. There were many more individuals interested in attending the event than could participate, which speaks to the level of interest across VIU in the Sustainable Development Goals.

Due to the longevity of the research project, which spanned over two years, it was difficult to monitor any new or changing initiatives, research, and/or plans. It was beyond the capacity of the research team to continuously monitor updates within the VIU community. Therefore, the research team acknowledges that some of the data collected at the start of the project 2018 may be out of date. In addition, the time required to research each program/area of study, design questions, transcribe the interview, and analyze the data required much more time than was considered in the project scoping estimates.
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## Appendix A

Data collection methodology for the review of the VIU website

The following table provides a detailed description of how data collected during the VIU website review was organized. In an excel spreadsheet, indicators related to each SDG were listed in the rows, and columns were comprised of the different categories that compiled data could fall under. Below is a description of what data was included in each of these columns.

<table>
<thead>
<tr>
<th>Column name</th>
<th>Data included in this column</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicator Tier</td>
<td>The UN classified the indicators into three tiers based on their level of methodological development and data availability (United Nations, 2018-h). Tier 1 (I) indicators have clearly defined and internationally established methodology and standards with data being produced by at least 50 per cent of countries (United Nations, 2018-h). Tier 2 (II) indicators are conceptually clear and have internationally established methodology and standards; however, the data is not regularly produced by countries (United Nations, 2018-h). Tier 3 (III) indicators have no internationally established methodology or standards at this time (United Nations, 2018-h).</td>
</tr>
<tr>
<td>Relevance to VIU</td>
<td>The research team ranked each indicator as relevant (1), somewhat relevant (2), or not relevant (3) to VIU. This ranking system was based off of whether the indicators were applicable to VIU as an educational institution. Additionally, many of the indicators were ranked as not relevant by the research team as they were not as applicable to Canada, as the issue discussed in the indicator is not very relevant to a developed nation.</td>
</tr>
<tr>
<td>Programs</td>
<td>Programs that focused or touched on the indicator were included in this column.</td>
</tr>
<tr>
<td>Departments</td>
<td>Departments that focused or touched on the indicator were included in this column.</td>
</tr>
<tr>
<td>Courses</td>
<td>Specific courses that appeared to focus or touch on the indicator, based on the brief description of the course found online, were included in this column.</td>
</tr>
<tr>
<td>Research</td>
<td>Research centers, labs, institutes, or projects that focused on or were related to the indicator were identified in this column.</td>
</tr>
<tr>
<td>Activities/Initiatives</td>
<td>This column provided space to include activities that were held by VIU for the VIU community that were related to the indicator. Annual events, such as the Sustainability Fair, or workshops provided to the VIU community were included.</td>
</tr>
<tr>
<td>Community Engagement</td>
<td>Community engagement events hosted by VIU or VIU departments/entities that related to each indicator were identified in this column. The researchers considered community engagement to include both engagement within the VIU community (staff and students) and the surrounding communities.</td>
</tr>
<tr>
<td>Services</td>
<td>Services, such as health care services, available at VIU to the VIU community that were related to the indicator were included here.</td>
</tr>
<tr>
<td>Policies</td>
<td>This column included VIU policies that relate to the indicator.</td>
</tr>
<tr>
<td>Others</td>
<td>Relevant information that did not fall under the other categories was included here. Examples include statistics related to VIU (demographics, alleged complaints, CO2 emissions, etc.).</td>
</tr>
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Appendix B
Meetings with VIU faculty and staff

<table>
<thead>
<tr>
<th>Area</th>
<th>Description</th>
<th>Date of meeting</th>
</tr>
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<tr>
<td><strong>Faculties</strong></td>
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<td>Social Sciences</td>
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<td>Arts and Humanities</td>
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<td>Education</td>
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<tr>
<td><strong>Instructional Departments and Programs</strong></td>
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<td>Resource Management and Protection</td>
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<td>Geography</td>
<td>October 11</td>
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<td><strong>Services and Offices</strong></td>
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<td>Campus Recreation</td>
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<td>Campus Store</td>
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<td>Office of Aboriginal Education and Engagement</td>
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<td>Purchasing</td>
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<td>Coastal Hydrology and Climate Change Research Lab</td>
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<td>and Programs</td>
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<td>Art and Design</td>
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<td>Advancement and Alumni</td>
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<td>Equity, Diversity, and Inclusion</td>
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<td>Universal Access Committee</td>
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<td>Residence</td>
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<td>Powell River campus</td>
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<td>Cowichan campus</td>
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<td>September 4</td>
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<td>Awareness of Climate Change through Education and Research (ACER)</td>
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<td>October 3</td>
</tr>
<tr>
<td>BC Regional Innovation Endowment Chair in Aboriginal Early Childhood Development</td>
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<td>October 31</td>
</tr>
</tbody>
</table>
Appendix C

Example interview questions: Department of Global Studies

The text below illustrates a sample of the interview layout and questions. This script was used for the meeting with the Department of Global Studies; it was sent to them prior to the meeting (conducted on September 24, 2018) so that they could prepare.

Indicators 12.8.1 and 4.7.1 are very similar. Both address the extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment. While one focuses sustainable development on the topic of climate change education, the other focuses it on gender equality and human rights. “Education for global citizenship helps young people develop the core competencies which allow them to actively engage with the world and help to make it a more just and sustainable place. It is a form of civic learning that involves students' active participation in projects that address global issues of a social, political, economic, or environmental nature.”

Is the idea of “global citizenship education” something that is important to the Global Studies department here at VIU?

If so, how is this topic brought into the curriculum? Are faculty required to include certain themes in their teaching topics?

Is the topic of climate change discussed in any of the Global Studies courses?

In what ways are the topics of gender equality and human rights addressed in Global Studies?

Is increasing the understanding of “sustainable development”, particularly in terms of the 17 UN Sustainable Development Goals, important to the Global Studies department here at VIU?

If not, would you consider implementing this in the future?

Indicator 1.2.1 looks at the proportion of the population living below the national poverty line, by sex and age.

Is the topic of poverty discussed in any courses? If so, which courses?

Do you know if any students or faculty within the Global Studies department have been involved with research that has focused on the topic of poverty?

https://academicimpact.un.org/content/global-citizenship-education
Can you give examples of how a graduate with a Global Studies degree may have the opportunity to work within the field of poverty reduction?

On the Global Studies website, it describes Global Studies as developing “knowledge and skills oriented toward ecological and social sustainability”.

How is the topic of ecological sustainability discussed in your courses? And what courses is it discussed in?

Indicator 11.4.1 discusses the total expenditures spent on preservation, protection, and conservation of all cultural and natural heritage.

Does the Global Studies department offer any courses that discuss topics related to First Nations peoples and/or cultures?

Are other Canadian cultures discussed in any courses?

Are the topics of preservation, protection, and conservation of natural heritage discussed in the Global Studies department?

---

3 https://socialsciences.viu.ca/global-studies
Note: For the following appendices (D – T) of compiled data, some of the targets and indicators were deemed irrelevant or inapplicable to VIU as a post-secondary institution or beyond the scope of this project. This does not mean that they are not relevant to a university or not important for accelerating Agenda 2030. Simply put, we suggest the rewording of these indicators, or the development of new ones entirely, to better reflect that of an educational institution.

Appendix D

Compiled Data for Goal 1: End poverty in all its forms everywhere

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>2018 Data</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than $1.25 a day</td>
<td>1.1.1 Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)</td>
<td>VIU faculty and students from the Sociology department conducted research on the local homeless population to better understand poverty in Nanaimo (Sociology, personal communication, September 25, 2018). Through questionnaires, data for the 2018 Point-In-Time Count Report was collected on the demographics and number of homeless people in Nanaimo (United Way, 2018). The 2018 Point-In-Time Count Report identified that the minimum number of people that are homeless in Nanaimo is 335 (United Way, 2018). VIU’s 2016/17 Economic Impact of Vancouver Island University report acknowledges that child poverty in VIU’s region is significantly higher than the provincial and national averages (VIU, 2018-g). For this reason, VIU has made a commitment to address poverty and attempt to break its cycle through education (VIU, 2018-g). To address the high number of youth in care (almost 900 in the Vancouver Island region) VIU introduced the Tuition Waiver program, which waives tuition fees for youth who grew up in the care system (VIU, 2018-h). Although this program is mandatory across the province, VIU was the first post-secondary institute in B.C. to implement the Tuition Waiver program (VIU, 2018-h). In 2016/17, VIU supported 70 students through the Tuition Waiver program (VIU, 2018).</td>
<td>The Mastercard Foundation is supporting VIU through a commitment of $22.5 million over five years to deliver the EleV program, which expands initiatives that work with communities to remove educational barriers for Indigenous youth (MasterCard Foundation, 2019). The primary barrier to attending university for Indigenous youth is financial limitations, and the EleV program helps to alleviate this by matching funding that Band offices provide to their youth for attending university (Aboriginal Education and Engagement, personal communication, July 12, 2019). In addition to financial support, the program aims to increase Indigenous university enrolment and completion rates by providing social and cultural support to Indigenous students through Indigenous Education Navigators at VIU campuses (VIU, 2019-d). Educational awareness on the topic of poverty is brought into the Business Administration and Recreation and Tourism programs through courses such as MGMT 494 (Strategies for Sustainable Development), MBA 541 (Corporate Social Responsibility), and RGMT 100 (Introduction to Recreation) (VIU, 2018-j). The topic of poverty also comes up frequently in most English classes, with a focus on colonialism, raising awareness about economic inequality, and educating students about safe ways to talk about these topics (English,</td>
</tr>
</tbody>
</table>
Additionally, VIU offers various scholarships and bursaries to VIU students in need, which is discussed in more detail in Goal 4 (4.b.1).

Educational awareness on the topic of poverty is brought into various departments (e.g. Anthropology, Sociology, Global Studies, Social Work and others) and courses at VIU. Some courses that address the topic of poverty include: SOCW 200B (An Intro to Social Welfare in Canada), CRIM 400 (Law and Human Rights), ANTH 419 (Globalizing Culture: A Critical Perspective), SOCI 335 (Social Problems and Solutions), GLST 200 (Global Economic Issues), and ECON 320 (Economic Development) (VIU, 2018).

Aside from course topics, VIU also addresses this indicator through research and initiatives. In 2017 and 2018, the Sociology Students’ Union participated in “Chew on This!”, an event that was led by two Sociology faculty members as part of the International Day for the Eradication of Poverty (Sociology, personal communication, September 25, 2018; Bowns & Pastro, 2018). This event intended to raise awareness about hunger, food security, and poverty in Canada (Bowns & Pastro, 2018). In addition, student research through directed studies and the Community Based Applied Interdisciplinary Research (CBAIR) have addressed the topic of poverty (VIU, 2018-r). VIU also supports the United Way Campaign that addresses social issues in the local community (VIU, 2018-l). In previous years, VIU has hosted a Campaign Associate for 16 weeks but starting in the 2018/19 academic year, VIU will increase awareness about the United Way all year long (University Relations, personal communication, October 4, 2018). In 2017, 169 VIU employees donated just over $50,000 to the United Way (University Relations, personal communication, October 4, 2018).

A variety of VIU Departments also address this indicator through community-based initiatives. The Academic and Career Preparation Department partners with local homeless shelters and social service agencies to help provide education and skills for employment to community members in need (Academic and Career Preparation, personal communication, June 26, 2019). Bachelor of Science in Nursing students working in community placements also look at the impacts of low income and help community members look for available employment opportunities (Nursing, personal communication, July 4, 2019). Students in the Bachelor of Education Post Baccalaureate program develop Community Action Plan (CAP) projects that range from collecting gently used winter clothing in the Cardigans not Climate Change campaign, to bringing Indigenous resources to French Immersion schools, to building a Community Locker for youth containing games and toys that can be borrowed (VIU, 2019-g). As mentioned in 2018 data, all VIU campuses support the United Way Campaign and VIU Cowichan regularly facilitates fundraisers and brings in speakers from the United Way.

2018-h). Similarly, almost all History courses cover the topic of human class and economic disparity (History, personal communication, August 22, 2019). Similarly, personal communication, August 21, 2019).
The Centre for Community Outreach and Care provides programs and initiatives to fill gaps in the community associated with youth at risk and vulnerable populations with the hopes that these gaps will be acknowledged and continue to be addressed after the project’s end (VIU, 2018-k). The fundamental cause of the issues that the Centre is working with is low income and poverty (Centre for Community Outreach and Care, personal communication, September 27, 2018). Therefore, all of the projects that run through the Centre for Community Outreach and Care are addressing this Goal (VIU, 2018-k). The ‘I Have a Dream’ program is focused on reducing poverty and the cycle of poverty by helping youth set future goals such as pursuing further education (Centre for Community Outreach and Care, personal communication, September 27, 2018). “Healthy Kids/Healthy Smiles” is an inter-professional project with the Dental Hygiene program at VIU that provides dental services to children and families in the Harewood community that cannot financially access dental care (Centre for Community Outreach and Care, personal communication, September 27, 2018). Per school year, over 500 children access the programs made available to them through the Centre for Community Outreach and Care (Centre for Community Outreach and Care, personal communication, September 27, 2018).

Degrees in programs such as Sociology, Child and Youth Care, Social Work, and Global Studies have led graduates to work in non-profit organizations, the volunteer sector, and the government related to poverty reduction (Sociology, personal communication, September 25, 2018; Centre for Community Outreach and Care, personal communication, September 27, 2018; Global Studies, personal communication, September 24, 2018). Former students of VIU have gone on to become program and policy analysts (VIU Cowichan, personal communication, September 4, 2019).

VIU participated in Giving Tuesday between November 15 and December 3, 2019, with a set goal of receiving 400 gifts, which was exceeded with 452 gifts (Giving Tuesday, 2020; VIU, 2019-e). VIU’s giving focus this year was for student support in the form of additional scholarships and bursaries, offering over $175,000 in matching funds from partners such as Indspire, the VIU Alumni Association, and the VIU Foundation (VIU, 2019-g). In 2018, VIU raised over $300,000 to support students (VIU, 2019-e).
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.

<table>
<thead>
<tr>
<th>1.2.1 Proportion of population living below the national poverty line, by sex and age</th>
<th>As mentioned above, VIU offers various courses that discuss the topic of poverty and engages in activities through clubs.</th>
</tr>
</thead>
</table>

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

| Indicator 1.2.2 was deemed inapplicable to VIU. As this is a Tier II indicator (United Nations, 2018-h), and because it is so similar to 1.2.1 above, our team determined that it was not necessary to look into for the purpose of this project. |

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.

<p>| 1.3.1 Proportion of population covered by social protection floors/systems, by sex, distinguishing children, unemployed persons, older persons with disabilities, pregnant women, newborns, work-injury victims and | This target was determined not relevant to an educational institution. It was beyond the scope of this project to look into how Canada ensures this protection for its citizens and international students who study here. |</p>
<table>
<thead>
<tr>
<th>Indicator 1.4.2</th>
<th>1.4.2 Proportion of total adult population with secure tenure rights to land, (a) with legally</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicator 1.4.2 was not included in this study as it was deemed irrelevant to an educational institution. It was beyond the scope of this project to understand how Canadians secure tenure rights to land.</td>
<td></td>
</tr>
</tbody>
</table>

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

VIU Residence has 10 buildings located at the Nanaimo campus offering a variety of accommodation including traditional dormitory-style housing, townhouses, and apartments (VIU, 2018-**gggg**). VIU Residence also maintains available space in order to offer emergency housing for students as a place to go if their regular housing situations fall through (Residence, personal communication, July 22, 2019). For Indigenous students who live in VIU Residence, flexible payments and timelines are offered and housing is always guaranteed for all first-year students (Residence, personal communication, July 22, 2019).

Community housing needs are addressed through VIU’s First Nations Housing Manager Certificate program, which trains housing managers to assist communities in benefiting from affordable, health, high quality, and well-maintained housing (VIU, 2019-f). Graduates of the program are qualified to work as on-reserve housing managers which have a direct impact on the health of families and communities and the potential to make long-lasting change in First Nation communities (VIU, 2019-f). The Aboriginal Construction Certificate program is also offered at VIU and was developed in consultation with coastal First Nations communities (VIU, 2019-h). The program is designed for Aboriginal learners and includes recognition of cultural issues regarding education and traditional construction (VIU, 2019-h).
recognized documentation, and (b) who perceive their rights to land as secure, by sex and type of tenure

1.5 By 2030, build 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 directly affected persons attributed to disasters per 100,000 population |

Indicators 1.5.1 and 1.5.2 were determined not relevant to an educational institution. It was beyond the scope of this project to look into how Canada ensures this for its citizens and international students who study here.

| 1.5.2 Direct economic loss attributed to disasters in relation to global gross domestic product (GDP) |

| 1.5.3 Number of countries to adopt and implement national disaster risk reduction |

A course in the Master of Business Administration program, MBA 541 (Corporate and Social Responsibility) includes a major assignment involving student led
1.5.4 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies

Indicator 1.5.4 was determined not applicable to an educational institution. It was beyond the scope of this project to look into how Canada ensures this for its citizens and international students who study here.

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

<table>
<thead>
<tr>
<th>1.a.1 Proportion of domestically generated resources allocated by the government directly to poverty reduction programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td>To successfully offer the Tuition Waiver program, VIU has been working with the BC Ministry of Children and Family Development and the BC Ministry of Advanced Education (VIU, 2019-c). As of October 2018, 85 students were enrolled in the Post-care Tuition Waiver program, a total of 181 have enrolled since the program launch in 2013, and 45 students have graduated through the program (VIU, 2018-ffft).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1.a.2 Proportion of total government spending on essential services (education, health and social protection)</th>
</tr>
</thead>
<tbody>
<tr>
<td>As a proportion of VIU’s aggregate budget, provincial government operating grants have steadily declined since the 1980s when the portion of provincial support in VIU’s budget was more than 80% (VIU, 2019-i). In the 2018/19 academic year, $18,759,307 was disbursed in student loans, out of which 1,689 students accessed full time loans, and 150 students accessed part time loans (VIU, 2018-iiii). An additional $141,192...</td>
</tr>
<tr>
<td>developed countries, to implement programmes and policies to end poverty in all its dimensions</td>
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<tr>
<td>---</td>
</tr>
<tr>
<td>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</td>
</tr>
</tbody>
</table>

was disbursed to assist VIU students with living costs (VIU, 2018-iii). The Aboriginal Emergency Assistance Fund (AEAF) disbursed $80,425.95 to 124 students (VIU, 2018-iii). $6,000 was disbursed to 22 students for Student Union Health and Dental costs, and $9,600 in Student Union Grocery cards were disbursed to 115 students (VIU, 2018-iii). The Adult Upgrading Grant also disbursed $363,201 to learners in 2017/18 to cover the costs of tuition, fees, and textbooks (VIU, 2018-iii).
### Appendix E

Compiled Data for Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>2018 Data</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>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.</strong></td>
<td><strong>2.1.1 Prevalence of undernourishment</strong></td>
<td>VIU’s Sport, Health &amp; Physical Education (SHAPE) program as well as the Nursing program both touch on the topic of undernourishment. Courses such as PHED 352 (Nutrition for Health and Sport), PHED 252 (Nutrition: A holistic Approach), PHED 491 (Scholarship in Sport, Health, and Physical Education), NURS 208 (Health Sciences III: Pathophysiology I), and NURS 218 (Health Science IV: Pathophysiology II) educate students on the topic of nutrition and increase their food literacy (VIU, 2018-j). Through SHAPE, students also have the opportunity to gain hands on experience through activities and programs such as Will Work for Food, where they work directly with local farmers (Sport, Health and Physical Education, personal communication, September 14, 2018). Prevalence of undernourishment at VIU is hard to visibly notice and therefore hard to measure (Sport, Health and Physical Education, personal communication, September 14, 2018). However, with the low income and young demographic at VIU, there are likely students who face undernourishment. For those with dietary or cultural restrictions, there are limited access to proper nutritional food sources on campus (Sport, Health and Physical Education, personal communication, September 14, 2018). VIU Food Services does not have a system for requiring food to meet certain nutritional values, however, all cooks within Food Services must be qualified with VIU’s Child and Youth Care and Gerontology programs in the Faculty of Health and Human Services educate students on the topic of undernourishment and hunger (Health and Human Services, personal communication, July 3, 2019). Students in Child and Youth Care are placed in local schools for their practicums and run programs such as the Breakfast Club and lunch programs (Child and Youth Care, personal communication, September 18, 2019). Additionally, Child and Youth Care students learn how to educate youth on this topic and host workshops on nutrition (Child and Youth Care, personal communication, September 18, 2019). VIU’s Professional Development and Training program helps to train students for a lunch program with the Cowichan Tribe (Cowichan – Professional Development and Training, personal communication, October 29, 2019). Through this lunch program they feed 120 youth every year by delivering food to schools in the area (Cowichan – Professional Development and Training, personal communication, October 29, 2019). Cowichan’s Professional Development and Training has worked with Cowichan Green Community to apply for a grant to receive funds to develop a community kitchen (Cowichan – Professional Development and Training, personal communication, October 29, 2019).</td>
<td></td>
</tr>
</tbody>
</table>
a certain level of education regarding nutrition (Food Services, personal communication, October 2, 2018).

The topic of undernourishment is also addressed through initiatives that help give the VIU community access to food itself, such as the Good Food Box program, programs through the Centre for Community Outreach and Care, VIU’s Farmers Market, and events hosted by VIU’s ElderCollege (VIU, 2018-q; VIU, 2018-k; VIU, 2018-t).

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

The Food Insecurity experience scale (FIES) consists of eight questions about people’s access to food. The questions begin with “During the last 12 months, was there a time when, because of lack of money or other resources” (para.3) and finish with the following 8 options: (1) You were worried you would not have enough to eat?; (2) You were unable to eat healthy and nutritious food?; (3) You ate only a few kinds of foods?; (4) You had to skip a meal?; (5) You ate less than you thought you should?; (6) Your household ran out of food?; (7) You were hungry but did not eat?; and (8) You went without eating for a whole day? (Food and Agriculture Organization of the United Nations, 2018).

Although VIU does not have a system for applying the FIES survey model to its students or employees, it does educate the VIU community on the topic of food security as well as provide a means for people to gain access to food.

VIU offers courses that discuss the topic of food security such as SOCI 209 (Social Inequality), SOCI 335 (Social Problems and Solutions), GEOG 356 (Policy, Resources and Sustainability), PHED 351 (Human Wellness), PHED 252, and PHED 491 (VIU, 2019-ii). VIU’s Nursing and Child and Youth Care programs provide students with opportunities to address food insecurity in the local communities (Nursing, personal communication, September 20, 2019; Child and Youth Care, personal communication, September 18, 2019). Nursing students have been involved in food banks facilitated by Loaves and Fishes (Nursing, personal communication, September 20, 2019). As discussed previously in indicator 2.1.1, Child and Youth Care students run breakfast and lunch programs in local schools. Nursing students doing community-based practicums in Cowichan Valley schools noticed a difference in children’s moods and behaviour based on whether they came to school hungry or not (VIU, 2019-ii). These observations lead a Nursing professor to facilitate a research project aimed at understanding how to create a community-based initiative to feed the children, and the result is what is now known as Nourish Cowichan (VIU, 2019-ii). The non-profit organization supports more than 800 children at 10 different elementary schools, 3 day cares and 1 maternity ward (VIU, 2019-ii).

The Powell River campus provides access to food in a few different ways. The campus has a small café/kiosk that is run by Inclusion – a non-profit employment program for people with disabilities (Powell River campus, personal communication, July 3, 2019). The café offers soup and sandwiches at a low cost (Powell River Campus, personal
Through PHED 491, students in the SHAPE program have the opportunity to engage in a project of their choice and the topic of food security has been a focus on a few projects done over the years (Sport, Health and Physical Education, personal communication, September 14, 2018). Each year, Club SHAPE raises money for the Breakfast Club in Nanaimo (Sport, Health and Physical Education, personal communication, September 14, 2018). The Breakfast Club of Canada has partnered with the Nanaimo-Ladysmith Schools Foundation to provide more than 7,400 students a month with breakfast (Nanaimo-Ladysmith Schools Foundation, 2018). Students in the Community Based Applied Interdisciplinary Research (CBAIR) program have partnered up with Nanaimo Food Share to research ways of expanding the Good Food Box program in Nanaimo (VIU, 2018-r; Sociology, personal communication, September 25, 2018).

At the Nanaimo campus, there are six locations (upper & lower cafeterias, the Students’ Union Pub, Starbucks, the Discovery Room, and Subway), where students and employees can purchase food (VIU, 2018-n). At the Cowichan campus, a cafeteria offers sandwiches, coffee, soups, muffins, salads, and lunch specials (Vancouver Island University Cowichan, 2018-a). One food service available on the Powell River campus is the Future Chef’s Café, a dining room that requires reservations (Vancouver Island University Powell River, 2018). VIU Food Services offers two meal plan options to students, one of which is also available to employees (Food Services, personal communication, October 2, 2018). Each meal plan offers 5% bonus dollars, which adds 5% of the money back to the account.

As mentioned in the 2018 data for this indicator, VIU Residence offers the Good Food Box and Grocery Shuttle programs for students. For $15/month students receive a produce box and are taught by a nutritionist how to prepare meals with the food box ingredients (Residence, personal communication, July 22, 2019). This program has been operating for five years and has had approximately 85-100 participants (Residence, personal communication, July 22, 2019). The Grocery Shuttle drives up to 25 students to Superstore twice a week (Residence, personal communication, July 22, 2019).
when money is put on the plan (e.g. for $100 put on the card an additional $5 is added) (VIU, 2018-o).

Beyond educating students, there are many initiatives at VIU that address food security or have touched on the topic. As discussed in Goal 1, in 2017 (and upcoming in 2018), the Sociology Students’ Union participated in the “Chew on This!” event as part of the International Day for the Eradication of Poverty (Bowns & Pastro, 2018). This event intended to raise awareness about hunger, food security, and poverty in Canada (Bowns & Pastro, 2018). VIU ElderCollege hosted a speaker in October 2018 who talked about “Hungry Canadians, Corporate Charity and the Right to Food” (VIU, 2018-t). Another workshop was also hosted in January 2018 on “Global Food Security: What Can Science Contribute”. The Centre for Community Outreach and Care offers various programs that work with at-risk youth and vulnerable populations (VIU, 2018-k). Each of their programs focuses on providing youth with access to healthy, nutritious food (Centre for Community Outreach and Care, personal communication, September 27, 2018).

The “Friday Night Lights” program offers free activities and dinner to low income families and kids who have parents that work in the evenings and are unsupervised (Centre for Community Outreach and Care, personal communication, September 27, 2018). Around 100 families per year attend the ‘Friday Night Lights’ program which runs for more than 50 nights within the year (Centre for Community Outreach and Care, personal communication, September 27, 2018). VIU Residence offers to the Good Food Box program to both students and employees (VIU,
### 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) |

This target was not included in this study, as both indicators actually focus on children under 5 years of age rather than the different age groups listed in the target. Because of this and because these age groups are included in Target 2.1, our team determined that it was not necessary to look into for the purpose of this project.

### 2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular, women, Indigenous

| 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 |

Target 2.3 was not included in this study as it was deemed irrelevant to an educational institution.
<table>
<thead>
<tr>
<th>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.</th>
<th>producers, by sex and Indigenous status</th>
<th>Both the Milner Gardens &amp; Woodland and the G.R. Paine Horticulture Training Centre properties grow edible plants that are consumed, but agriculture is not the primary focus for either organization (VIU, 2018-OOO; Horticulture, personal communication, August 21, 2018; Milner Gardens &amp; Woodland, personal communication, August 23, 2018). Although the G.R. Paine Horticulture Training Centre has three greenhouses which are sometimes used to grow food plants, the overall area used for agriculture at Vancouver Island University is still quite small (Horticulture, personal communication, August 21, 2018).</th>
</tr>
</thead>
<tbody>
<tr>
<td>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</td>
<td>2.4.1 Proportion of agricultural area under productive and sustainable agriculture</td>
<td>In collaboration with the Vancouver Island Master Gardeners Association, VIU offers the Master Gardener Certificate program which consists of 78 hours of classroom training followed by 70 hours of volunteer service (VIU, 2019-j). VIU was approached by the Master Gardeners Association to develop a curriculum that focuses on the importance of sustainable gardening and includes topics such as water management, native plants, and climate change (Cowichan campus, personal communication, October 30, 2019). The program is based on a multifaceted approach to gardening problems and emphasizes the promotion of plant health, the use of an environmentally responsible approach, and the employment of integrated pest management (VIU, 2019-j).</td>
</tr>
</tbody>
</table>
progressively improve land and soil quality

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.

<table>
<thead>
<tr>
<th>2.5.1 Number of plant and animal genetic resources for food and agriculture secured in either medium- or long-term conservation facilities</th>
</tr>
</thead>
</table>
| Courses offered in various programs teach on the topic of securing plant and animal genetic resources in conservation facilities. These courses include: BIO 223 (Botany), BIO 350 (Plant Biology), BIO 365 (Biotechnology), and HORT 135T (Greenhouse Production) (VIU, 2018-j). In the Horticulture Technician Foundation program at the G.R. Paine Horticulture Training Centre, students mostly learn about growing ornamental plants and some edible plants, rather than conserving them (Horticulture, personal communication, August 21, 2018).

One of the main objectives of the International Centre for Sturgeon Studies at VIU is the conservation of white sturgeon (VIU, 2018-s). Conservation in the International Centre for Sturgeon Studies happens through researching about the sturgeon and its spawning habits and conditions (International Centre for Sturgeon Studies, personal communication, August 24, 2018). All of the fish in the Centre itself are either bred there or rescued from poaching or ponds (about 15 have been rescued) (International Centre for Sturgeon Studies, personal communication, August 24, 2018). Due to limited resources and space, the Centre culls a large percentage of its stock, as well as cans some of the sturgeon for food consumption (International Centre for Sturgeon Studies, personal communication, August 24, 2018). Because they are providing access to sturgeon for food consumption (i.e. canned sturgeon) from captive-bred individuals, the International Centre for...
| 2.5.2 Proportion of local breeds classified as being at risk or at unknown level of risk of extinction | This indicator was deemed inapplicable to an educational institution as it is beyond the scope of this study to determine at-risk agricultural breeds in Canada. |

| 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 |

<p>| 2.a.2 Total official flows (official development assistance plus other official flows) to the agriculture sector | This target was determined not relevant to an educational institution as it is beyond the scope of this project to investigate how Canada may be financially aiding developing countries in this regard. |</p>
<table>
<thead>
<tr>
<th>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</th>
<th>2.b.1 Agricultural export subsidies</th>
</tr>
</thead>
<tbody>
<tr>
<td>This target was determined not relevant to an educational institution. It was beyond the scope of this project to look into how Canada subsidizes agricultural export.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>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</th>
<th>2.c.1 Indicator of food price anomalies</th>
</tr>
</thead>
<tbody>
<tr>
<td>This target was deemed irrelevant to an educational institution and is beyond the scope of this study to understand Canada’s approach to food market facilitation.</td>
<td></td>
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</tbody>
</table>
**Appendix F**

Compiled Data for Goal 3: Ensure healthy lives and promote well-being for all at all ages

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>2018 Data</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births</td>
<td>3.1.1 maternal mortality ratio</td>
<td>Sociology students learn about maternal mortality rates in SOCI 322 (Sociology of Gender Relations) and SOCI 320 (Families in Today’s World) (VIU, 2018-j). Additionally, by providing the nation with more graduates of health-related backgrounds, VIU is helping to indirectly achieve this indicator.</td>
<td>Health and Human Services students in programs such as Nursing, Social Work, and Early Childhood Education are educated on this topic (Health and Human Services, personal communication, July 3, 2019). Specifically, students learn about this topic in NURS 318 (Health and Healing: Global Issues) and NURS 441 (Issues in Maternal Newborn Nursing) (Nursing, personal communication, June 4, 2019; VIU, 2018-j).</td>
</tr>
<tr>
<td></td>
<td>3.1.2 Proportion of births attended by skilled health personnel</td>
<td></td>
<td>Nursing students participate in an Infant, Child, Youth and Family practicum, which includes time in perinatal and pediatric placements within local communities (Nursing, personal communication, June 4, 2019). It is arranged so that most students will get to observe a birth during their placements (Nursing, personal communication, June 4, 2019).</td>
</tr>
<tr>
<td>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 1000 live births and under-5 mortality to at least as low as</td>
<td>3.2.1 Under-5 mortality rate</td>
<td></td>
<td>VIU’s Early Childhood Education program educates on the topic of pediatric mortality issues (Health and Human Services, personal communication, July 3, 2019).</td>
</tr>
<tr>
<td></td>
<td>3.2.2 Neonatal mortality rate</td>
<td></td>
<td>This indicator was deemed irrelevant to an educational institution as it is beyond the scope of this project to determine how Canada is addressing neonatal mortalities. As discussed in target 3.1 above, we would again argue that VIU’s Health graduates, who end up working in maternity, are indirectly helping to achieve this indicator.</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>25 per 1000 live births</th>
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<table>
<thead>
<tr>
<th>3.3.1 Number of new HIV infections per 1000 uninfected population, by sex, age and key populations</th>
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</thead>
<tbody>
<tr>
<td>Many courses in the Nursing program at VIU educate students on epidemiology and episodic health challenges. Some of these courses include: NURS 200 (Health and Healing III: Health Challenges/Healing Initiatives), NURS 208 (Health Sciences III: Pathophysiology I), NURS 275 (Consolidated Practice Experience II), and NURS 318 (Health and Healing IV: Global Health Issues) (VIU, 2018-j). Within these courses the students gain an understanding of chronic and episodic health challenges, the development of nursing practices related to the illnesses (VIU, 2018-j). Additionally, students gain experience with developing relationships with individuals who have chronic and episodic health challenges (VIU, 2018-j).</td>
</tr>
</tbody>
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<thead>
<tr>
<th>3.3.2 Tuberculosis incidence per 100,000 population</th>
</tr>
</thead>
<tbody>
<tr>
<td>As mentioned above, students in the VIU Nursing program are educated on epidemiology and episodic health challenges in courses such as NURS 200, NURS 208, and NURS 318 (VIU, 2018-j).</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>3.3.3 Malaria incidence per 1000 population</th>
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<tr>
<th>3.3.4 Hepatitis B incidence per 100,000 population</th>
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<tr>
<th>3.3.5 Number of people requiring</th>
</tr>
</thead>
<tbody>
<tr>
<td>This indicator was not included as it was deemed irrelevant to a Canadian educational institution.</td>
</tr>
<tr>
<td>interventions against neglected tropical diseases</td>
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<tr>
<td>-----------------------------------------------------</td>
</tr>
</tbody>
</table>

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

Educational awareness for mortality rates associated with cardiovascular disease, cancer, diabetes or chronic respiratory disease are taught in VIU Biology and Sport, Health and Physical Education (SHAPE) courses such as BIOL 435 (Immunology), BIOL 465 (Endocrinology), PHED 302 (Applied Exercise, Physiology, and Prescription), and PHED 365 (Aging and Physical Activity) (VIU, 2018–j). Additionally, students in Sociology and Psychology have an opportunity to learn about this topic within courses such as, SOCI 340 (The Sociology of Health and Illness) and PSYC 327 (Health Psychology) (VIU, 2018–j). The SHAPE program has a heavy focus on this topic as it comes up in most of the courses and students learn about it through multiple approaches (theory, experience, and practice) (Sport, Health and Physical Education, personal communication, September 14, 2018). SHAPE students also engage in assessments, cardiovascular and respiratory labs, and research related to this indicator (Sport, Health and Physical Education, personal communication, September 14, 2018).

Aside from courses, VIU also addresses this indicator through programs such as Campus Recreation, Fitness Services, and Health & Wellness programs (Campus Recreation, personal communication, August 14, 2018; Health and Wellness Centre, personal communication, August 15, 2018). These areas offer physical activity options or bring awareness to health issues. For

In addition to the list of courses in the 2018 data for this indicator, RGMT 100 (Introduction to Recreation), RGMT 153 (Diversity and Inclusion in Recreation), TRMT 410 (Leisure Planning for Resilience), TRMT 333 (Leisure Lifestyles), EACS 130 (Principles and Practices of Wellness), EACS 150 (Health and Wellness), EACS 150 (Health and Wellness), and PSYC 327 (Health Psychology) also educates on this topic (Recreation and Tourism, personal communication, July 11, 2019; Early Childhood Education and Care, personal communication, October 3, 2019; Powell River – Health and Human Services, personal communication, October 26, 2019; Psychology, personal communication, May 17, 2019). PSYC 327 looks at coping with stress and how the mind and body impact each other (Psychology, personal communication, May 17, 2019). Also, within the Psychology department, the Behavioural Medicine Lab studies obstacles that people need to overcome to engage in physical activity (Psychology, personal communication, May 17, 2019).

Aside from coursework, students in the Bachelor of Science Nursing program address this topic through practicum placements and other initiatives. During their practicum placements, the Nursing students work closely with communities and focus on developing a harm reduction approach to health (Nursing, personal communication, June 4, 2019). Nursing students also produce A Sound Constitution, a series of eight to ten radio shows per semester, on the radio station CHLY 101.7 (Nursing, personal communication, June 4, 2019; CHLY, 2019). The radio show discusses current health trends and holistic approaches to health, debunks mythical information, and uses research-based evidence to inform their audience (Nursing, personal communication, June 4, 2019).
example, the Fitness Centre is free to use for everyone on campus (VIU, 2018-PPP). Campus Recreation, often in collaboration with the Nursing program and the Health and Wellness Centre, offers Biometrics clinics, a chance for students or faculty to learn about their personal health (Campus Recreation, personal communication, August 14, 2018). They also offer Wellness Wednesdays and the Health and Wellness fair, which both promote healthy living to everyone on campus (Campus Recreation, personal communication, August 14, 2018). The Centre for Community Outreach and Care focuses on exposure to trauma within children as trauma is linked to cardiovascular disease in adulthood (Centre for Community Outreach and Care, personal communication, September 27, 2018; Suglia et al., 2018). Each of the programs ran by the Centre for Community Outreach and Care address trauma through providing youth with mental, spiritual, emotional and physical support (Centre for Community Outreach and Care, personal communication, September 27, 2018). Examples of some of these programs include: “Creating Connections”, “Youth Sexual Exploitation Prevention”, “Sanala Housing”, and “Children Who Witness Overdose trauma” (Centre for Community Outreach and Care, personal communication, September 27, 2018).

To maintain physical health, students and staff have free access to the VIU Gymnasium (VIU, 2018-PPP). Students and staff have access to racquetball and squash courts, fitness and weight rooms, and the multi-purpose room (VIU, 2018-PPP). Alumni and the general public may also use the facility and

Another initiative Nursing students are involved with is the promotion of the 5210 Initiative to youth in local schools (Nursing, personal communication, June 4, 2019). The 5210 Initiative is a movement that promotes five fruits and vegetables, two hours of screen-time, one hour of activity, and zero sugary drinks every day to youth (Nursing, personal communication, June 4, 2019; Live 5210, 2019). VIU’s Nursing program also co-facilitates the HealthyU VIU program, which aims to promote preventative health through initiatives such as Wellness Wednesdays, health fairs, Biometric clinics, and Naloxone training (Nursing, personal communication, June 4, 2019). Many of these initiatives involve collaboration between various departments at VIU, such as Student Affairs, Health and Wellness Centre, Campus Recreation, and Aboriginal Education (Health and Wellness Centre, personal communication, August 15, 2018; Campus Recreation, personal communication, August 14, 2018; Nursing, personal communication, June 4, 2019; Aboriginal Education, personal communication, July 12, 2019). For example, through Aboriginal Education, the Community Cousins program is involved in Health and Wellness Days by providing a holistic approach to health and having Elders share their knowledge of traditional health and wellness (Aboriginal Education, personal communication, July 12, 2019).

In 2018, VIU received a $50,000 grant from Island Health to lead the Recreation Prescription Project in partnership with the City of Nanaimo Parks and Recreation, Division of Family Practice, and the Nanaimo Ladysmith School District (VIU, 2018-hhh; VIU, 2019-P). Within VIU this project involved collaboration between the Nursing, Child and Youth Care, Recreation and Sport, and Sport Health and Physical Activity programs (World Leisure Centre of Excellence, personal communication, June 10, 2019; Nursing, personal communication, June 4, 2019). The Recreation Prescription Project works with four of the most vulnerable schools in the Harewood area of Nanaimo to promote health, physical activity, and literacy among youth (World Leisure Centre of Excellence, personal communication, June 10, 2019). The project involved 120 students from three
equipment, but they have to pay service fees (VIU, 2018-PPP).

fifth grade classes, and 101 of these students were participants in the research over 16 weeks (World Leisure Centre of Excellence, personal communication, June 10, 2019). In addition to health promotion, Nursing students conducted pre, mid, and post health assessments on the youth involved (World Leisure Centre of Excellence, personal communication, June 10, 2019; Nursing, personal communication, June 4, 2019). VIU has received further funding to continue this project and look at how large systems such as academic and health care institutions can work together to address youth health and well-being (World Leisure Centre of Excellence, personal communication, June 10, 2019).

VIU Residence and Campus Recreation promote physical health through the resident sports league program (Residence, personal communication, July 22, 2019). The program offers weekly events for students in Residence and involves a points system to encourage participation (Residence, personal communication, July 22, 2019). Additionally, Residence has basketball courts, beach volleyball courts, and hockey nets for students to access (Residence, personal communication, July 22, 2019).

### 3.4.2 Suicide mortality rate

VIU offers education on mental health through courses such as PSYC 327 (Health Psychology), SOCI 340 (The Sociology of Health and Illness), PHED 451 (Health and the Human Spirit), or SOCW 440 (Social Work and Mental Health) (VIU, 2018-j). An additional Psychiatric Education program offered on campus is a 7-8 week program focused on mental well-being that teaches mood regulation and self-efficacy (Health and Wellness Centre, personal communication, August 15, 2018). In 2018, the Studies in Women and Gender program introduced SWAG 103 (Care of Self: Feminism and Wellbeing) (Arts & Humanities, personal communication, September 11, 2018). A Sociology faculty member led a student research project on additional VIU courses that educate on mental health include: PSYC 473 (Abnormal Psychology), PSYC 432 (Fundamentals of Clinical Psychology), PSYC 440 (Skills and Techniques in Counseling and Psychotherapy), PSYC 315 (Intro to Neuropsychology), PSYC 333 (Positive Psychology), RMGT 153 (Diversity and Inclusion in Recreation, TOUR 100 (Introduction to Tourism), TRMT 333 (Leisure Lifestyles), and TRMT 410 (Leisure Planning for Resilience), CYC 363 (Child and Youth Mental Health), CYC 391 (Therapeutic Applications of Wilderness Programming), and EACS 170 (Challenging Conditions) (Psychology, personal communication, May 17, 2019; Recreation and Tourism, personal communication, July 11, 2019; Child and Youth Care, personal communication, September 18, 2019; Early Childhood Education and Care, personal communication, October 3, 2019; VIU, 2018-j). CYC 391 is a new course, open to...
suicide prevention with a couple of students (Sociology, personal communication, September 25, 2018). In addition, within the Masters of Community Planning program there is a focus on designing happy and healthy cities that promote physical and mental wellbeing (Masters of Community Planning, personal communication, September 18, 2018).

Aside from courses, VIU has a Mental Health and Wellbeing Task Force, meant to identify opportunities for improving the services currently available for students (VIU, 2018-QQQ). VIU also has a Health and Wellness Desk, Counselling Services, a Mental Health Access Specialist – for students with disabilities – and two Aboriginal counsellors (one in Nanaimo and one in Cowichan) as well as Elders in Residents (Aboriginal Studies, personal communication, August 17, 2018). The Elders are available 5 days a week at Shq-apthut (A Gathering Place) to offer support to students (Aboriginal Studies, personal communication, August 17, 2018; VIU, 2018-w). VIU’s Health and Wellness Centre has a strong focus on mental health and offers mental health first aid, programs to recognize suicide ideation or suicide awareness, among other courses and workshops to help the VIU community understand mental health (Health and Wellness Centre, personal communication, August 15, 2018). Wellness Wednesdays, mentioned above, often focuses on health and wellbeing, offering students time with therapy dogs, free massage chairs, free meditation and fitness classes (e.g. yoga), and more (Health and Wellness, personal communication, August 15, 2018). In 2018, VIU hosted its first annual THRIVE Week from October 1-5 (VIU, 2018-A). THRIVE Week promoted mental health and wellbeing

students and professionals, that is based around the idea that exploring the wilderness can positively affect physical, psychological, social, and emotional development in children and youth (VIU, 2019-P). In this course, students learn how to facilitate wilderness exploration opportunities for youth and how these experiences can foster positive character development (VIU, 2019-P). Some ElderCollege courses also touch on topics related to mental health, such as how to mourn a loss, energy medicine for self-help, and planning for the end of life (ElderCollege, personal communication, October 16, 2019). VIU also offers a six-month Community Mental Health Worker Certificate program that trains and provides students with the tools required to work with individuals that face mental health and addiction issues (VIU, 2019-n). Courses in the program include: CMHW 110 (Community Mental Health Worker I), CMHW 111 (Community Mental Health Worker II), CMHW 115 (Building Therapeutic Relationships), CMHW 120 (Support Strategies), CMHW 125 (Professional Issues), CMHW 135 (Addictions and Mental Health Issues), and CMHW 140 (Practicum) (VIU, 2019-p).

Students in the Psychology department not only learn how to cope with stress within their courses, they also engage in experiential learning opportunities related to mental health (Psychology, personal communication, May 17, 2019). Many Psychology students participate in practicums at local treatment centres, such as Edgewood in Nanaimo, which allow students to gain experience in the field of mental health work (Psychology, personal communication May 17, 2019). The Environmental Psychology Lab offers students the opportunity to research how built and natural environments can affect mental health (Psychology, personal communication May 17, 2019; VIU, 2019-q). The Psychology student club has also engaged in activities to promote mental health, such as positivity fairs and mental health nights (Psychology, personal communication, May 17, 2019).
through a week-long series of events for the entire VIU community (VIU, 2018-B). During the 2018 Experience VIU open house, a Sociology faculty member gave a talk on the social causes of suicide and about wellbeing (Sociology, personal communication, September 25, 2018). Counselling Services hosted an Honouring the Spirit: Energy Care for Indigenous Students workshop in September 2018 and will host it again in October and November of 2018 (Counselling Services, personal communication, August 7, 2018). In addition, Outdoor Recreation offers opportunities for students to spend time in nature, a form of mental therapy (Campus Recreation, personal communication, August 14, 2018). Some of the opportunities offered through VIU Outdoor Recreation include: Hiking, Sea Kayaking, SUP Yoga, Surfing Day Trip, and Snowshoeing (VIU, 2018-C).

At the VIU High School, mental health and wellbeing is an important component (VIU High School, personal communication, September 17, 2018). With a high rate of international students, they aim to provide a safe and supportive environment as students will be experiencing life away from home for the first time in addition to facing the stress of school (VIU High School, personal communication, September 17, 2018). The VIU High School Principal aims to get a certificate in Mental Health First Aid at some point in 2018 to better assist her students (VIU High School, personal communication, September 17, 2018). At the beginning of each year the High School hosts a student orientation, which includes an hour and a half workshop with a counsellor (VIU High School, personal communication, September 17, 2018). Throughout the year, the high school VIU aims to have a healthy culture where everyone feels welcomed and respected within the community (Human Resources, personal communication, October 28, 2019). Mental health is promoted through various activities across campus in order to achieve a healthy culture. During exam season, compassion dogs are brought to both the Nanaimo and Cowichan campuses to help students reduce stress (Health and Wellness, personal communication, August 15, 2018). On all VIU campuses, students have access to counselling, referrals to community contacts, and informational materials on mental health, substance abuse, harm reduction, and consent (Powell River – Health and Human Services, personal communication, October 26, 2019; Health and Wellness Centre, personal communication, August 15, 2018; VIU, 2019-r). The Powell River campus received funding to bring professional development opportunities, such as Mental Health First Aid and Capacity to Connect, to campus (Powell River campus, personal communication, October 26, 2019). Capacity to Connect was also offered as a workshop at the Nanaimo campus in August 2019 which provided education on how to best support students in distress (VIU, 2019-s). VIU also has an Early Alert system, which is a “student success and retention tool” to identify students that may be in need of support services (VIU, 2019-t; Powell River Health and Human Services, personal communication, July 23, 2019). Faculty can submit an Incident Report to indicate concerning behaviours of students and the student will then be directed to the resources they can access for support (VIU, 2019-t).

In addition to on-campus initiatives in support of mental health, a VIU Nursing Professor and a multidisciplinary team from Island Health are working in collaboration to develop a curriculum that emphasizes the importance of self-compassion among health-care providers (VIU, 2019-ii). The team was awarded a REACH award from the Michael Smith Foundation for Health Research to address commonly reported issues of hostile work
students also have full access to VIU services, including the counsellors at the Health and Wellness Centre (VIU High School, personal communication, September 17, 2018).

environments and the stressors associated with the health-care environment (VIU, 2019-ii).

| 3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol | VIU, through the Students’ Union, offers a Students Benefit Plan (VIU, 2018-a). Full-time VIU employees are also offered a Manulife Faculty Benefits Plan (VIU, 2018-u). Both of these benefits programs offer mental health coverage that can assist with substance use disorders. In addition, the Health and Wellness Centre screens students for alcohol misuse or abuse and Counselling Services offers counselling related to alcohol and drug use (Health and Wellness Centre, personal communication, August 15, 2018). The Health and Wellness Centre also provides students with information about other external supports they can access if they face substance use disorders (Health and Wellness Centre, personal communication, August 15, 2018). The Addiction Studies Certificate at VIU directly relates to this indicator as students are taught how to help those suffering with substance use addictions (VIU, 2018-y). Additionally, two new programs have been introduced to VIU through the Centre for Community Outreach and Care (Centre for Community Outreach and Care, personal communication, September 27, 2018). These programs address the effects of the stigma associated with drug (opioid) on children (VIU, 2018-RRR). Furthermore, a VIU Chemistry professor and Chemistry students have been working on developing technology to more accurately test drugs, including being able to analyze how much fentanyl is present (Nanaimo News Now, 2018). | As mentioned in the 2018 data, VIU offers an Addictions Studies Certificate program. To receive the certificate, students are required to take a second year methods course, with a choice from PSYC 205 (Introduction to Biopsychology), PSYC 345 (Drugs and Behaviour), PSYC 441 (Theories of Addiction), HSD 369 (Perspectives on Substance Use), or CYC 361 (Understanding Substance Abuse in Child and Youth Care Practice) (VIU, 2018-y). As well, students have to earn twelve to fifteen more credits from a variety of Psychology, Sociology, Criminology, First Nations Studies, Anthropology, Social Work, and Global Studies courses (VIU, 2018-y). Students not pursuing the Addictions Certificate may also take any of these courses. Students in other programs at VIU are also exposed to the topic of substance use. Most Health and Human Services programs, including Bachelor of Science in Nursing, Practical Nursing, Child and Youth Care, Early Childhood Education, Social Work, and Community Mental Health Worker, touch on this topic (Health and Human Services, personal communication, July 3, 2019). Nursing students are involved with the Party Program which promotes alcohol awareness and education to high school students (Nursing, personal communication, June 4, 2019; Island Health, 2019). Stemming from the Party Program, VIU Nursing students developed the Before Party Program (Nursing, personal communication, June 4, 2019). This program educates high school students about the impacts that drugs have on mental health and brain development (Nursing, personal communication, June 4, 2019). The program follows the most current research and evidence in the field (Nursing, personal communication, June 4, 2019). Briefly mentioned in the 2018 data for this indicator was the Centre for Community Outreach and Care and their program that deals with stigma associated with opioids. This program was... |
| 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. | VIU’s Health and Wellness Centre, through the Biometric clinic, discusses the effect of alcohol on mental health and how to manage substance abuse (Health and Wellness Centre, personal communication, August 15, 2018). Wellness Wednesdays have offered alcohol abuse/misuse screening in the past (Health and Wellness Centre, personal communication, August 15, 2018). Through an initiative to limit excessive alcohol use, Campus Recreation started keeping the Fitness Centre open later on Thursday nights to give students an alternative option to drinking (Campus Recreation, personal communication, August 14, 2018). | As described above in the 2019 data for indicator 3.5.1, VIU offers an Addictions Studies Certificate which educates students on this indicator. VIU Residence hosts a number of initiatives to raise awareness on substance abuse and to reduce substance use (Residence, personal communication, July 22, 2019). Residence’s initiative *Eat Before you Hit the Streets* provides students with food before they go out drinking in order to reduce harmful effects of alcohol (Residence, personal communication, July 22, 2019). Workshops are hosted to educate on the impacts of substance abuse such as date rape, consent, and driving under the influence (Residence, personal communication, July 22, 2019). Residence hosts dry events on Halloween and St. Patrick’s Day to offer students a place to socialize without alcohol (Residence, personal communication, July 22, 2019). Aside from initiatives, |
VIU Residence also has policies and regulations outlined in the VIU Student Residence Handbook 2017-2018 regarding substance use (Residence, personal communication, July 22, 2019). These policies and regulations, while focusing on policing behaviour rather than the substance, do not permit alcohol consumption by a minor, mass consumption of alcohol, kegs, drinking games, or the use of single serve containers in residence (Residence, personal communication, July 222, 2019; VIU, 2018). Residence employs twenty people to focus on communicating and encouraging safe alcohol use to students (Residence, personal communication, July 22, 2019).

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

<table>
<thead>
<tr>
<th>3.6.1 Death rate due to road traffic injuries</th>
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<tbody>
<tr>
<td>This target was not included in this study as we determined that it was not applicable to a post-secondary institution.</td>
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</table>

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.

<table>
<thead>
<tr>
<th>3.7.1 Proportion of women of reproductive age (aged 15–49 years) who have their need for family planning satisfied with modern methods</th>
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<tbody>
<tr>
<td>VIU’s Health and Wellness Centre plays a large role in meeting this indicator on campus. The Health and Wellness Centre offers primary health care services for women (e.g. PAP tests, STI tests) and promotes the use of IUDS (Health and Wellness Centre, personal communication, August 15, 2018). It also plays a large role in VIU’s campus-wide Know More Campaign, which educates the VIU community on consent (VIU, 2018-Y; Health and Wellness Centre, personal communication, August 15, 2018). The VIU High School follows the B.C. Physical and Health Education curriculum which includes sexual education and also brings in a sexual health educator every year (Government of British Columbia, 2018-a; VIU High School, personal communication, September 17, 2018). Due to the multi-cultural nature of the VIU High School, there</td>
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<tr>
<td>VIU Residence has contraceptives available to students and hosts workshops facilitated by nurses on safe sex (Residence, personal communication, July 22, 2019). On Wednesdays, Residence hosts Hump Day Sex Talks that focus on different topics each week related to safe sex (VIU, 2019-v). Residence also runs a program called Don’t be an Asshole, which provides a safe and open space for men to talk about sex in the contexts of consent, making informed decisions, and multicultural differences (Residence, personal communication, July 22, 2019). An Arts and Humanities Professor is one of VIU’s new Canada Research Chairs in the Historical Dimensions of Women’s Health (VIU, 2019-w). During the first five-year term of this position, the Chair will focus on three main projects: research on natural childbirth on Vancouver Island and around the world from the mid-to-late 20th century, a collaborative project exploring medical violence (including childbirth trauma), as well as the development of a conference at VIU exploring these themes,</td>
</tr>
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are different cultural expectations around the topic of sexual health education, but the teachers provide the students with as much information as they can (VIU High School, personal communication, September 17, 2018).

and a new project exploring the history of women’s pain across the life cycle (VIU, 2019-ii).

<table>
<thead>
<tr>
<th>3.7.2</th>
<th>Adolescent birth rate (aged 10 -14 years; aged 15 – 19 years) per 1000 women in that age group</th>
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<tr>
<td></td>
<td>This indicator was not included as it was determined to be beyond the scope of this study.</td>
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3.8 Archive 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.

<table>
<thead>
<tr>
<th>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 public)</th>
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<tbody>
<tr>
<td>As mentioned earlier, VIU offers a Students Benefit Plan as well as a Manulife Faculty Benefits Plan. Both of these benefits programs offer basic health coverage that assist students and faculty with essential services.</td>
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In November 2019, VIU partnered with the Superstore Pharmacy to offer two free Flu Vaccination Clinics for employees and students (VIU, 2019-j). Flu clinics have also been offered in previous years (VIU, 2018-SSS; VIU, 2017-l).

Not only does VIU offer health services to its students and staff, VIU programs also offer health services to the surrounding communities (Health and Human Services, personal communication, July 3, 2019; Child and Youth Care, personal communication, September 18, 2019; VIU, 2019-l). VIU’s Dental Clinic is open to the public where community members can receive low-cost dental services from the Dental Assistant and Dental Hygiene programs. All the Health and Human Services programs have clinical placements or engagement experience, which allows students to take their knowledge into local communities (Health and Human Services, personal communication, July 3, 2019). Students in the Nursing program are often situated in Indigenous Health Centres for their placements, where they develop health promotion projects (Nursing, personal communication, September 20, 2019). The health promotion projects are based off a community needs assessment and topics have included hand hygiene, vaccination information, oral hygiene, and nutrition (Nursing, personal communication, September 20, 2019). When Child and Youth Care students are placed in family support centres, they develop family support projects (Child and Youth Care, personal communication, July 3, 2019).
<table>
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<tr>
<th><strong>most disadvantaged population.</strong></th>
<th>Care students are in their placements at local schools, they are able to identify youth in need of dental services and link them to VIU’s Dental Clinic (Child and Youth Care, personal communication, September 18, 2019). Additionally, VIU ElderCollege offered their course “Navigating the health care system” for the first time in fall 2019 (ElderCollege and Grandkids University, personal communication, October 16, 2019). The course brought in health care professionals to share their knowledge and expertise on how to navigate health care services (ElderCollege and Grandkids University, personal communication, October 16, 2019).</th>
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<tr>
<td><strong>3.8.2 Proportion of population with large household expenditures on health as a share of total household expenditure or income.</strong></td>
<td>This indicator was not included as it was beyond the scope of this study and deemed inapplicable to a post-secondary institution.</td>
</tr>
<tr>
<td><strong>3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.</strong></td>
<td>VIU offers many courses on campus that teach about topics related to air pollution, such as CHEM 302 (Atmospheric Environmental Chemistry), CHEM 300 (Green Chemistry and Toxicology), GEOG 211 (Atmospheric Environments), and GEOG 372 (Climatology) (VIU, 2018-). These courses are offered to students studying both Chemistry and Geography. Aside from courses, VIU offers students the chance to gain hands-on experience related to this topic through the Applied Environmental Research Laboratories (AERL), which researches environmental health (i.e. air, water, and soil) by developing and applying new, analytical methods that provide more information faster (VIU, 2018-z).</td>
</tr>
<tr>
<td><strong>3.9.1 Mortality rate attributed to household and ambient air pollution.</strong></td>
<td>In addition to the courses listed in the 2018 data for this indicator, NURS 318 (Health and Healing: Global Health Issues) also touches on this topic (Nursing, personal communication, June 4, 2019). This topic also comes up indirectly throughout many Health and Human Services programs and courses when students look at air pollution through a health issue lens (Health and Human Services, personal communication, July 3, 2019). Additionally, in 2019 VIU switched over to a new janitorial service, BEE-Clean Building Maintenance. BEE-Clean Building Maintenance is committed to providing sustainable solutions as it is CIMS-Green Building certified and follows a Green Cleaning policy (BEE-Clean Building Maintenance, 2020). CIMS stands for Cleaning Industry Management Standard, which is the benchmark of cleaning standards for North American companies (BEE-Clean Building Maintenance, 2020). By utilizing a janitorial service...</td>
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Although the primary focus of AERL is not to educate on human health impacts of air pollution, this is the driving force behind the research that they do (Applied Environmental Research Laboratories, personal communication, August 3, 2018).

In September 2018, Alpine Building Maintenance Inc. started a contract with VIU (Facilities Services & Campus Development, personal communication, September 21, 2018). Alpine Building Maintenance Inc. is committed to providing sustainable solutions with a focus on being green through aiming to reduce chemical use, eliminate toxicity and improve indoor air quality (Alpine Building Maintenance Inc., 2018). The company uses paperless systems for reporting and invoicing, has eliminated any detergents, surfactants, or toxins from routine cleaning, and has eliminated or is monitoring emissions from power equipment (Alpine Building Maintenance Inc., 2018).

Finally, VIU’s Carbon Neutral Action Report showcases what the university has accomplished, and what it plans to do, to reduce greenhouse gas emissions, some of which are considered pollutants (VIU, 2018-ccc). The report looks at initiatives that have been done on campus such as work done by the AERL, Active Commute Week, and VIU’s LEED buildings (VIU, 2017-a). The 2017 report indicates that for the future location of the AERL in the Health and Science Centre will have state-of-the-art instrumentation and real-time geospatial mapping (VIU, 2017-a). The geospatial mapping will allow students to complete quality assessments and track hazardous substances (VIU, 2017-a).
<table>
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<tr>
<th>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).</th>
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<tbody>
<tr>
<td>Through courses such as GEOG 374 (Hydrology) and CHEM 301 (Aqueous Environmental Chemistry), VIU is teaching its students about water, which includes the topic of water quality (VIU, 2018-j). Through AERL, VIU students can be involved with research involved with understanding the chemistry of drinking water (Applied Environmental Research Laboratories, personal communication, August 3, 2018). Again, although AERL may not necessarily research the impacts on human health – this is the context behind the research that they do Applied Environmental Research Laboratories, personal communication, August 3, 2018). Additionally, the Mount Arrowsmith Biosphere Region Research Institute’s (MABRRI) lake monitoring project, which focuses on the Like Qualicum Water Region, is training students to monitor lake health following the BC Lake Stewardship Society’s standards (BCLSS) (VIU, 2018-bb).</td>
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<tr>
<td>Health and Human Services programs educate on this topic indirectly through a health issues lens (Health and Human Services, personal communication, July 3, 2019). During community placements/practicums, Nursing students engage in health promotion projects that involve health issues including hand hygiene, education for parents, and oral hygiene (Nursing, personal communication, September 20, 2019). Nursing students also educate youth in local schools about proper hand washing and how to avoid spreading germs (Nursing, personal communication, September 20, 2019).</td>
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<tr>
<td>3.9.3 Mortality rate attributed to unintentional poisoning</td>
</tr>
<tr>
<td>This indicator was not included as it was deemed inapplicable to an educational institution.</td>
</tr>
<tr>
<td>3.a Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control</td>
</tr>
<tr>
<td>3.a.1 Age-standardized prevalence of current tobacco use among persons aged 15 years and older</td>
</tr>
<tr>
<td>As discussed above, VIU’s Addiction Studies Certificate teaches students about the use of tobacco, among other substance abuses (VIU, 2018-y). Both the Health and Wellness Centre and Campus Recreation offer smoking cessation programs or initiatives throughout the school year (Campus Recreation, personal communication, August 14, 2018; Health and Wellness Centre, personal)</td>
</tr>
<tr>
<td>Health and Human Services programs such as Nursing, Dental, Social Work, and Child and Youth Care, promote tobacco prevention and educational awareness through community engagement activities (Health and Human Services, personal communication, July 3, 2019). Nursing students have also conducted a research project on the use of e-cigarettes in adolescents and presented their findings to Nanaimo Public Health (Nursing, personal communication, June 4, 2019).</td>
</tr>
<tr>
<td>in all countries, as appropriate.</td>
</tr>
<tr>
<td>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</td>
</tr>
<tr>
<td>3.b.2 Total net official development assistance to medical research and basic health sectors</td>
</tr>
<tr>
<td>Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all.</td>
</tr>
<tr>
<td>3.b.3 Proportion of health facilities that have a core set of relevant essential medicines available and affordable on a sustainable basis</td>
</tr>
<tr>
<td>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</td>
</tr>
<tr>
<td>3.c.1 Health worker density and distribution.</td>
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</table>
workforce (Health and Human Services, personal communication, July 3, 2019). One expansion will involve the Early Childhood Education and Care program, which will be expanded to offer an Assistant Certificate, as well as the Early Childhood Education and Care Basic Certificate (Powell River – Health and Human Services, personal communication, October 26, 2019). The New Program Development Schedule (2019) indicates that there will be four new Health and Human Services programs implemented in 2020/21 (Office of University Planning and Analysis, 2019). These new programs are: Health Care Assistant to Licenced Practical Nurse Bridging Program, Occupational Therapist Technician, Pharmacy Technician, and Rehabilitation Therapist Technician.

In addition to students, there are approximately 100 faculty members in the Faculty of Health and Human Services (Health and Human Services, personal communication, July 3, 2019). The Powell River Health and Human Services Department currently employs 11 staff members (Powell River – Health and Human Services, personal communication, October 26, 2019). The Nursing program has 29 full time and 20 sessional faculty members (Nursing, personal communication, June 4, 2019).

The Kw’am Kw’um Shhwuli Health Care Assistant program offered through the Cowichan campus reduces barriers for individuals from First Nations communities so they can receive an education that will lead to employment in a field of need (Cowichan campus, personal communication, October 29, 2019). There is an eight-week transition period following the program where students have access to support to find a job (Cowichan campus, personal communication, October 29, 2019).

| 3.d Strengthen the capacity of all countries, in particular developing countries, for early warning, 3.d.1 International Health Risk (IHR) capacity and health | As previously mentioned, VIU offers free flu shot clinics for students and employees (VIU, 2019-k). In regard to the outbreak of the coronavirus diseases (COVID-19) in 2019 and 2020, VIU has closely monitored global developments and has made adjustments to policies and procedures as required (VIU, 2020-a). Not only does VIU recommend that employees and students follow the recommendations of Global Affairs Canada, but also... |
| risk reduction and management of national and global health risks | emergency preparedness | implemented travel restrictions for VIU-sanctioned travel to China (VIU, 2020-a).

VIU also has an *Emergency Response Preparedness Plan* that is based on the British Columbia Emergency Management Response System and provides a framework for planning for, responding to, and recovering from an emergency at VIU (VIU, 2009-b). |
## Appendix G

### Compiled Data for Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>2018 Data</th>
<th>2019 Data</th>
</tr>
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<tbody>
<tr>
<td>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</td>
<td>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</td>
<td>This target was determined not applicable to VIU as a post-secondary institute as it does not deal directly with primary and secondary education.</td>
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<tr>
<td>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</td>
<td>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</td>
<td>VIU’s Early Childhood Education and Care (ECEC) diploma program trains students to acquire the necessary skills to provide childcare for young children, while also working with their families (VIU, 2019-C). Within this program, students look at the expected curve of development in children and learn how to identify signs of possible abnormalities, noting both the children’s strengths and needs (Early Childhood Education and Care, personal communication, October 3, 2019). Particular courses in this program also have a greater focus on early childhood development, such as: ECEC 130 (Principles and Practices of Wellness), ECEC 221 (Assessing and Supporting Healthy Early Development), and ECEC 222 (Program Development for Children with Diverse Abilities) (VIU, 2019-I). Beginning in September 2019, expansion was made to the ECEC program, with an offering available at the VIU Powell River campus to meet the community’s growing demand for early</td>
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childhood education and care (VIU, 2019-J). This program expansion was made possible due to collaboration between VIU, the local ECEC community, the City of Powell River’s Municipal Council, the Tla’amin Nation, and School District 47 (VIU, 2019-J).

VIU also offers a Bachelor of Arts in Child and Youth Care (CYC) which is designed in response to a growing demand for skilled child and youth care practitioners (VIU, 2019-D). CYC courses that address early childhood development include CYC 111 (Child Development), CYC 232 (Diverse Abilities in Child and Youth Care), and CYC 363 (Child and Youth Mental Health) (VIU, 2019-HHH).

VIU’s BC Regional Innovation Endowment Chair in Aboriginal Early Childhood Development has numerous research projects related to early childhood development (Aboriginal Early Childhood Development, personal communication, October 31, 2019). The Chair aims to create best outcomes for Aboriginal children, families, and communities by integrating cultural traditions into early childhood education, care, and health and human services (VIU, 2019-O).

<table>
<thead>
<tr>
<th>4.2.2 Participation rate in organized learning (one year before the official primary entry age), by sex</th>
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<tbody>
<tr>
<td>This indicator was determined inapplicable to VIU as a post-secondary institute, as it does not deal directly with primary education.</td>
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<thead>
<tr>
<th>4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational</th>
</tr>
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<tbody>
<tr>
<td>4.3.1 Participation rate of youth and adults in formal and non-formal education and training</td>
</tr>
<tr>
<td>In 2016/17, VIU had a total enrolment of 14,386 students (VIU, 2018-d). From these numbers, 57% of the students were female and 43% were male (VIU, 2018-d). In the age group of 18 and under to 24 years of age there were 7,147 (VIU, 2018-d). The age group of 25 to 49 years had a</td>
</tr>
<tr>
<td>In 2017/18, VIU had a total student headcount of 14,504 students, and in 2018/19, the total student headcount was 14,324 (VIU, 2018-d). During both years, 42% of students were male and 58% were female (VIU, 2018-d). In 2018/19, 1,577 students were aged less than 19 years, 5,828 students aged</td>
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</table>
and tertiary education, including university in the previous 12 months, by sex total of 5,068 students and 2,066 students were aged 50+ (VIU, 2018-d).

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Total Students</th>
<th>Data Source</th>
</tr>
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</table>
| 19-24       | 3,284          | 25-34       | 3,621 35 years and older (VIU, 2018-d). Of the total student headcount, 7,665 were full time and 6,659 were part time (VIU, 2018-d).
|             |                |             |
| As previously discussed in the 2018 data for Goal 1, the Post-Care Tuition Waiver Program allows students who have been in foster care to access tuition-free university education. As of October 2018, 85 students were enrolled in the Post-Care Tuition Waiver program, a total of 181 students have enrolled since the program launched in 2013, and 45 students have graduated through the program (VIU, 2018-fff).
|             |                |             |
| To encourage youth enrolment in post-secondary education, VIU offers a dual credit program, in which a partnership between VIU and the local school district provides high school students with the opportunity to take university courses. Students can simultaneously take university and high school courses, earning credit towards both transcripts (VIU, 2019-E). In the 2017/18 academic year, 527 students were enrolled in the dual credit program (VIU, 2018-fff).
|             |                |             |
| As well as helping youth gain access to education, VIU offers learning opportunities to older adults through ElderCollege. ElderCollege provides a variety of courses and speaker series at VIU campuses as well as in the surrounding communities (VIU, 2019-F). Courses are taught by volunteer instructors with the support of VIU staff and resources, and course enrolment only requires a $20 annual membership fee (VIU, 2019-F; VIU, 2019-K). 2019 was ElderCollege’s 26th year of providing lifelong learning to Vancouver Island communities, which now has 156 courses (ElderCollege, personal communication, October 16,
In 2018/19, there were 2,030 enrolments in ElderCollege courses, usually with 20-30 students in each course (ElderCollege, personal communication, October 16, 2019). In addition to ElderCollege, VIU also offers the Love of Learning program, which allows any member of the public to take a VIU course without the requirements of grading or receiving credit (VIU, 2019-G).

VIU’s Academic and Career Preparation (ACP) department has an Adult Basic Education program that offers upgrading courses for those in need of prerequisites for university entrance, and makes up approximately 90% of ACP’s enrolment (Academic and Career Preparation, personal communication, June 26, 2019; VIU, 2019-L). Over the 2017/18 academic year, approximately 1,600 students were enrolled in various ACP programs (Academic and Career Preparation, personal communication, June 26, 2019), with the highest enrolment of 422 students at the Cowichan campus (Cowichan campus, personal communication, September 4, 2019).

### 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

The departments of Information Technology (IT), The Centre for Innovation and Excellence in Learning (CIEL), Computing Science, Applied Business Technology, Media Studies & Digital Media Technology focus on providing adults with information and communications technology skills (VIU, 2018-WWW; Centre for Innovation and Excellence in Learning, personal communication, August 9, 2018; Computing Sciences, personal communication, September 25, 2018; VIU, 2018-XXX; Media Research Lab, personal communication, October 3, 2018).

The Media Studies & Digital Media Technology program at VIU begins educating its new

Courses that specifically address the development of ICT skills include but are not limited to: MGMT 230 (Introduction to E-Management), MBA 501 (Managing the Networked Enterprise), MBA 532 (Advertising and Media) (VIU, 2019-M), and ENG 207 (Computer-Mediated Communication) (VIU, 2019-N). Fundamentals of ICT skills are also woven throughout many programs such as Graphic Design, Academic and Career Preparation, and Applied Business Technology (Faculty of Art and Design, personal communication, June 11, 2019; Academic and Career Preparation, personal communication, June 26, 2019; Cowichan campus, personal communication, October 30, 2019).
students starting from the basics of technology so that all students can begin at the same level (Media Research Lab, personal communication, October 3, 2018). By doing so, the program does not exclude students with various levels of knowledge (Media Research Lab, personal communication, October 3, 2018). Students within the Media Studies & Digital Media Technology department are not only educated on how to produce media technology, they are also taught to view media and technology through an analytical and critical lens, looking at how things function and what role media plays (Media Research Lab, personal communication, October 3, 2018).

As a branch of the Media Studies Department, the Media Research Lab also educates students to have an analytical perspective when dealing with media and technology but the lab also offers workshops and training sessions (Media Research Lab, personal communication, October 3, 2018). The lab goes to classrooms and works with community partners; its focus is to increase media literacy by helping people create and learn about the media rather than just doing it for them (Media Research Lab, personal communication, October 3, 2018). Those that work at the lab hope to host more workshops and training sessions off-campus that are open to the public to help increase media literacy (Media Research Lab, personal communication, October 3, 2018).

The CIEL supports learning technologies and believes that virtual learning provides different sorts of access and interactions and convenience as you do not have to be on
### 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 | Of the 14,386 students at VIU in the 2016/17 academic year, 11% (1,569) were Indigenous students and 14% (2,013) were international students (VIU, 2018-d). Almost 7% (1,000) students have registered with Disability Services at VIU for 2017/18 (Disability Access Services, personal communication, August 29, 2018).

VIU offers scholarships and bursaries to students (VIU, 2018-i; VIU, 2018-h). There are four scholarships and eleven bursaries directed towards Aboriginal students, in addition to 35 other scholarships/bursaries that have preference for Aboriginal students (VIU, 2018-i). Five awards have preferences for students with disabilities, 25 are directed towards students who are single parents, and two are directed towards LGBTQ+ students (VIU, 2018-i). Additionally, in 2013 VIU introduced its Tuition Waiver program, which waives tuition fees for eligible students who have grown up in the foster care system (VIU, 2018-h). Starting the program with 16 students in 2013, the program has grown and in 2016/17 VIU supported 70 students (VIU, 2018-h).

In 2008, VIU became a member of the World University Service of Canada (WUSC) (VIU, 2018-I). WUSC aims to create a better world for youth through improving education, employment and empowerment opportunities and has a few initiatives to work towards achieving this (World University Service of Canada, 2018-a). One such initiative is the “Student Refugee Program” (World University Service of Canada, 2018-a). Ranking second among BC universities in Indigenous student headcount, VIU’s 2018/19 student population of 14,324 had a 12% (1,579) Indigenous student headcount (VIU, 2018-ffff). Data available for 2017/18 shows that there were 819 self-declared Indigenous females enrolled at VIU and 494 self-declared Indigenous males (VIU, 2018-HHHH). Out of the total student headcount in 2017/18, 390 new Indigenous students came to VIU (VIU, 2018-HHHH). One of the ways VIU strives to accommodate access to education for Indigenous students is through the support of the Jay Treaty of 1795, by allowing all Indigenous peoples whose ancestral lands are within Canada to pay domestic tuition fees even if they reside outside of Canada (VIU, 2018-wwww). As VIU is in a Territory where a Treaty was entered in 1854, a Centre for Pre-Confederation Treaties and Reconciliation was established in 2014 to work on increasing research, understanding, and public dialogue regarding Pre-Confederation Treaties and reconciliation (BC Ministry of Advanced Education, Skills and Training, 2017). As described in Goal 1, support for Indigenous education is achieved through the EleV program at VIU, which aims to increase the number of Indigenous youth accessing post-secondary education by providing scholarships, social and cultural support, and career advising (VIU, 2019-P). The program was launched in 2017, and in 2018, nearly 80 students were funded, and 10 students have graduated from VIU and entered the workforce (VIU, 2019-Q). |
Service of Canada, 2018-b). This program combines resettlement with higher education, bringing refugee students to Canada and allowing them to study as permanent residents (World University Services of Canada, 2018-b). Since becoming a member of WUSC and joining the Student Refugee Program, VIU has sponsored two refugee students every year (VIU, 2018-I). VIU has also become a member of the Scholars at Risk (SAR) program, which provides a place of safety for threatened scholars (Scholars at Risk Network, 2018; Education Abroad, personal communication, August 29, 2018). Since 2016, VIU has hosted one scholar at risk who was a refugee from Iran and is looking into building a regional approach to bring in scholars at risks from other universities to speak (VIU, 2018-YYY; Education Abroad, personal communication, August 29, 2018).

Various VIU departments also address disparities related to Indigenous peoples. The Academic and Career Preparation department offers the Aboriginal University Bridging program, which provides Indigenous students with access to adult education programming that aligns with university program prerequisites (VIU, 2019-H). The program was developed in consultation with Indigenous communities across BC and in addition to providing education, Elders-in-Residence provide social and cultural support to students in the program (ACP, personal communication, June 26, 2019). ILRP 100 (Indigenous Learning and Recognition Portfolio) is a course structured as a reflective process for students to learn how to record their past learning experiences and build a portfolio that can be shared with future employers (Cowichan campus, personal communication, October 30, 2019). To encourage both cultural and gender diversity among trades, VIU offers 12 week non-credit Trades Sampler programs for women and Indigenous students. These programs provide foundational knowledge for a variety of trades to either help students upgrade their education, or explore the trades industry, to determine if they want to pursue an education and career in the area (Cowichan campus, personal communication, October 30, 2019). Additionally, the ECEC program is able to provide an entire Indigenous cohort with full financial support (Early Childhood Education and Care, personal communication, October 3, 2019). The program also offers a series of courses for employees of the Aboriginal Headstart Association of BC to help increase qualification of staff and provide access to education (Early Childhood Education and Care, October 3, 2019).
VIU also works off-campus to provide education and training to local Indigenous communities. For example, the Kw’am Kw’um Shhwuli Health Care Assistant program at VIU’s Cowichan campus was developed based on community needs and incorporates cultural components into the education in such a way that employment can be obtained upon completion (Cowichan campus, personal communication, October 30, 2019). VIU’s Aboriginal Construction program also provides students with hands-on experience within First Nations communities (VIU, 2019-h). Students in the program receive training for the construction industry with an emphasis on First Nations construction history and methods (VIU, 2019-h). The program also provides graduates with credit that provides the foundation for completion of a Carpentry apprenticeship (VIU, 2019-h). The program has been designed so that it can be delivered within communities across Vancouver Island, as well as remote communities in northwest BC (Carpentry, personal communication, October 22, 2019).

To address disparities related to disability status, VIU offers the Workplace Essential Skills and Training (WEST) program as described in Goal 1 (indicator 1.1.1). However, the WEST program is unique as it is open to students that may have self-disclosed employment barriers rather than documented disabilities (Workplace Essential Skills and Training, personal communication, September 19, 2019). Each academic year, the Nanaimo campus WEST program welcomes 16 new students into their first year of studies, and recent government funding has also allowed an additional intake of 14 students in Nanaimo, as well as full time offering of the program at the Cowichan
campus (Workplace Essential Skills and Training, personal communication, September 14, 2019). VIU also has a Cooperative Entrepreneur Training Program to support persons with disabilities in pursuit of their entrepreneurial journeys (Workplace Essential Skills and Training, personal communication, September 14, 2019). This program allows students to complete internships and network with local businesses (VIU, 2019-R). In 2018/19, VIU had over 1,000 students registered with Disability Access Services, providing services to over 7% of the student population (VIU, 2018-iii).

As described in Goal 1, the Tuition Waiver program at VIU helps to address financial disparities by supporting those who have lived in foster care, with no age cap on those who are eligible (Financial Aid and Awards, personal communication, September 12, 2019). Since the implementation of the Tuition Waiver program in 2013, approximately 213 students have gone through the program, including 31 single parents and 62 Indigenous students (Financial Aid and Awards, personal communication, September 12, 2019). VIU also promotes access to education through the Canada Learning Bond (CLB) and was the first Canadian university to become part of the Canada Education Savings Program Champion’s Network (VIU, 2018-g). The CLB provides support to low income families with funding to help develop RESPs for children in the family (VIU, 2018-g). Since CLB’s outreach began at VIU in 2013, post-secondary participation rates have risen from 23% to 36% (VIU, 2018-g). In addition to funding that supports tuition costs, VIU offers the Education Assistance Fund, the Youth Futures Education Fund, and the Youth Education Bursary to assist students with living expenses (Financial Aid
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 Proportion 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 |
| All programs at VIU have admission requirements, meaning that all students must have achieved a certain level of academic proficiency. While each program varies in their requirements, there are some general requirements for students to meet before they are accepted to VIU (VIU, 2018-K). For students applying to Academic Programs they must be a graduate from a secondary school with a minimum of a “C” grade in English 12 or meet one of the following: (i) graduation from a B.C. secondary school or (ii) has education history with another post-secondary institution (VIU, 2018-K). General admission requirements for Trades and Applied Technology Programs state that these students must simply be a graduate from secondary school (VIU, 2018-K). International students must prove that they are proficient in English along with meeting the requirements for the program they are applying for (VIU, 2018-ZZZ). |
| A main goal of VIU’s WEST program is to incorporate the nine essential skills outlined by the Ministry of Education which include reading, writing, document use, numeracy, computer use/digital skills, thinking, oral communication, working with others, and continuous learning (Workplace Essential Skills and Training, personal communication, September 19, 2019; Government of Canada, 2015). The main focus of the Academic and Career Preparation programs is to provide people with literacy skills as well as prerequisites for university courses, which typically incorporate both literacy and numeracy skills (Academic and Career Preparation, personal communication, June 26, 2019). |

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

| 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) |
| In VIU’s Academic Plan, VIU highlights its core values (VIU, 2018-D). This indicator is reflected within these eight core values: learning, respect, discovery, engagement, achievement, diversity, celebration, and sustainability and well-being (VIU, 2018-D). In addition to the core values, the plan outlines six objectives: student learning, engagement and success; academic community; indigenous commitment; program quality; community engagement; and institutional effectiveness (VIU, 2018-D). The community engagement objective, outlines that |
| In 2017/18, VIU had 2,247 international students (15% of total headcount), from which almost 90 different countries were represented (27% from China, 20% from India, 12% from Japan, and 7% from Germany) (VIU, 2018-d; VIU, 2018-fff). From 2012/13 to 2017/18, International Student enrollment has increased by 39% (VIU, 2018-jjjj). The Master of Business Administration (MBA) attracts the most international students, with a headcount of 362 full-time equivalents in 2017/18 (VIU, 2018-kkkk). |
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

VIU is committed to fostering awareness of global cultures, issues, and conditions (VIU, 2018-D). Also, VIU aims to provide appropriate responses to regional cultural, economic, environmental, and social needs through relationships with business and industry organizations, communities, educational partners, governments, and Indigenous communities (VIU, 2018-D).

For some departments (e.g. Political Studies, Global Studies, and Sociology) global citizenship education is a fundamental component within the curricula (Political Studies, personal communication, September 18, 2018; Global Studies, personal communication, September 24, 2018; Sociology, personal communication, September 25, 2018). Political Studies focusses on educating students on global issues with an unbiased perspective (Political Studies, personal communication, September 18, 2018). Also, the idea of global citizenship education is important for the VIU High School (VIU High School, personal communication, September 17, 2018). The High School is very intentional about intercultural awareness and global inequalities and is participating in, along with eight other school districts in BC, the Global and Intercultural Skills Program ran by the BC Ministry of Education (VIU High School, personal communication, September 17, 2018; Government of British Columbia, 2018-b). At the core of this program are two courses: the Global Intercultural Studies Course, which looks at the notion of global citizenship, values, and beliefs around cultural understanding; and Global and Intercultural Experience 12, where students are able to apply their knowledge in projects (VIU

VIU's Academic Plan lists “Indigenous Commitment” as one of the six overall objectives and in 2018, VIU was recognized as a world leader in teaching excellence due in part to the institution’s commitment to social responsibility and Indigenous peoples (VIU, 2018-D; VIU, 2018-nnn). VIU was one of the only two Canadian universities to make the list as a finalist for the AdvanceHE 2018 Global Teaching Excellence Award (VIU, 2018-nnn). One example of a VIU initiative towards social responsibility is hosting The Walrus Talks in March 2018, a charitable, non-profit foundation with an education mandate to create discussions on important Canadian issues (VIU, 2018-nnn). The event at VIU focused on showcasing reconciliation between Canada’s Indigenous and non-Indigenous peoples and fostering world citizenship skills (VIU, 2018-nnn). Additionally, in 2016, the Jarislowsky Foundation provided VIU with $125,000 USD to become home of the first Fulbright Canada Jarislowsky Visiting Research Chair in Aboriginal Studies (VIU, 2016-b). This position is providing VIU’s Indigenous students with opportunities to be engaged in research, while also strengthening VIU’s relationships with First Nations, Inuit, and Métis communities (VIU, 2016-b). Another initiative towards Indigenous commitment involves collaborative work between the Faculty of Education and the BC Regional Innovation Chair for Aboriginal Early Childhood Development in contributing to the project Reorienting Education and Training Systems to Improve the Lives of Indigenous Youth (2017-2020). The project is led by UNESCO’s Chair in Reorienting Education Towards Sustainability and aims to improve the lives of Indigenous youth and communities by enhancing the quality of their education, while engaging them
High School, personal communication, September 17, 2018).

Topics of gender and human rights are introduced to students within a number of Social Science departments immediately in first year, such as through the following courses: POLI 100 (Identities and Communities: An Introduction to Politics), SOCI 111 (Introduction to Sociology), and GLST 100 (Through the Global Lens) (VIU, 2018-j). The education on this topic is continued throughout upper level courses as well, such as: POLI 301 (Implementing Human Rights), SOCI 322 (Sociology of Gender Relations), and CRIM 400 (Law and Human Rights) (VIU, 2018-j).

Global citizen education is also taught across campus through annual events such as Global Citizens Week, which has an academic focus on global issues, as well as WorldVIU Days, a celebration of cultural diversity (VIU, 2018-N; VIU, 2018-O). These annual events showcase VIU students and faculty in their efforts to find solutions to global issues and problems while celebrating cultural diversity (VIU, 2018-N; VIU, 2018-O). Additional global engagement events at VIU include International Women’s Day and International Refugee Day (VIU, 2018-aaaa).

in education for sustainable development (UNESCO, 2018-b). In this 5-year project, that involves over 120 institutions and communities across 40 countries, VIU is researching the ways in which education for sustainable development can enhance learning opportunities for Indigenous youth (VIU, 2018-rrrr). Also as part of this project, VIU hosted a community engagement event addressing the topics of Indigenous education and education for sustainable development. The event consisted of a project overview (SDGs), a world café, case studies for successful indigenous learning initiatives, and a closing circle (UNESCO, 2018-a).

To foster cross-cultural relationships, VIU’s Canada Research Chair in Community Research in Art, Culture and Education has created the Urban Community Action Centre for the Arts (VIU, 2019-S). The program uses creative processes to build relationships among Indigenous, non-Indigenous, and international youth (VIU, 2019-S). Another form of cross-cultural relationship building is through the VIU Faculty of International Education’s facilitation of International Cooperation projects. These projects all have a teaching focus on competency-based education and training, with an aim to improve educational programs in partner countries (Education Abroad, personal communication, November 21, 2019). Gender equality and human rights, as well as environmental issues, are addressed in different ways through each of these projects (Education Abroad, personal communication, November 21, 2019). For example, an ongoing partnership between VIU and Kisii National Polytechnic (KNP) in Kenya is working to develop a new building technology program at KNP, which involves developing the curriculum, training for teachers and technicians, and delivery of the
program (VIU, 2019-fff). The capacity-building approach of this partnership is helping Kenya to develop a teaching and learning centre, in addition to increasing cultural literacy and global citizenship amongst VIU faculty (Education Abroad, personal communication, November 21, 2019). This project has a gender equality component, as participants are actively working to encourage women to work non-traditional jobs (Education Abroad, personal communication, November 21, 2019). Other international cooperation projects in the form of capacity building partnerships (3-5 years) that have a pedagogy focus include: Improving Skills Training for Employment Program (Tanzania Hospitality/Tourism), Brong Ahafo Research and Extension Centre (Ghana), LED Africa (Malawi), Tra Vinh University Partnership (Vietnam), Heart of Gold Project (Costa Rica), and Spatial Data Infrastructure Training Program (Ukraine) (VIU, 2018-kkk).

As mentioned in the 2018 data, VIU is a member of the WUSC Student Refugee Program (SRP). In addition to sponsoring student refugees at VIU, the SRP student committee provides social support among students, helps build friendships and competency skills, raise education and awareness around important SDGs such as education for girls and conscious consumption (Education Abroad, personal communication, November 21, 2019). Another initiative that supports global citizenship education is WorldVIU Days, as described in the 2018 data. WorldVIU Days 2019 had a theme of Creating a Connected Community at VIU, and showcased initiatives of faculty, staff and students that increase social connections on and off campus, especially between international and domestic students or between people from different cultural backgrounds (Education Abroad, personal
communication, November 21, 2019). Some of the events included social gatherings, interactive workshops on equity, diversity and inclusion, presentations on student experiences, climate change and human rights, and cultural expression (Education Abroad, personal communication, November 21, 2019).

Departments such as Art and Design, Nursing, English, WEST, Child and Youth Care, Indigenous Studies, and Liberal Studies have global citizenship education incorporated as a key component of the program. In Art and Design, contemporary issues such as human rights and climate change are expressed through a variety of visual arts projects (Art and Design, personal communication, June 11, 2019). The department also brings in visiting artists from around the world to incorporate the idea of global citizenship education by promoting cultural diversity and lessons on how to be a good citizen (Art and Design, personal communication, June 11, 2019). Nursing students learn about the social determinants of health, and the SDGs, which often results in students bringing the SDGs into their work. Additionally, as part of NURS 318 (Health and Healing VI: Global Health Issues), students are required to complete activities related to global issues or global citizenship which typically include climate change discussions, student refugee support, attending an event during Global Citizens Week, and visiting Nanaimo’s Immigrant Welcome Centre (Nursing, personal communication, July 4, 2019). Global citizenship education is one of the main learning outcomes in English as it is part of the department’s mission statement (English, personal communication, August 22, 2019). The topic comes up in courses such as ENGL 222 (Travels in World Literature), ENGL 326 (Topics in Globalization and
Gender equality and human rights comes up in ENGL 222 (Travels in World Literature), ENGL 327 (Topics in International Literature) and ENGL 328 (Gender and Sexuality in Literature) (VIU, 2019-N); English, personal communication, August 22, 2019). The idea of global citizenship is embedded into the WEST curriculum and includes discussions about what it means to be a good citizen, current topics in local and global communities, and multiculturalism (WEST, personal communication, September 19, 2019). The course, CMCN 04 (Becoming a Citizen of the World) also intends to enhance students’ awareness and engagement in community issues (VIU, 2019-T). In the Early Childhood Education and Care courses ECEC 150 (Interpersonal Communication: Theory and Practice) and ECEC 222 (Program Development for Children with Diverse Abilities), the instructor incorporates the idea of global citizenship education (Aboriginal Early Childhood Education Chair, personal communication, October 31, 2019). These courses typically also have a lot of international students, and the instructor encourages them to share their stories and perspectives. (Aboriginal Early Childhood Education Chair, personal communication, October 31, 2019).

Additionally, the MBA program has global citizenship education as one of the five core program learning outcomes (VIU, 2019-U; BBA Management and Law, personal communication, June 4, 2019). VIU’s Bachelor of Business Administration programs also consistently have more International students than other Bachelors programs, and courses such as MGMT 323
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:
- electricity
- the internet for pedagogical purposes
- computers for pedagogical purposes
- adapted infrastructure and materials for students with disabilities
- basic drinking water
- single sex basic sanitation facilities

The entire VIU population has access to technology through the library computers and other computer labs across campus. VIU provides free WIFI to its employees, students, and guests (VIU, 2018-rr). Employees of VIU are also set up with a VIU email account, and offices and classrooms have phones. For peoples with disabilities, VIU has assistive stations and technology (VIU, 2018-G). The Accessibility Stations provide access to Kurzweil, Zoom Text and Inspiration software, which are available to all students (VIU, 2018-G). Kurzweil offers a text-to-speech program that reads the text out loud for individuals with disabilities that impair

To help youth in Africa obtain access to education, a VIU physics professor developed a charity, **LED Africa**, which provides solar powered lighting to rural schools in Malawi (LED Africa, 2019). Without the LED lights, students attend evening study sessions lit by paraffin lamps that are expensive and can cause health concerns (VIU, 2009-c). From 2009 to 2018, LED Africa installed and maintained solar powered lighting systems at 21 rural secondary schools in Malawi (LED Africa, 2019).

Regarding infrastructure and materials adapted for students with disabilities, VIU’s Universal Access Committee was established in May 2018 (Universal Access Committee, personal communication, 2018-G).
basic handwashing facilities (as per the WASH indicator definitions) | their reading (Kurzweil Education, 2018). Zoom Text is a magnification and reading program for individuals with low-vision (ZoomText, 2018). Inspiration provides a program to individuals who are more visual learners; individuals can create diagrams and visual representations of their content (Inspiration Software, Inc., 2018). Also, all students and staff at VIU have free access to Kurzweil and Firefly for their own devices (Disability Access Services, August 28, 2018). In 2012 VIU introduced the Assistance Phone System on the Nanaimo Campus, the system provides student access to assistance phones that are strategically placed all over campus (VIU, 2018-ss). This system was an addition to the Yellow Call Boxes on campus (VIU, 2018-ss). Additionally, VIU students and staff have a free subscription to Microsoft Office 365 to download on their personal laptops or computers (VIU, 2018-bbbb). VIU has water fountains and 33 water bottle filling stations installed at a variety of locations across campus (VIU, 2018-aa). In addition, all water available on campus from taps is safe for consuming. Furthermore, all bathrooms are single sex facilities, except for the new 22 gender neutral bathrooms located in buildings: 373, 380, 355, 356, 305, 255, 250, 180, 200, and 205 (The Nav, 2018-a; VIU, 2010-a). Bathroom facilities at VIU are required to include basic handwashing set ups (i.e. sink, soap dispenser, and paper towels) (VIU, 2015-a). VIU’s Accessibility Facility Design Criteria (2008) provides guidelines for the university to follow in order to better meet the needs of people with disabilities as well as older adults and January 7, 2020. The Committee is comprised of Directors from across campus that work to raise funding and awareness for campus accessibility (Universal Access Committee, personal communication, January 7, 2020). Between August 2018 and April 2019, all VIU buildings underwent audits by the Rick Hansen Foundation which gave each building a rating of how accessible they are (Universal Access Committee, personal communication, January 7, 2020; Rick Hansen Foundation, 2020). Some buildings received good ratings, but the majority are in need of significant upgrades (Universal Access Committee, personal communication, January 7, 2020). The Universal Access Committee applied for funding to perform upgrades, and received enough to improve nine of the campus buildings (Universal Access Committee, personal communication). So far, the Committee has guided the implementation of inclusive and accessible bathroom upgrades throughout various buildings on the Nanaimo campus (Universal Access Committee, personal communication, January 7, 2020). To increase wheelchair access on the Nanaimo campus, an upgraded ramp is under construction outside of building 345 (Universal Access Committee, personal communication, January 7, 2020). These upgrades allow individuals with specific needs to access education on campus (Universal Access Committee, personal communication, January 7, 2020). The Universal Access Committee also recently helped develop a VIU Nanaimo campus map that outlines accessible routes across the campus, including the degree of accessibility (i.e. steepness of slopes), accessible parking and bathroom locations, and which buildings have power doors and elevators (VIU, 2019-y). This map helps students, staff, faculty, and visitors navigate the campus if they are unable to
seniors on campus (VIU, 2008). The criteria states that if a facility has more than one level, it requires at least one elevator (VIU, 2008). VIU Facilities are constantly making small changes to infrastructure to better meet the needs of people with disabilities (Facilities Services & Campus Development, personal communication, September 21, 2018). Upgrades are being made to common areas so that they have accessible bathrooms (Facilities Services & Campus Development, personal communication, September 21, 2018). A barrier-free route is available for people with mobility issues, however, these routes still remain challenging (VIU, 2018-F; Disability Access Services, personal communication, August 29, 2018). The barrier-free routes cross over some parking lots and are not located in the most efficient and accessible places (Disability Access Services, personal communication, August 29, 2018). Facilities has created an update of the barrier-free route and consulted with the Student Disability Club and will be addressing some of the main problem areas in the barrier free route (Facilities Services & Campus Development, personal communication, September 21, 2018). For peoples with low vision, VIU has bright yellow lines outlining walking paths and has recently implemented tactile paving outside of the Welcome Centre to assist peoples with low vision (Facilities Services & Campus Development, personal communication, September 21, 2018).

VIU@Cowichan Innovation Lab is working with School District 79 to break the digital divide by increasing access to opportunities to learn how

climb stairs (Universal Access Committee, personal communication, January 7, 2020). VIU’s Facilities Services is also working towards ensuring increased accessibility by implementing universal access into all campus repairs and upgrades (Universal Access Committee, personal communication, January 7, 2020).
to code, especially in remote communities (VIU@Cowichan, personal communication, September 20, 2018). The Lab’s “Place Specific Learning Modules” project involves updating learning modules to be place-specific for the Cowichan Valley (VIU@Cowichan, personal communication, September 20, 2018). In other words, the grammar and wording of texts were changed to make sense to Cowichan indigenous students in an attempt to prevent learning challenges due to language differences.

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 | VIU offers about 580 scholarships to students, most of which are targeted towards specific characteristics of the student: four are available for Aboriginal Education; 13 for Athletics; 30 for Adult Basic Education; 64 for the Faculty of Arts and Humanities; 21 for the Faculty of Education; 64 for the Faculty of Health and Human Services; 48 for the Faculty of Management; 84 for the Faculty of Science and Technology; 16 for the Faculty of Social Sciences; 81 for the Faculty of Trades and Applied Technology; and 147 that are more generalized for anyone at VIU (VIU, 2018-i). Additionally, VIU offers around 200 bursaries: 11 for Aboriginal students; 15 for Academic & Career preparation; 3 for Business; 5 for Culinary Arts and Hospitality Management; 8 for Education; varying number for the VIU International Refugee Newcomer award; 3 for Fisheries & Aquaculture; 8 for Forest Resources; 100+ for General Criteria Bursaries; 23 for Health and Human Services; varying number for Performing Arts; 10 for Science and Applied Science; 2 for Tourism and Recreation; and 11 |

In 2018/19, more than $3.4 million was disbursed to students for scholarships, awards, and bursaries, with the average value of award per student at $1,063 (VIU, 2018-fff). For grade 12 students from Indigenous communities, Friendship Centres, or Métis Organizations on Vancouver Island, Chancellor’s Full Tuition Scholarships are available and are renewable for the duration of the student’s undergraduate studies (VIU, 2018-i). VIU President’s Entrance Scholarships are available to one top academic grade 12 student from each Vancouver Island Public and Private High School, and are renewable for the duration of the student’s undergraduate studies at VIU (VIU, 2018-i). VIU’s Faculty of Business partners with the Ch’Nook Scholars program, which provides Indigenous post-secondary business students with support to succeed in their studies and careers (UBC Sauder School of Business, 2019). A gathering for Ch’Nook scholars was held at the VIU Nanaimo campus in 2016, and there is currently one B.A. student who is a scholar, while there have been approximately five other VIU scholars in the past (BBA Management and Law, personal communication, June 4, 2019).
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<th>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</th>
<th>for Trades and Applied Technology (VIU, 2018-H).</th>
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| 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 | The Faculty of Education at VIU offers a Bachelor of Education and a Post Baccalaureate in both elementary and secondary ages (VIU, 2018-L). VIU’s Education programs are committed to providing education training that is “current, relevant, and meets the practical needs expressed by the field” as it educates its students to follow the B.C. Provincial curricula (VIU, 2018-M, para. 1).

Within the Faculty of Education, there are 150 students, but the numbers have been growing and by 2021 they expect to have about 186 students (Education, personal communication, September 17, 2018). In 2018, there were 150 graduates from the program. Primarily, the VIU Education program is producing K-12 teachers and graduates are successful at obtaining jobs in the field as there is a current teacher shortage (Education, personal communication, September 17, 2018). |
| As described in the 2018 data, WUSC supports student refugees in their education at VIU. The main fundraising event for WUSC is the annual Harambee Gala Dinner which includes an evening with a 4-course meal, live entertainment, Fair Trade sales, and a silent auction (VIU, 2019-X). VIU also has an International Refugee Newcomer Award for refugees who are new to Vancouver Island and are seeking post-secondary education (VIU, 2019-z). | Due to the high demand for jobs in Early Childhood Education and Care on Vancouver Island, VIU doubled its capacity for the ECEC program for the September 2019 intake (VIU, 2019-B). Graduates of the program are certified as early childhood educators and are eligible to certify as Infant, Toddler, and Special Needs workers (VIU, 2019-B). As previously discussed in indicator 4.2.1, the program has also expanded to the VIU Powell River Campus to meet the high demand for qualified ECEC workers in the area (VIU, 2019-J). |
## Appendix H

Compiled Data for Goal 5: Achieve gender equality and empower all women and girls

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>2018 Data</th>
<th>2019 Data</th>
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<tr>
<td>5.1 End all forms of discrimination against all women and girls everywhere</td>
<td>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</td>
<td>VIU has a number of policies and supplementary procedures that address harassment, including: Policy 21.05 (Personal Harassment), Policy 21.03 (Human Rights), Procedure 21.05.001 (Responding to Complaints of Personal Harassment), and Procedure 21.03.001 (Human Rights Education Initiatives &amp; Complaint Resolution) (VIU, 2018-S). Policy 21.05 and Policy 21.03 are similar, both state that VIU aims to provide an environment free of harassment and discrimination of all kinds, including sex and gender. Policy 21.03 simply follows the BC Human Rights Code. To further address discrimination and/or harassment at VIU, all employees are required to take the Preventing and Addressing Workplace Harassment: Rights and Responsibilities Course. VIU’s Human Rights and Respectful Workplace Office (HRRWO) has an online Toolkit for Addressing Workplace Harassment available to anyone (VIU, 2018-II). VIU has also taken on some initiatives to address discrimination and harassment. The Know More Campaign and the Positive Space Campaign, along with a series of workshops hosted by the HRRWO for students and employees each year, help to address this indicator. Related to discrimination, in the 2013/14 school year HRRWO presented 51 educational events and 16 events in 2015/16 (VIU, 2014-a; VIU, 2016). Prior to these two campaigns, VIU Students’ Union has been hosting workshops in collaboration with VIU and the Human Rights and Respectful Workplace Office (HRRWO) aim to promote gender equality among faculty and staff through education and support both on and off campus (Human Rights and Respectful Workplace Office, personal communication, May 27, 2019). As mentioned in the 2018 data for this indicator, VIU has a number of policies that address harassment. Policy 21.03 (Human Rights) is currently under revision and being rewritten (Human Rights and Respectful Workplace Office, personal communication, May 27, 2019; VIU, 2018-S). In VIU’s CUPE Collective Agreement it states that VIU, as an employer, “shall not discriminate between male and female employees by employing a person of one sex for any work at a rate of pay that is less than the rate of pay at which a person of the other sex is employed for similar or substantially similar work” (VIA, 2019-aa, p. 51). VIU has a Sexual Violence and Harassment Education and Response Steering Committee which aids in the development of VIU policies and educates students through events on campus (VIU, 2019-Y; The Nave, 2018-c). VIU Residence also has a set of community standards in place that all residents must comply with (Residence, personal communication, July 22, 2019; VIU, 2019-ee). Any behaviours or activities that are threatening, racist, sexist, or reflect any form of discrimination or harassment are prohibited (Residence, personal communication, July 22, 2019). In addition to policies, VIU is currently undergoing infrastructural changes that aim to eliminate gender-based discrimination. In 2015, the VIU Positive Space Alliance worked with VIU Human Resources and the VIU Faculty Association to make gender neutral signage for twenty-two bathrooms on campus (The Nav, 2019). As of 2017/18, VIU’s...</td>
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the University of Victoria on understanding consent (Students’ Union, personal communication, August 28, 2018). VIU also hosted a presentation from West Coast Leaf on the topic of consent, looking at the legal definitions, frequently asked questions on the law of consent and sexual assault in Canada, and legal rights and procedures following sexual assault (Counselling Services, personal communication, August 7, 2018; West Coast Leaf, 2018).

Additionally, as of the fall of 2018, the editorial operations for the world’s leading journal on the history of gender relations is based out of VIU (VIU, 2018-x). Three VIU History professors have taken on the role to be co-editors of the Gender & History journal for the next five years (VIU, 2018-x). With this role, they must publish three issues per year and host an international conference on a topic related to gender every second year – the first Gender & History symposium hosted by VIU will be held in 2020 (VIU, 2018-x).

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, Projects within the Centre for Community Outreach and Care program addresses bringing awareness to sexual abuse and exploitation as well as supporting young females who have experienced abuse (Centre for Community Outreach and Care, personal communication, September 27, 2018). The Youth Sexual Exploitation Prevention program brings awareness to the prevalence of youth sex trafficking in Nanaimo (Centre for Community Outreach and Care, personal communication, September 27, 2018). The VIU community strives to have a culture of inclusion and equality on campus. HRRWO aims to create an inclusive and respectful environment at VIU when dealing with cases of disclosure. HRRWO aims to allow individuals who experience sexual misconduct to define their experience on their own terms and ensure that it is not being defined for them (Human Rights and Respectful Workplace Office, personal communication, May 27, 2019). The VIU Students’ Union and community show support for survivors and allies of gender-based violence and sexism by participating in the 16 Days of Activism Against Gender Based Violence (VIU, 2018-III; Center
by form of violence and by age | September 27, 2018. A couple other projects (“Sanala Housing” and “Friday Night Lights”) provides youth with activities that help to reduce their exposure to harmful situations that might lead to sexual violence (Centre for Community Outreach and Care, personal communication, September 27, 2018). Additionally, VIU in cooperation with Haven Society and Ending Violence Association of B.C. (EVA B.C.) has offered training sessions for faculty and staff to learn how to receive disclosures of sexual violence (VIU, 2018-T; Haven Society, 2018; Ending Violence Association of BC, 2018).

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 | VIU’s HRRWO produces an annual report that highlights the number of discrimination or violence claims that occur on campus; in the 2015/16 report just one alleged sexual harassment complaint occurred that year (VIU, 2016). This number has gone down from nine sexual harassment complaints in 2014/15, eleven in 2013/14, and four in 2012/13 (VIU, 2015-b; VIU, 2014-a; VIU, 2013-a). These reports do not identify the gender identification of the alleged victims or who their perpetrators were. They also do not necessarily suggest that less incidents are occurring on campus, just that less are being reported.

As mentioned above, Haven Society and EVA B.C provide training sessions for faculty and staff on how to receive disclosures of sexual violence (VIU, 2018-T). Additionally, as discussed in more detail above in indicator 5.2.1, the Centre for Community Outreach and Care has projects that...
address sexual abuse and exploitation, such as the “Youth Sexual Exploitation Program”, “Sanala Housing”, and “Friday Night Lights” (Centre for Community Outreach and Care, personal communication, September 27, 2018).

| 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 |
|  | This target was not included in this study as child marriages and genital mutilation are both illegal in Canada. |

| 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 |
|  | This target was not included in this study as its only indicator was deemed irrelevant to an educational institution. |
| 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 | 5.5.1 Proportion of seats held by women in (a) national parliaments and (b) local governments | The Criminology department offers a couple courses that address this indicator, CRIM 334 (Law and Society) and CRIM 135 (Intro to Canadian Law and Legal Institutions: A Criminal Justice Perspective) (VIU, 2018-j). These courses educate students on gender representation within governments and encourages students to think critically about the current state of equality within legal institutions (Criminology, personal communication, September 28, 2018).

Within Studies in Women and Gender (SWAG) and Sociology, among other departments, students learn about gender inequalities, which includes women’s participation in the workforce and government (Arts and Humanities, personal communication, September 11, 2018; Sociology, personal communication, September 25, 2018). Courses offered through these programs include: SOCI 390 (Leading from where you stand: Leadership for Social Science Students), SOCI 209 (Social Inequality), SOCI 322 (Sociology of Gender Relations), WOST 100 (Young Women and Leadership: Issues and Action), SWAG 341 (Women and the Law), SWAG 320 (Women & Leadership), and POLI 336 (Gender & Equality) (VIU, 2-18-j). Females in SWAG, Sociology, and Political Studies do not specifically learn how to secure positions in the government, but through the program they learn the skills that will support them to take on leadership roles and build capacity (Arts and Humanities, personal communication, September 11, 2018; Sociology, personal communication, September 25, 2018; Political Studies, personal communications, September 18, 2018). Women in these programs are encouraged to have a public voice and perceive their roles in society differently (Arts... |
### 5.5.2 Proportion of women in managerial positions

Within the managerial positions at VIU, 40 out of 60 of the positions are held by women (VIU, 2018-U). Looking at other senior positions at VIU, women hold a fairly equal proportion of those positions. Nineteen out of 26 Deans at VIU are women (VIU, 2018-U). Almost half of the Department Chairs are women (26 out of 55) (VIU, 2018-U). In VIU’s Executive Team, three out of six are women and four out of six of the Senior Administrators are women (VIU, 2018-U).

As mentioned previously, VIU offers courses that focus on gender inequalities and promoting leadership in women (SOCI 322, SWAG 320 & WOST 100) (VIU, 2018-j). Through these courses, women are encouraged to have a public voice and learn the skills to support them in leadership roles. Political Studies students are able to receive credit for a managerial position that they have through co-ops or internships, which provides them direct applied experiences (Political Studies, personal communication, September 18, 2018).

In July 2019, VIU welcomed Dr. Deborah Saucier as the new President and Vice Chancellor, who is an experienced administrator, accomplished neuroscientist, and devoted educator (Nanaimo News Bulletin, 2019). Through ongoing assessment of employee statistics, VIU Human Resources has noticed a shift in gender-based representation at VIU over the last few years with women now being well represented at VIU (Human Resources, personal communication, October 28, 2019). For example, 3 out of 5 of VIU’s Research Chairs are women (Equity, Diversity and Inclusion, personal communication, November 27, 2019). Human Resources ensures recruitment at VIU follows an inclusive and fair process (Human Resources, personal communication, October 28, 2019). Human Resources search committees also participate in training to ensure that they follow a defensive process and their hiring decisions are strongly supported (Human Resources, personal communication, October 28, 2019). Training methods include understanding Canada’s training guidelines, asking appropriate questions, and acknowledging unconscious bias (Human Resources, personal communication, October 28, 2019). Human Resources also helps train individuals to be mindful of biases and provides education on human rights legislation (Human Resources, personal communication, October 28, 2019). In addition, VIU’s Equity, Diversity and Inclusion team plans to collect data on how many women are in leadership positions at VIU (Equity, Diversity and Inclusion, personal communication, November 27, 2019).
This data, along with other data, will inform the development of their Action Plan regarding Equity, Diversity and Inclusion at VIU (discussed in more detail in indicator 5.1.1) (Equity, Diversity and Inclusion, personal communication, November 27, 2019).

Courses such as MGMT 292 (Organizational Behaviour) MGMT 293 (Human Resource Management), MGMT 377 (Recruitment and Selection), HIST 280 (The U.S. First Ladies, 1789-1885: Gender, Power and Politics), and HIST 281 (The U.S. First Ladies from 1885: Gender, Power, and Politics) discuss gender equality and promoting leadership in women (Management and Law, personal communication, June 4, 2019; History, personal communication, August 27, 2019; VIU, 2018).

| 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 | Every student at VIU is offered the Health Benefit Plan for $275 per year (Vancouver Island University Students’ Union, 2018-a). Through this plan, 20% of contraceptives are covered (Greenshield Canada, 2018). At the VIU Health and Wellness Centre, female students of all ages are provided with various services and information needed to make their own informed decisions regarding their sexual health and care (VIU, 2018-v). Pamphlets are provided at the Health and Wellness Centre and their website provides links to services off campus and other information (VIU, 2018-W). In regard to sexual health, female students have access to PAP tests, STI tests, and contraceptives at the Health and Wellness Centre (Health & Wellness Centre, personal communication, August 15, 2018). Contraceptive prescriptions are the most single written prescriptions that go through the Health and Wellness Centre (Health & Wellness Centre, personal communication, August 15, 2018). However, it is important to note that VIU’s Canada Research Chair in the Historical Dimensions of Women’s Health is researching how women experience birth and are treated during labour (CBC News, 2019). This research aims to provide support for ongoing inequities and policy efforts in women’s health by looking at the historical roots of medical attitudes toward women’s bodies and pain experiences (CBC News, 2019; VIU, 2019-dd). The Research Chair also plans to host a conference at VIU exploring themes such as medical violence, childbirth trauma, the history of women’s pain, and perceptions of women’s health (VIU, 2019-dd). |
prescriptions cannot be filled at VIU, students have to travel off campus; this potentially creates a barrier for students that live in Residence and cannot easily get themselves to nearby pharmacies. Also, the Health and Wellness Centre gives referrals to obstetricians and provides prescriptions for Plan B or the morning after pill (Health & Wellness Centre, personal communication, August 15, 2018).

In addition to providing contraceptives and information, the Health and Wellness Centre has assisted students in the past with unplanned pregnancies and termination of pregnancies (Health & Wellness Centre, personal communication, August 15, 2018). However, due to the nature of being a post-secondary institute, cases of unplanned pregnancies are rare since most students are focused on their education and professional development (Health and Wellness Centre, personal communication, August 15, 2018).

Unfortunately, the space and services available at the Health and Wellness Centre are limited and stressed under the demand by the number of students in need (Health & Wellness Centre, personal communication, August 15, 2018).

<p>| 5.6.2 Number of countries with laws and regulations that guarantee full and equal access to women and men aged 15 years and older to sexual and reproductive health | This indicator was not included as it was beyond the scope of this study to look into what Canada is doing to achieve equal access to health care. |</p>
<table>
<thead>
<tr>
<th>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</th>
<th>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</th>
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<tr>
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<td>This target was deemed irrelevant to VIU and was beyond the scope of this study to look into the proportion of Canadians with agricultural land ownership.</td>
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<td>5.a.2 Proportion of countries where legal framework (including customary law) guarantees women’s equal rights to land ownership and/or control</td>
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<tr>
<td>5.b Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women</td>
<td>5.b.1 Proportion of individuals who own a mobile telephone, by sex</td>
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<tr>
<td></td>
<td>This target was not included in this study as its indicator looks at the proportion of people that have access to a cellphone. We determined this as irrelevant to Canada as a whole.</td>
</tr>
<tr>
<td>5.c Adopt and strengthen sound policies and</td>
<td>5.c.1 Proportion of countries with systems to track and</td>
</tr>
<tr>
<td>care, information and education</td>
<td>As mentioned previously in the 2018 data, VIU’s programs and courses encourage women to have a public voice, while teaching them empowering skills. VIU has two Women in</td>
</tr>
</tbody>
</table>
| enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels | make public allocations for gender equality and women’s empowerment | Trades Training pathways of funding opportunities: Trade Sampler programs and trade specific Foundation Training programs (VIU, 2019-cc). Through the Trade Sampler programs, women are exposed to various trades (welding, electrical, carpentry, heavy duty mechanics, auto mechanics, and motorcycle and marine mechanics) and opportunities through hands-on learning, career mentorship, and site tours (VIU, 2019-cc). This fully funded program for eligible applicants, hopes that through experiencing the different options, women will pursue a trades program (Carpentry, personal communication, October 22, 2019; VIU, 2019-cc). The Foundation Training program offers sponsorship to women as they pursue their trade (VIU, 2019-cc).

As mentioned above in indicator 5.1.1, VIU has established an Equity, Diversity and Inclusion team. The team will review VIU’s policies and collect data related to pay equity and statistics of how many women are employed at VIU (Equity, Diversity and Inclusion, personal communication, November 27, 2019). |
Appendix I

Compiled Data for Goal 6: Ensure availability and sustainable management of water and sanitation for all

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>2018 Data</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all</td>
<td>6.1.1 Proportion of population using safely managed drinking water services</td>
<td>All people at VIU have access to clean and safely managed drinking water services. VIU has water fountains and 33 water bottle filling stations installed at a variety of locations across campus (VIU, 2018-aa). Additionally, all tap water available on campus is safe for consuming (City of Nanaimo, 2017).</td>
<td></td>
</tr>
<tr>
<td>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</td>
<td>6.2.1 Proportion of population using (a) safely managed sanitation services and (b) a handwashing facility with soap and water</td>
<td>Every building has at least one set of bathroom facilities that include basic handwashing setups (e.g. sink, soap dispenser and paper towels) (VIU, 2015-a). VIU also has hand sanitizer stations all over campus.</td>
<td></td>
</tr>
<tr>
<td>6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and</td>
<td>6.3.1 Proportion of wastewater safely treated</td>
<td>There are two main waste water streams at VIU, the sanitary sewer and storm sewers, both of which are managed by the City of Nanaimo (Facilities Services &amp; Campus Development, personal communication, September 21, 2018). However, VIU is conscious of its wastewater and makes attempts to help handle rain water flow (Facilities Services &amp; Campus Development, personal communication, September 21, 2018). Storm water is appropriately handled on</td>
<td></td>
</tr>
</tbody>
</table>
| 6.3.2 Proportion of bodies of water with good ambient water quality | The Mount Arrowsmith Biosphere Region Research Institute (MABRRRI) has a few different projects that address ambient water quality (VIU, 2018-bb). The Wetland Mapping project, through a partnership with the Regional District of Nanaimo, is aimed to gain a better understanding of the water resources, specifically wetlands, in the region (VIU, 2018-bb). The Lake Monitoring project focuses on the Little Qualicum Water Region and is training students to monitor lake health following the BC Lake Stewardship Society’s standards (BCLSS) (VIU, 2018-bb).

Courses offered within the Biology, Geology, Fisheries and Aquaculture, and the Resource Management and Protection programs at VIU touch on the topic of water resources and quality through classroom discussions and hands on experience, which is discussed in more detail below in Indicator 6.6.1. |

Through AERL, a VIU Biology graduate is working to develop a measurement technique that will analyze water quality in rivers, lakes, or oceans immediately on-site (VIU, 2019-P). The technique will determine if the water has been contaminated with toxic chemicals (VIU, 2019-P). |

| 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 water usage | VIU’s Policy 44.12 states that VIU is committed to being a sustainability leader, which is implemented through policies and practices (VIU, 2018-e). Over the years, VIU has been taking action through initiatives such as the VIU Water Pledge, water bottle filling stations and the Water Wise Challenge (VIU, n.d.; VIU, 2018-aa; VIU, 2018-dd). Additionally, the Cowichan Campus, the G.R. Paine Horticultural Centre, and the Deep Bay Marine Field Station use water efficient methods such as low-flow plumbing fixtures and rain water collection for irrigation and reduced water usage (Facilities Services & Campus VIU Residence is working to educate students about sustainable water use practices and have been replacing hot water heaters in the residence buildings with newer, more sustainable models (Residence, personal communication, July 22, 2019). The Cowichan campus practices water-use efficiency through a few different methods (Cowichan campus, personal communication, September 4, 2019). Native, drought resistant plants are used for landscaping and require minimal irrigation (VIU, 2019-ff). When the Cowichan campus needs to irrigate, rainwater that has been collected from the water capture system is used (Cowichan campus, personal communication, September 4, 2019; VIU, |
reduce the number of people suffering from water scarcity

VIU has records of its water use, as it is billed quarterly to the university from the City, and has been taking steps to increase its water use efficiency (Facilities Services & Campus Development, personal communication, September 21, 2018). In terms of water consumption, most of the water consumed at VIU is done at the individual level rather than the industrial level (Facilities Services & Campus Development, personal communication, September 21, 2018). Over the years, VIU has increased its water consumption due to more people on campus; however, it has become more efficient about it (i.e. on a per person basis we are using less) (Facilities Services & Campus Development, personal communication, September 21, 2018). In 2017, all of the culinary refrigeration systems that used water for their cooling system were replaced to reduce water consumption (Facilities Services & Campus Development, personal communication, September 21, 2018). In addition, all toilets have been changed to low flow toilets (Facilities Services & Campus Development, personal communication, September 21, 2018). Each time a product breaks or needs replacing, VIU Facilities replaces it with a new, updated and more efficient product (e.g. new refrigerators, toilets, shower heads, and sinks) (Facilities Services & Campus Development, personal communication, September 21, 2018).

6.4.2 Level of water stress: freshwater withdrawal as a proportion of

As mentioned above for indicator 6.4.1, VIU has taken steps towards being more water efficient. Related more to water stress, VIU follows the Regional District of Nanaimo’s water regulations (Regional District of Nanaimo, 2018). For example, in 2019-ff). The Cowichan campus also has a monitor board that shows the campus’ water consumption and energy use in order to track consumption patterns (Cowichan campus, personal communication, September 4, 2019).
A VIU Geography professor and a Master of Geographic Information Systems Applications student have partnered with the Government of B.C. and local municipalities to develop a water budget for Vancouver Island (VIU, 2018-cc). The water budget will help water managers (i.e. B.C. Government and regional governments) and the public understand how much water is available in B.C. Inputs and Outputs of water within the region will be monitored and a publicly accessible interactive map of the water available will be developed (VIU, 2018-cc).

Courses offered within the Biology, Geography, and Resource Management and Protection programs touch on the topic of water resources (VIU, 2018-j). Some of these courses include: RMOT 306 (Environmental Monitoring), GEOG 346 (Urban Change Management), GEOG 350 (Natural Resource Management), and BIOL 320 (Aquatic Ecosystems) (VIU, 2018-j).

<table>
<thead>
<tr>
<th>6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate</th>
<th>6.5.1 Degree of integrated water resources management implementation (0-100)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This target was determined not applicable to an educational institution and it was beyond the scope of this project to look into water resources management in Canada.</td>
</tr>
</tbody>
</table>
| 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 | Research in VIU’s Earth Science department, on Quadra Island karst systems, is working towards a better understanding of karst aquifers and catchments in the region (VIU, 2018-rrrr). A permanent water monitoring site was installed at the Stramberg Spring to understand how it is recharged, which will provide land management recommendations for the spring catchment and assist in protecting the water resource (VIU, 2018-rrrr).

Another project undertaken by VIU’s Earth Science department aimed to improve groundwater management for the region (VIU, 2018-rrrr). This project involved a partnership between two VIU faculty members, 75 VIU students, the Regional District of Nanaimo (RDN), and the RBC Foundation (VIU, 2018-rrrr). To gain an understanding of subsurface geological conditions that relate to groundwater recharge, faculty and students conducted geophysical surveys and borehole data analyses to develop geological models of the subsurface (VIU, 2018-rrrr). The aim of the project was to guide groundwater management by making recommendations to the RDN, while determining areas that are vulnerable to contamination (VIU, 2018-rrrr).

A collaboration between VIU and the University of Northern British Columbia (UNBC) has received $2.4 million in funding to understand the role that seasonal snow cover and glaciers play in the hydrology of key watersheds along BC’s Central and Southern Coast (VIU, 2019-ii). The importance of glaciers is in the transport of vital nutrients through coastal watersheds to the ocean (VIU, 2019-ii). The research team has installed a weather station and camera at Klinaklini Glacier, one of North America’s largest, to provide flood and avalanche forecasting, showcase the dynamic conditions of glaciers, and improve an

<p>| Students within the Biology, Fisheries and Aquaculture, Forestry, Geology, and the Resource Management and Protection programs learn about this indicator in courses such as BIO 320 (Aquatic Ecosystems), FRST 143 (Forest Hydrology and Riparian Management), RMOT 306, RMOT 206 (Habitat Management), GEOL 304 (Hydrogeology), FISH 253 (Fisheries Engineering I – Hydrogeology), and FISH 132 (Aquatic Habitats) (VIU, 2018-ji). Fisheries and Aquaculture and Resource Management and Protection students get hands on experience with monitoring local lakes and water systems (e.g. Cottle Creek, Richards Creek, &amp; Englishman River) and in BIO 320 students have been monitoring lakes for over 10 years (Fisheries &amp; Aquaculture, personal communication, October 2, 2018; Resource Management and Protection, personal communication, September 11, 2018; Biology, personal communication, September 10, 2018). Research done by the Coastal Hydrology and Climate Change Research Lab at VIU has monitored watersheds in various areas and snow-covered areas for the entire coast of North America (Coastal Hydrology and Climate Change Research Lab, 2018). One of the projects that the lab is engaged in is the Kwakshua Watersheds project on Calvert Island (Coastal Hydrology and Climate Change Research Lab, personal communication, October 10, 2018). Through this project the lab is monitoring discharge from seven small watersheds in an attempt to determine how much freshwater is entering the ocean (Coastal Hydrology and Climate Change Research Lab, personal communication, October 10, 2018). Another project done through the Coastal | Students within the Biology, Fisheries and Aquaculture, Forestry, Geology, and the Resource Management and Protection programs learn about this indicator in courses such as BIO 320 (Aquatic Ecosystems), FRST 143 (Forest Hydrology and Riparian Management), RMOT 306, RMOT 206 (Habitat Management), GEOL 304 (Hydrogeology), FISH 253 (Fisheries Engineering I – Hydrogeology), and FISH 132 (Aquatic Habitats) (VIU, 2018-ji). Fisheries and Aquaculture and Resource Management and Protection students get hands on experience with monitoring local lakes and water systems (e.g. Cottle Creek, Richards Creek, &amp; Englishman River) and in BIO 320 students have been monitoring lakes for over 10 years (Fisheries &amp; Aquaculture, personal communication, October 2, 2018; Resource Management and Protection, personal communication, September 11, 2018; Biology, personal communication, September 10, 2018). Research done by the Coastal Hydrology and Climate Change Research Lab at VIU has monitored watersheds in various areas and snow-covered areas for the entire coast of North America (Coastal Hydrology and Climate Change Research Lab, 2018). One of the projects that the lab is engaged in is the Kwakshua Watersheds project on Calvert Island (Coastal Hydrology and Climate Change Research Lab, personal communication, October 10, 2018). Through this project the lab is monitoring discharge from seven small watersheds in an attempt to determine how much freshwater is entering the ocean (Coastal Hydrology and Climate Change Research Lab, personal communication, October 10, 2018). Another project done through the Coastal |</p>
<table>
<thead>
<tr>
<th>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</th>
<th>6.a.1 Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan</th>
</tr>
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<tbody>
<tr>
<td>Hydrology and Climate Change Research Lab has been monitoring the long term effects (started in 1992) of climate on snow in Russell Creek (Coastal Hydrology and Climate Change Research Lab, personal communication, October 10, 2018).</td>
<td>understanding of the importance of freshwater discharge to the ocean (VIU, 2019-ii).</td>
</tr>
<tr>
<td>6.b Support and strengthen the participation of local communities in improving water and sanitation management</td>
<td>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</td>
</tr>
<tr>
<td>It was beyond the scope of this project to look into Canada’s involvement with supporting developing countries in water and sanitation activities.</td>
<td>In partnership with the Coastal First Nations-Great Bear Initiative, VIU offers resource stewardship training to Coastal First Nations communities in BC through the First Nations Stewardship Training program (VIU, 2019-eee). This program provides students with the necessary skills training that will allow them to work for their Nation in jobs such as fisheries technician, heritage surveyor, or environmental monitor (VIU, 2018-eee). Courses in this program that relate water and sanitation management include NREN 024 (Essential Field Skills), NREN 022 (Construction Site Monitoring), RMOT 165...</td>
</tr>
</tbody>
</table>
(Compliance Communications and Resource Monitoring), and NREN 025 (Water Monitoring Skills) (VIU, 2018-eee).
### Appendix J

Compiled Data for Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>2018 Data</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1 By 2030, ensure universal access to affordable, reliable and modern energy services</td>
<td>7.1.1 Proportion of population with access to electricity</td>
<td>In 2009 a VIU faculty member from the Physics department established the charity LED Africa, which promotes science education and provides solar powered lighting to rural schools in Malawi, Africa (Physics personal communication, November 7, 2019; LED Africa, 2019). Between 2009 and 2018, LED Africa installed lighting systems in 21 rural schools in Malawi and launched the Science for All project in 2013 (LED Africa, 2019). The Science for All project provided educational materials such as science textbooks, equipment, and demonstration manuals to schools in Africa (LED Africa, 2019). VIU faculty and students also host an annual Extreme Science show at VIU to fundraise for LED Africa (Physics, personal communication, November 7, 2019; VIU, 2011-b; VIU, 2015-c).</td>
<td></td>
</tr>
<tr>
<td>7.1.2 Proportion of population with primary reliance on clean fuels and technology</td>
<td>This indicator was not included as it was beyond this study’s scope to understand how Canada is ensuring that people have access to clean fuels. We have looked into whether or not VIU uses renewable energy on campus (Target 7.2); all students, faculty, and staff have access to those that we have identified, as well as have access to the electricity on campus.</td>
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</tr>
<tr>
<td>7.2 By 2030, increase substantially the share of renewable energy in the global energy mix</td>
<td>7.2.1 Renewable energy share in the total final energy consumption</td>
<td>VIU’s Policy 44.14 states that VIU is committed to being a sustainability leader, which is implemented through policies and practices (VIU, 2018-e). The Energy Management Policy for VIU states that its third goal is to “seek environmentally neutral sources of heating, cooling, and energy” (VIU, 2018-ff). VIU has also taken some steps towards using renewable energy within its infrastructure (VIU, 2018-gg). Currently VIU has two LEED certified buildings at the Nanaimo campus (Buildings 250 and 480) and soon the new Health and Science building and 108 will be</td>
<td>As mentioned in the 2018 data for this indicator, VIU utilizes a geo-exchange system, which was implemented on the Nanaimo campus in June 2018. The second phase of the implementation is expected to begin in 2022 and has a budget of $2,800,000 (VIU, 2018-g). Students in VIU’s Carpentry program learn about clean technology within the classroom and through hands-on opportunities (Carpentry, personal communication, October 22, 2019). In the classroom, Carpentry students learn about solar power, air movement, and recognizing</td>
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LEED certified (Facilities Services & Campus Development, personal communication, September 21, 2018). LEED certification is based off of the Leadership in Energy and Environmental Design (LEED) Green Building Rating Systems which is an internationally accepted benchmark for sustainable green building and development practices (VIU, 2018-b). The Cowichan Campus (building 700) is also LEED certified; it uses daylight as 90% of its lighting source, has a green roof, and uses a geo-exchange system (VIU, 2018-gg). VIU does not use solar energy for any of its buildings, due to financial feasibility. However, VIU does utilize solar streetlights and crosswalks (Facilities Services & Campus Development, personal communication, September 21, 2018). As of June 2018, VIU has implemented a geo-exchange system at the Nanaimo campus that provides energy to the new Health and Science Centre, building 170, and soon to building 205. This geo-exchange system heats and cools the buildings from the energy stored in water trapped in the Wakesiah mine (VIU, 2018-hh). Based off of the Campus Master Plan, there are plans to use almost as much as four times the amount of geo exchange as there is today at VIU (VIU, 2009). Following provincial regulations and VIU’s vision, any new buildings built will be LEED certified and therefore more sustainable (Facilities Services & Campus Development, personal communication, September 21, 2018).

Through departments such as Geography, VIU offers courses that touch on the topic of renewable energy, such as GEOG 101 (Environmental Geography), GEOG 346 (Urban Change Management), GEOG 350 (Natural Resource Management), GEOG 352 (Managing Natural and Social Capital), and SCIE 350 (Technologies for the Developing World) (VIU, 2018-j). Additionally, students in the Horticulture program energy inefficiencies, while looking at examples from other countries (Carpentry, personal communication, October 22, 2019). Guest lectures are also delivered by local industry partners to Carpentry students about sustainable practices (Carpentry, personal communication, October 22, 2019). The VIU Carpentry program also had the opportunity to help build a footbridge (to increase accessibility) for the Green Point Project, which is working to re-build The Green Point home, an Archeological site that was home to the Cowichan First Nation’s Chief Tzouhalem (Carpentry, personal communication, October 22, 2019; The Green Point Project, 2019-a). The project is using sustainable approaches to attain Living Building Challenge, Passive Home, and Green Shores for Homes certifications (The Green Project, 2019-b; The Green Project, 2019-c). In the course SCIE 350 (Technologies for the Developing World), students learn about renewable energy and consider examples where science and technology have been applied to assist the developing world (Engineering, personal communication, November 7, 2019; VIU, 2018-j). Management students also learn about renewable energy in MGMT 494 (Strategies for Sustainable Development) and MBA 541 (Corporate Social Responsibility) (BBA Management and Law, personal communication, June 4, 2019; VIU, 2018-j). Additionally, VIU’s ElderCollege offers courses, such as How Green (Energy Efficient) Is My Home? and Photovoltaics: Solar Electric Power, which look at energy efficiency and effectiveness of solar energy (ElderCollege, personal communication, October 16, 2019; VIU, 2019-l).

In 2018, students in a Cultural Geography course had the opportunity to research the enablers and constraints of bio-diesel use in commercial, industrial, and institutional vehicles within the Regional District of Nanaimo (VIU, 2018-nnn; VIU, 2018-mmmm). The research aimed to reduce greenhouse gas emissions in the region and increase awareness about the use of bio-diesel as an
learn about greenways and applying green roofs; for example, they learn how to use trees to shade (i.e. cool) or warm buildings (Horticulture, personal communication, August 21, 2018).

VIU student group, Awareness of Climate Change through Education and Research (ACER), brings awareness of climate change to the VIU campus and Nanaimo community. The majority of ACER’s work involves educational initiatives focusing on conveying information to the public by following the best practices in scientific communication and using the most current peer-reviewed literature (ACER, personal communication, October 3, 2019). A focus of ACER is educating the public on renewable energy and other sustainable practices (ACER, personal communication, October 3, 2019). ACER students track the cost comparisons between fossil fuel energy wind and solar energy and they use this information in their presentations to the public (ACER, personal communication, October 3, 2019).

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


As discussed above in indicator 7.2.1, VIU has taken steps to become more energy efficient over time. As mentioned above, in 2018 VIU implemented a geo-exchange system that heats and cools buildings from energy stored in the Wakesiah mine. There are plans to implement the geo-exchange system into more buildings in the future (Facilities Services & Campus Development, personal communication, September 21, 2018).

VIU’s has two energy awareness initiatives: Energy Naughty or Nice? and the 2018 Energy Nice Shutdown Challenge. Energy Naughty or Nice? promotes energy usage awareness by having individuals take a picture of themselves being energy alternative to fossil fuels (VIU, 2018-nnnn).
nice (i.e. turning of computer monitors, taking the stairs, sorting waste, closing doors, etc.) (VIU, 2018-ii). Contestants upload their picture on a social media platform for a chance to win a prize (VIU, 2018-ii). The other program is the 2018 *Energy Nice Shutdown Challenge* (VIU, 2018-jj). This challenge was created for students who live in residence as an incentive to use less energy over the Christmas break (VIU, 2018-jj). The floor with the most participants wins a pizza party (VIU, 2018-jj).

<table>
<thead>
<tr>
<th>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</th>
<th>7.a.1 International financial flow to developing countries in support of clean energy research and development and renewable energy production, including hybrid systems</th>
<th>Looking more locally, a graduate student in VIU’s Master of Community Planning program received a Canada Graduate Scholarship award to determine attitudes of Nanaimo residents towards e-bikes (VIU,2019-kk). The research aims to assess whether e-bikes are supported and should be included in the City of Nanaimo future plans (VIU, 2019-kk). Additionally, in 2018, VIU’s Health and Safety Office partnered with Bikes for Kids, a local non-profit organization to provide replacement bikes to VIU students and employees in need (VIU, 2018-AAAA). As mentioned previously in indicator 7.1.1, a VIU faculty member founded a charity, LED Africa, which provides rural African schools with solar powered lighting systems (Physics, personal communication, November 7, 2019; LED Africa, 2019).</th>
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<tbody>
<tr>
<td>7.b By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy</td>
<td>7.b.1 Investments in energy efficiency as a proportion of GDP and the amount of foreign direct investment in</td>
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</tbody>
</table>
services for all in developing countries, small island developing States and landlocked developing countries, in accordance with their respective programmes of support | financial transfer for infrastructure and technology to sustainable development services | This indicator was not included in this study as it was deemed inapplicable to an educational institution.
## Appendix K

Compiled Data for Goal 8: Promote sustained, inclusive, and sustainable growth, full and productive employment and decent work for all

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>2018 Data</th>
<th>2019 Data</th>
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<tbody>
<tr>
<td>8.1 Sustain per capita economic growth in accordance with national</td>
<td>8.1.1 Annual growth rate of real GDP per</td>
<td></td>
<td>This target was determined not applicable to a post-secondary institute. It was beyond the scope of</td>
</tr>
<tr>
<td>circumstances and, in particular, at least 7 per cent gross domestic</td>
<td>capita</td>
<td></td>
<td>this project to look into Canada’s economic growth.</td>
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<tr>
<td>product growth per annum in the last least developed countries</td>
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<tr>
<td>8.2 Achieve higher levels of economic productivity through</td>
<td>8.2.1 Annual growth rate of real GDP per</td>
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<tr>
<td>diversification, technological upgrading and innovation, including</td>
<td>employed person</td>
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<td>a focus on high-value added labour-intensive sectors</td>
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VIU’s Economic Impact Report (2019) indicates that VIU is undertaking various capital projects between the fiscal years of 2017 and 2026 (Roslyn Kunin and Associates Inc., 2013). Funds allocated to spending for capital projects will be used to develop and maintain the various capital resources of VIU, thereby allowing it to positively affect the economy at large. The projects include: Automotive Marine Trades building, Health and Science Centre phase 2, ASTEC B180 renovations, Physical Wellness, Teaching and Activity Centre, Arts and Humanities Centre, University Centre, Third Street Connector and Fourth Street Upgrade, Faculty of Management addition, Trades Welding complex, Gathering Place phase 2, Cowichan Campus 3rd Floor addition, Geo-exchange phase 2, Student Residence Expansion, and Annual Routine Capital. These projects will create a
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.

<table>
<thead>
<tr>
<th>8.3.1 Proportion of informal employment in non-agriculture employment, by sex</th>
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<tr>
<td>This target was deemed to be inapplicable as VIU does not have informal employees. Informal employment is generally considered jobs that lack a set of legal or social protections, which include self-employment, family workers, and workers producing foods for their own use (Heintz, 2010).</td>
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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

<table>
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<tr>
<th>8.4.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP</th>
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<tr>
<td>VIU’s Policy 42.31 states that the Purchasing Department is responsible for sourcing, negotiating, and administering the purchase of goods and services for all of VIU except for the Library and Campus Store (VIU, 2018-e). The Purchasing Department follows the guidelines of NAFTA, The New West Trade Partnership Trade Agreement (NWPTA), the Agreement on Internal Trade (Canada), and the Purchasing Management Association of Canada’s Code of Ethics (NAFTANOW, 2018; New West Partnership Trade Agreement, 2018; Canadian Free Trade Agreement, 2018; Supply Chain Management Association, 2016; Purchasing, personal communication, August 24, 2018). Following these agreements, VIU must have a competitive, open public bidding process for the purchase of all goods and services. VIU researchers are working to discover the challenges and prospects of the artisan economic sector in support of the success of local businesses. A Recreation and Tourism professor found that consumer demand for artisanal products has been increasing (VIU, 2018-pppp). This lead to a partnership between VIU and the Société de développement économique de la Colombie-Britannique (SDÉCB) to evaluate how an ÉCONOMUSÉE© model for artisans will have an economic impact (VIU, 2018-pppp). ÉCONOMUSÉE© promotes the preservation of traditional knowledge and local entrepreneurship by encouraging the purchase of locally produced artisanal products (VIU, 2018-pppp).</td>
</tr>
</tbody>
</table>
| the 10 Year Framework of Programmes on Sustainable Consumption and Production, with developed countries taking the lead | over $75,000 or $200,000 for construction (Purchasing, personal communication, August 24, 2018). An internal VIU agreement requires all departments to go through Purchasing for any purchase over $50,000 (Purchasing, personal communication, August 24, 2018). Due to this public bidding process, VIU cannot actively seek out local products from local distributors (Purchasing, personal communication, August 24, 2018). However, through their proposal for goods and services they are able to outline requirements which may be better met by local distributors or goods (Purchasing, personal communication, August 24, 2018).

The Campus Store deals with companies in the Workers’ Rights Consortium (WRC) and VIU is an affiliate with WRC (Campus Store, personal communication, August 17, 2018; Worker Rights Consortium, 2018). Although the Campus Store would like to sell local goods and products, the price-point and demand does not support it resulting in a low percentage of all products and goods in the store being domestic and local (Campus Store, personal communication, August 17, 2018). Some products in the store are local such as Hornby Island Bars, handmade local soaps, and local jewellery, with hopes to add more in the future (Campus Store, personal communication, August 17, 2018). Furthermore, in November and December the store highlights local artisans (Campus Store, personal communication, August 17, 2018).

Similarly, Food Services desires to sell more local products but the price-point and demand from the customers is not supportive (Food Services, personal communication, October 2, 2018). However, Food Services does offer many local products in the cafeteria such as local ham from Port Alberni, cheese from Qualicum Beach, potato chips from Cowichan, and popsicles from Comox (Food Services, personal communication, October 2, 2018). Food Services also has to make sure that they balance seasonality with customer

2018-pppp; Société de développement économique, 2019).

In ongoing efforts to increase the proportion of campus food that is locally sourced, Powell River Culinary Arts students use locally-sourced food as much as possible for catering events and for the restaurant that runs on Wednesday evenings (previously described in Goal 2) (Powell River Campus, personal communication, July 23, 2019). The Culinary Arts program at the VIU Cowichan campus is also focused on locally-sourced food, and has formed a partnership with Providence Farm to open the Farm Table Restaurant, which offers a farm-to-table dining experience (VIU, 2019-qq). The partnership is all about sourcing, gathering, and using local food, not just from Providence Farm, but from local fisheries and poultry farms as well. Close to 100% of ingredients used in the restaurant are locally sourced (VIU, 2019-qq). VIU Nanaimo’s Good Food Box program, described in Goal 2, almost always also uses locally-sourced food from the Nanaimo Foodshare Society (Residence, personal communication, July 22, 2019).

To increase domestic material consumption, the VIU Cowichan Welding Department re-uses welding materials when possible for teaching purposes, and instructors often collect scrap metal from welding companies for use in the program (Cowichan campus, personal communication, September 4, 2019). |
expectations, especially in regard to the fruit platters offered through VIU Catering (Food Services, personal communication, October 2, 2018). People expect a variety of fruit, which may not be in season locally, therefore they have to purchase these fruits from other companies (Food Services, personal communication, October 2, 2018).

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

<table>
<thead>
<tr>
<th>8.5.1 Average hourly earnings of female and male employees, by occupation, age, and persons with disabilities</th>
<th>This indicator was deemed not relevant as it was beyond the scope of this project and researchers did not have access to this information.</th>
</tr>
</thead>
</table>
| 8.5.2 Unemployment rate, by sex, age and persons with disabilities | While VIU itself does not have an unemployment rate, it does have an impact on the employment rate as it employs people and trains students to gain employment in the near future. VIU has over 16,000 learners and employs over 2,000 faculty and staff (VIU, 2018-cccc).

VIU offers services through Career Services to students to aid them in finding employment (VIU, 2018-II). VIU Career Services provides posting for jobs and volunteer opportunities, work-op and non-work-op postings, access to career advisors, practicum and internship opportunities, and personal and professional development events (VIU, 2018-II). Additionally, VIU offers Internship and Apprenticeship programs such as the Bachelor of Arts Internship program and apprenticeships in automotive, baking, carpentry, and marine technician (VIU, 2018-cccc).

As mentioned, VIU does not have an unemployment rate, but does have an impact on employment rates by providing students with employability skills. For example, the Workplace Essential Skills and Training program (WEST) at VIU is specifically targeted for students with developmental and cognitive barriers to employment, and is designed to assist students develop skills required to obtain and maintain employment (VIU, 2018-JJ). In addition to teaching these skills, the WEST program has partnerships with approximately 90 different employers in the Nanaimo and Cowichan communities that provide students with hands-on experience in the workplace, from which many students obtain employment (Workplace Essential Skills and Training, personal communication, September 19, 2019). The WEST program has proven successful among graduates, with at least 50% obtaining employment and the rest going into volunteer work or continuing in post-secondary studies (Workplace Essential Skills and Training, personal communication, September 14, 2019). At the Nanaimo campus, the WEST program also provides work experience for students through
the WEST Café Training Lab, which opened in September 2019, and serves coffee and snacks in building 205 (Workplace Essential Skills and Training, personal communication, September 19, 2019). WEST students are employed in the café where they get experience with customer service, handling money, and restaurant operations (Workplace Essential Skills and Training, personal communication, September 19, 2019). WEST students also volunteer at the Nanaimo campus Farmers Market selling produce that they helped plant and harvest on the Five Acre Farm (Workplace Essential Skills and Training, personal communication, September 19, 2019).

Another program that helps with the development of employability skills is the Cooperative Entrepreneur Training Program, which is an academic program for people who want to be self-employed or have cognitive disabilities or other barriers to employment (Workplace Essential Skills and Training, personal communication, September 19, 2019). The program currently has 12 students and provides them with the opportunity to create their own business plans and start their business in the last 4 weeks of the year as practice and trial (Workplace Essential Skills and Training, personal communication, September 19, 2019). The Natural Resource Protection Extension Program is another professional development and training program for the environmental sector that aids in development of skills for better chances of employment or for further success in a current position (Natural Resource Extension Program, personal communication, October 21, 2019).

In addition to Career Services (mentioned in the 2018 data), VI Solutions, an initiative developed in partnership between VIU and Innovation Island, aims
to match organizations with students from different backgrounds where students can explore opportunities or challenges for the organization (VIU, 2019-zzz). *VI Solutions* aims to respond to a labour gap identified in 2018 across Vancouver Island VIU, 2019-zzz). Another way organizational partnerships respond to employment rates is through student co-ops and internships. Many students who have completed one co-op or internship preparation class or one work-term have said that strengths of the program included: resume and cover letter building, interview development skills, network connections, and personal and professional growth (VIU, 2019-c).

VIU’s Indigenous Intern Leadership program also provides Indigenous students with opportunities to apply for intern positions with BC companies, assisting in building a foundation towards a lasting career (VIU, 2019-oo). The program encourages businesses to provide paid internships for Indigenous students and provides a database for students to see which businesses will provide internships (Aboriginal Education, personal communication, July 12, 2019).

In general, the completion of academic programs at VIU contributes to a decreased unemployment rate as students are qualified for their desired professions (VIU, 2018-oooo). For example, 91% of students in the 2017 Interior Design cohort are now in interior design or design-related professions (VIU, 2019-ss). The VIU Trades and Applied Technology programs also provide practical education and training that prepare students for a variety of employment opportunities such as: heavy equipment mechanics, heavy equipment operation, Internet-based information systems design, installation, operation and administration, forest harvesting, power engineering, hairstyling, electrician, culinary arts, automotive services, carpentry, business technology,
professional driving, professional esthetics, dental hygiene, early childhood education and care, road building and heavy construction, marine mechanics, aluminum boat building, motorcycle mechanics, professional baking and pastry arts, refrigeration and air-conditioning mechanics, welding, and Aboriginal construction (VIU, 2019-tt). For recent graduates who need help with applying for jobs, the Office of Advancement and Alumni offers Job Seekers Workshops (Advancement and Alumni, personal communication, November 14, 2019).

In addition to providing VIU students with employability skills, professional development and training programs are offered to local First Nations communities, which are tailored to achieve specific community goals set out by the First Nations communities (VIU, 2019-rr). In particular, partnerships between the Bachelor of Science in Nursing program and Indigenous communities sometimes involve employment development for community members, such as skills and training workshops, as well as help with developing grants (Nursing, personal communication, September 20, 2019).

Employment at VIU also contributes to an overall employment rate. For example, in the 2016/17 fiscal year, VIU employed 1,242 employees, and total payroll amounted to $99.8 million, equal to 69.6% of the university’s total expenses (VIU, 2018-pppp). Professional development and training opportunities are also available to current employees. For example, VIU is a member of Leave for Change, a program run by Uniterra (a Canadian International development program that is jointly operated by CECI and WUSC), which offers member employees a personal and professional development opportunity by providing
them the chance to participate in a short term international volunteer assignment (Education Abroad, personal education, November 21, 2019). Uniterra's mission is to improve economic and social conditions in the 14 countries where it operates, particularly for women and youth who face barriers to employment, as well as provide meaningful education to Canadians about the importance of inclusive economic development (Uniterra, 2015).

Through on-campus employment, a total of 656 students were employed in 2018/19 (Centre for Experiential Learning, personal communication, December 17, 2019). Of the 656 students, 266 were employed through work-op programs, 371 were employed through individual departments, and 19 were employed with Canada Summer Jobs funding (Centre for Experiential Learning, personal communication, December 17, 2019). The Centre for Experiential Learning offers work-integrated Learning for VIU students, involving a preparation course followed by work experience with a community partner or organization (VIU, 2019-mm). In 2018/19, 1,355 students participated in work-integrated learning (Centre for Experiential Learning, personal communication, December 17, 2019).

Since 2017, Imagine VIU, the largest charitable giving campaign in Central Vancouver Island’s history, raised $5.5 million in funds for campus buildings, programs, equipment, and students (VIU, 2109-mm). In addition to raising funds, the campaign created an opportunity for VIU to build strong, enduring relationships with community members and businesses who rely on VIU to provide an education workforce to the region’s economy (VIU, 2019-mm).

| person | 8.6.1 Proportion of youth (aged 15–24) | As previously mentioned for Indicator 8.5.2, VIU does not record its employment rate, but does provide education and | To encourage local youth to attend university, VIU hosts Discovery Days, an annual on-campus event |
substantially reduce the proportion of youth not in employment, education or training years) not in education, employment or training

training for youth and aids them in finding employment. In the school year of 2016/17 VIU had 677 students under the age of 18, 4,152 students in the age group of 18-21 years, and 2,318 students aged 22-24 years (VIU, 2018-d).

Additionally, VIU takes action by attempting to recruit youth while they are still in secondary schooling. VIU hosts Discovery Days, which showcases the programs and supports offered on campus to potential students in grades 10-12 (VIU, 2018-P). VIU also hosts an Open House and Spring Break Days, which allows community members to see what options are available at VIU (VIU, 2018-Q; VIU, 2018-R).

that gives perspective students an idea of what to expect when they enrol at VIU (VIU, 2019-pp). To help students in exploring VIU’s academic offerings, Faculty Open Houses allow high school students to meet professors, other students, and get a feel for what each program has to offer (VIU, 2019-pp). In 2019, the following Faculty Open Houses were offered: Education (Bachelor Degree and Diploma programs), Trades and Applied Technology (Diploma and Certificate programs), Arts and Humanities (Bachelor Degree, Diploma, and Certificate programs), Health and Human Services (Bachelor Degree, Diploma, and Certificate programs), Management (Bachelor Degree, Diploma, and Certificate programs), Social Sciences (Bachelor Degree, Diploma, and Certificate programs), Science and Technology (Bachelor Degree, Diploma, and Certificate programs), Shq’apthut – A Gathering Place (Services), and Academic and Career Preparation (Certificate programs and courses) (VIU, 2019-pp).

To encourage high school students to consider post-secondary education, the Peter Cundill Foundation partnered with VIU’s Office of Aboriginal Education Engagement in 2017 to offer free camps at VIU to Indigenous high school students (VIU, 2019-uu). The camps provide an introduction to university life, and focus on Indigenous youth education, health and wellness, student literacy, cultural awareness, and creating familiarity and connections, with a main focus on Indigenous community engagement to help create comfortable environment for first generation learners (Aboriginal Education and Engagement, personal communication, July 12, 2019). Approximately 4 VIU students are hired each summer to help facilitate the camps, and the camps are then led by VIU’s Community Cousins, an Aboriginal Mentorship program, with involvement from Elders...
<table>
<thead>
<tr>
<th>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</th>
<th>8.7.1 Proportion and number of children aged 5-17 years engaged in child labour, by sex and age</th>
</tr>
</thead>
<tbody>
<tr>
<td>This target was determined not relevant to an educational institute or Canada as it is directed more towards developing countries.</td>
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<tr>
<th>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</th>
<th>8.8.1 Frequency rates of fatal and nonfatal occupational injuries, by sex and migrant status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of the rate of fatal and nonfatal occupational injuries at VIU are not accessible. However, VIU does have a procedure manual for dealing with incidents and accidents (VIU, 2017-c). In the case of serious injury or death, VIU must notify WorkSafeBC immediately (VIU, 2017-c).</td>
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</table>

<p>| 8.8.2 Level of national compliance with labour rights (freedom of association and collective |
| --- | --- |
| This indicator was deemed inapplicable to VIU and it was beyond the scope of this project to look into Canada’s compliance with labour rights. | in Residence (Aboriginal Education and Engagement, personal communication, July 12, 2019). |</p>
<table>
<thead>
<tr>
<th>8.9 By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products</th>
<th>8.9.1 Tourism direct GDP as a proportion of total GDP and in growth rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Through its Recreation and Tourism department in the Faculty of Management, VIU is educating students on sustainable tourism. All students in Recreation and Tourism are required to take a course on sustainability (VIU, 2018-oo; VIU, 2018-mm; VIU, 2018-nn). Additionally, VIU offers a Graduate Diploma in Sustainable Leisure Management and a Master of Arts in Sustainable Leisure Management (VIU, 2018-pp). All of the programs in the Department of Recreation and Tourism provide students with the opportunity to gain experience in the field of sustainable tourism through their Cooperative Education program (VIU, 2018-qq). Diploma students complete two cooperative education work terms and degree students either engage in another coop placement or an internship (VIU, 2018-qq). Individuals who have completed a program within the Department of Recreation and Tourism Management have gone on to gain employment in places such as the Regional District of Nanaimo, Cruise Lines, kayak and tour companies, and municipalities’ community development (VIU, 2018-qq).</td>
<td></td>
</tr>
<tr>
<td>This indicator was not included was it is beyond of the scope of this study to look into Canada’s proportion of GDP as tourism.</td>
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<tr>
<th>8.9.2 Proportion of jobs in sustainable tourism industries out of total tourism jobs</th>
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<tbody>
<tr>
<td>In 2018, a VIU Recreation and Tourism professor was awarded a Social Sciences and Humanities Research Council (SSHRC) Connection grant in support of her work on the sixth annual International Polar Tourism Research Network (IPTRN) conference (VIU, 2018-rrrr). Topics at the conference included tourism and community related issues and concerns, economic diversification, the cultural and creative economies, and climate change (VIU, 2018-rrrr). Some VIU students presented on their work at the conference in Yukon, and approximately 35% of attendees were undergraduate or graduate students from around the world doing research in polar tourism (VIU, 2018-rrrr).</td>
</tr>
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</table>

| 8.a Increase Aid for Trade support for developing countries, in particular least developed |
| 8.a.1 Aid for Trade commitments and disbursement |
| This target was deemed irrelevant to VIU as an educational institute. It was beyond the scope of this project to look into Canada’s support for developing countries. |
| countries, including through the Enhanced Integrated Framework for Trade-related Technical Assistance to Least Developed Countries | 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 Existence of a developed and operationalized national strategy for youth employment, as a distinct strategy or as part of a national employment strategy | As mentioned in indicator 8.6.1, VIU offers many services and opportunities for students to aid them in training, education, and finding employment. |
### Appendix L

Compiled Data for Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>2018 Data</th>
<th>2019 Data</th>
</tr>
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<tbody>
<tr>
<td>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</td>
<td>9.1.1 Proportion of the rural population who live within 2 km of an all-season road</td>
<td>This target was not included in the study as the indicators are not relevant to VIU as a post-secondary institute.</td>
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<td>9.1.2 Passenger and freight volumes, by mode of transport</td>
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<tr>
<td>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</td>
<td>9.2.1 Manufacturing value added as a proportion of GDP and per capita</td>
<td>This target was not included in this study as its indicators speak to manufacturing, which are not relevant to VIU.</td>
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<tr>
<td></td>
<td>9.2.2 Manufacturing employment as a proportion of total employment</td>
<td></td>
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</tr>
<tr>
<td>9.3 Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services,</td>
<td>9.3.1 Proportion of small-scale industries in total industry value added</td>
<td>VI Solutions, a partnership between VIU and Innovation Island, is an initiative that aims to match organizations with students from different backgrounds to explore operational or business opportunities and challenges (VIU, 2019-zzz). An existing labour gap was identified across Vancouver.</td>
<td></td>
</tr>
</tbody>
</table>
including affordable credit, and their integration into value chains and markets. Is this initiative aims to respond to (VIU, 2019-zz). For students, VI Solutions provides opportunities to develop solutions, concepts, and sustainable business ideas supporting a variety of social innovation or social enterprise models (VIU, 2019-yy). Community partners that engage in the initiative also benefit through gaining creative solutions and innovative ideas from multidisciplinary teams of students, and linking their industry to academic units (VIU, 2019-zz).

VIU hosted two events in 2019 to assist with developing a social enterprise system on Vancouver Island (a social enterprise uses business strategies to maximize its social, environmental, or cultural impact (Social Enterprise Catalyst, 2019-a). The events are run by seCatalyst, a network of people and organizations interested in building a strong social innovation and social enterprise sector on Vancouver Island (Social Enterprise Catalyst, 2019-b). VIU has been involved with seCatalyst initiatives since 2014 Recreation and Tourism, personal communication, September 20, 2019). One of the events held at VIU in May was the 3-day Social Venture Bootcamp which brought together budding social entrepreneurs from across Vancouver Island and the Sunshine Coast, including two social enterprises started by VIU alumni in Powell River and Chemainus (Recreation and Tourism, personal communication, September 20, 2019). The Bootcamp aims to prepare individuals and groups to launch their business ideas, ensure that they both make money and generate a positive social, environmental, or cultural impact (Social Enterprise Catalyst, 2019-c). A follow up event in June, Connect. Money. Impact, connected Bootcamp graduates and other social enterprise start-ups across the island with lenders and impact investors from a dozen organizations providing capital for social
| 9.3.2 Proportion of small-scale industries with a loan or line of credit | This indicator was determined inapplicable to an educational institute, and therefore was not included. |

| VIU annually produces a Carbon Neutral Action Report. Data from the 2017 report shows that VIU’s total CO₂ emissions from that year was 2,995.97 tonnes (VIU, 2017-a). However, a majority of these emissions were offset (VIU, 2017-a). VIU offsets its emissions through paying about $25 per tonne to the B.C. Government (VIU, 2017-a).

Each year Facilities receives funding that is directed toward replacing building controls and heating fixtures, with new efficient ones to reduce VIU’s CO₂ emissions (Facilities Services & Campus Development, personal communication, September 21, 2018; VIU, 2018-E). VIU is making an attempt to replace larger service vehicles with smaller ones that produce less emissions (Facilities Services & Campus Development, personal communication, September 21, 2018). Additionally, the Geo-Exchange system in building 210 (soon to be added to building 205) will offset VIU’s greenhouse gas emissions (Facilities Services & Campus Development, personal communication, September 21, 2018). With a focus on sustainability, each time VIU needs an upgrade, Facilities tries its best to use efficient and sustainable methods and products to reduce CO₂ and other greenhouse gas emissions (Facilities Services & Campus Development, personal communication, September 21, 2018). |

Forestry students learn about forests as carbon sinks in courses such as FRST 132 (Forest Ecology I: Ecosystems and Silvics), FRST 235 (Forest Ecology II: Ecosystems and Management), FRST 162 (Fire Management) and FRST 352 (Forest Entomology) (Forestry, personal communication, May 23, 2019). |
| | VIU has taken on initiatives that aim to reduce VIU’s greenhouse gas emissions, including: Bike to Work Week, Energy Naughty or Nice?, Active Commute Day, and the CarShare program (VIU, 2018-DD). Bike to Work Week encourages employees to bike to work to promote active commuting and offered incentives such as free coffee and baked goods throughout the week (VIU, 2018-EE). Energy Naughty or Nice?, increased energy usage awareness on campus by having individuals take a picture of them being energy nice (i.e. turning off computer monitors or taking the stairs) and being able to enter to win a prize (VIU, 2018-ii). Active Commute Day was a daylong event where individuals could enter to win prizes and learn more about alternative transportation from community groups and organizations (i.e. BC Transit and Hub City Cycles Community Co-op) (VIU, 2018-FF). VIU’s CarShare program is a network where individuals can connect and organize carpooling (Facebook, 2018). In 2016, a student-led group on campus, Awareness of Climate change through Education and Research (ACER), hosted a Symposium on “Climate Change: Policy for a Sustainable Future” that brought awareness of greenhouse gas emissions to the community (VIU, 2018-GG). In fact, the main role of the group is to provide cost-free presentations, which include scientific demonstrations, to classrooms and the public on the topic of Climate Change, the background of which includes understanding CO₂ emissions (VIU, 2018-HH).

Students in the Chemistry program learn about chemical toxicology and green chemistry related to real-world problems such as greenhouse gases and the impacts on the environment and people

|
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

Over $1 million of VIU’s budget goes towards the Scholarship, Research and Creative Activity (SRCA) office (VIU, 2018-vv). The SRCA office works to promote and support research and creative activity on campus (VIU, 2018-ww). They provide students and employees with information about how to engage in research on campus, as well as a number of events such as Research Week, the Community Partner Series, and Lunch and Learn series. Research Week began in 2018 with the purpose to share and celebrate student scholarship and research at VIU through a number of week-long events (VIU, 2018-xx). The Community Partner Series brings local organizations to campus to share information with the goal to increase collaboration (VIU, 2018-zz). The Lunch and Learn series provides students and employees an opportunity to share and learn about various topics that have been explored through research at VIU (VIU, 2018-AA). About $35,000 of SCRA budget goes towards Scholarships and Bursaries directly helping student research (VIU, 2018-vv).

In addition to supporting research and creative activity on VIU campuses, SRCA also provides a total of $34,000 per year in Travel and Conference funding to members of the British Columbia Government and Service Employees’ Union (BCEEU) and the Vancouver Island University Faculty Association (VIUFA) (VIU, 2019-vv). Student Travel and Conference Funding is also available to help students offset the costs of attending a conference, in which funds are allocated according to region where the conference is held: $400 for Vancouver Island/Lower Mainland, $500 for the rest of BC, Alberta, Washington and Oregon, $700 for other Canadian, Eastern and South-Western USA, and $800 for International outside of Canada and USA (VIU, 2019-AA).

In 2016/17, VIU spent over $2.8 million on research and development activities with significant help from external funding (approximately 33% of research funding was received from federal and other outside sources) (VIU, 2018-pppp). Some of the key groups that have helped fund research projects in 2017/2018 include Natural Sciences and Engineering Research Council (NSERC), Ministry of Forests, Lands & Natural Resources, Tula Foundation, Environment and Climate Change Canada, Mitacs, Agilent Technologies, Canadian Foundation for Innovation, BC Real Estate Foundation, Social Sciences and Humanities Research Council of Canada, Canada Research Chairs, and British Columbia Academic Health Science Network (VIU, 2018-rrrr). VIU’s research expenses have a total impact of $21 million in labour income and $297.3 thousand in non-labour income (VIU, 2018-pppp). VIU identifies the number...
of patent applications filed as an indicator of innovation, and between 2012/13 – 2016/17, VIU filed six patent applications, contributing to region’s innovative and economic growth (VIU, 2018-pppp). Overall, from 2017/18 to 2018/19, VIU saw a 29% increase in federal research funding and a 53% increase in external grants and contracts (VIU, 2019-ii). One example of an important externally-funded research project is a $1 million investment from the Canada Foundation for Innovation and the BC Knowledge Development Fund which allowed the AERL research team to develop a one-of-its-kind mobile mass spectrometry lab (VIU, 2018-ssss). The lab’s innovative technology provides local and regional benefits as it allows researchers to measure atmospheric contaminants from a moving vehicle (VIU, 2018-ssss).

Over the 2017/18 Academic year, VIU embedded scholarship, research, and creative activity (SRCA) into its new Academic Plan: Access to Excellence as well as in a new Strategic Plan for SRCA (2017-2022) (VIU, 2018-tttt). To explore ways to enrich curricula and culture with SRCA, VIU hosted a Council for Undergraduate Research Institute on June 12-14th, 2018, which brought together teams from seven different Canadian institutions (VIU, 2018-tttt). To support the 2017-2022 Strategic Plan, Gather Grants are offered and provide up to $3,000 to eligible VIU Faculty to enable hosting events and gatherings that mobilize knowledge to academic or non-academic audiences (VIU, 2019-ww). The source of funding for these awards includes VIU, the Social Sciences and Humanities Research Council, and the National Sciences and Engineering Research Council of Canada (VIU, 2019-ww).
Also during the 2017/18 year, the Regional Initiatives Fund (RIF) was launched, a partnership between VIU and the Province of BC to support communities on Vancouver Island to collaborate on innovation and sustainability (VIU, 2018-rrrr). RIF funded 17 projects with 29 community partners, resulting in $880,311 in leveraged funding for research, involving 253 VIU students (VIU, 2018-rrrr). VIU also signed onto a consortium of Canadian institutions, CALAREO, to promote research opportunities for graduate students from Latin America (CALAREO, 2019). The aim of the program is to establish a scholarship program, elevate funding, and support student mobility and research collaborations between Canadian and Latin American institutions (VIU, 2018-rrrr). In 2017/18, VIU also received $300,000 to expand research through the Queen Elizabeth Scholars program, allowing more student to travel to partner countries, pursuing internships and research under the theme of *building resilience in coastal communities* (VIU, 2018-rrrr; VIU, 2019-xx). In addition, REACH awards, which financially support undergraduate and graduate students to conduct their own original research were given out to 10 students, of $2000 each, in Spring 2018 (VIU, 2018-rrrr).

A total of $82,315.60 was awarded to research through Faculty Research Grants in 2017/18: $10,320 to History, $5350 to Media Studies, $1951.60 to Assessment and Data Librarian, $5260 to Chemistry, $7360 to Chemistry, $4815 to Geography, $4756 to Recreation and Tourism, $4000 to Earth Science, $7200 to Biology, $13,660 to Fisheries and Aquaculture, $7991 to Social Work, $4960 to MABRRI, $2454 to Hospitality, and $2238 to English (VIU, 2018-rrrr).
In the 2018/19 year, 10 students received REACH awards of $2000 each, 2 Canada Graduate Scholarship Awards for Master’s Students were awarded, and 8 students received NSERC Undergraduate Student Research Awards (VIU, 2019-ii). Twenty different research funding opportunities are available through SRCA to support both undergraduate and graduate student research (VIU, 2019-BB). For the first time, SRCA recognized excellent learning experiences provided by faculty members by publicly launching the President’s Awards for Community Engagement and Provost’s Awards for Scholarship, Research and Creative Activity (VIU, 2019-ii). In 2018/19, 9 employees received the Provost’s Award and 9 employees along with the VIU Elders’ Council received the President’s Awards for Community Engagement (VIU, 2019-ii).

As a significant increase from 2017/18, RIF leveraged $996,878 in funding to support 20 research projects in 2018/19, which involved 255 students and 41 community partners (VIU, 2019-ii). Additional internal funding also connected faculty and students to 168 community partners (VIU, 2019-ii). Research with a community engagement component is also conducted through the Community-Based Applied Interdisciplinary Research (CBAIR) course, which allows VIU students to design and carry out a research project based on real-world problems of community groups (VIU, 2019-CC).

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

VIU contributes to research by providing opportunities to students and faculty to engage in research. Policy 31.11 (Research and Scholarly Activity Centres and Institutes), along with Procedures 31.11.011, 31.11.002, 31.11.003, and 31.11.004 address and support research at VIU (VIU, 2018-e). There are a total of 13 research

As mentioned in the 2018 data, the Scholarship, Research, and Creative Activity (SRCA) Office works to promote and support research and creative activity on campus. SRCA hosts an annual Research and Creative Activity Symposium, a day-long event allowing colleagues to share their research with the VIU community (VIU, 2019-DD). The libraries of Royal
centres and institutes (Centre for Shellfish Research, Media Research Lab, Centre for Education and CyberHumanity, etc) and 4 research labs (Brain Electrophysiology and Neuropsychology Lab, Environmental Psychology Research Lab, Resilience Research Lab, and VIU@Cowichan Innovation Lab) at VIU, which does not include the individual faculty or students that are doing research outside of these labs (VIU, 2018-tt). The number of faculty members at VIU that engage in research is hard to quantify as a lot of research is done off the side of the desk. Through research assistant work-ops VIU employees between 35-47 students within the fall and spring semesters (VIU, 2017-c). Similar to faculty members, the number of students who do research is hard to quantify as a lot of students engage in research for directed studies or applied courses.

Through the Scholarship, Research and Creative Activity (SRCA) Office, students have access to many funding opportunities and workshops to help them navigate the research world (VIU, 2018-BB). Some of these workshops include: “Poster workshop”, “Etiquette and tips for your first conference”, “publishing workshop”, and “spoken presentations workshop”, among others (VIU, 2018-BB). The SCRA Office provides students with a whole list of different funding opportunities that they can apply for on their website (VIU, 2018-CC). Additionally, VIU hosts the annual CREATE conference to showcase student research and to provide students an opportunity to gain experience presenting their research (VIU, 2018-yy). Roads University and VIU also collaboratively offer VIURRSPACE to digitally preserve scholarly and creative works as another way to share research among the universities (VIU, 2017-h).

Five Research and Innovation Chairs were secured at VIU in 2018/19. Three are Canada Research Chairs, one in Shellfish Health and Genomics, one in Community Research in Art, Culture and Education, and one in Historical Dimensions in Women’s Health (VIU, 2019-w). There are two BC Regional Innovation Chairs, one in Aboriginal Early Childhood Development, and one in Tourism and Sustainable Rural Development (VIU, 2019-w). There will also soon be two new Canada Research Chairs, one in Human Dimensions of Sustainability and Resilience, and one in Kinesiology and Physical Literacy (VIU, 2019-w). VIU has also joined other leading Canadian universities in signing the Dimensions Charter, a Canadian pilot program that emphasizes a focus on increasing equity, diversity and inclusion through research, innovation, and creativity within all disciplines of post-secondary institutions (Government of Canada, 2019). Over the next five years, this program aims to engage VIU in collaborative education to foster equity, diversity and inclusion across the campus (VIU, 2019-ii).

The 2019 CREATE Conference and Research Week was the largest yet, with 340 student participants and 25 faculty presentations (VIU, 2019-ii). Students who participated in CREATE indicated that the benefits of the conference included being able to share research, receiving feedback about their work, learning more about conferences, and being inspired for future work (VIU, 2018-rrrr). Developing the capacity for students and faculty to engage in research and creative activity is one of the key
focuses of SRCA’s 2017-22 Strategic Plan, and throughout 2018/19, SRCA boosted support for students by starting an e-news publication, Curious Minds, enabling regular communication and knowledge sharing among student researchers (VIU, 2019-ii). SRCA’s Student Research Team also brings students together who have a common interest of improving their research skills to work on various research projects, workshops, and events (VIU, 2019-EE). In 2018/19, SRCA also hosted 15 training sessions to build research capacity and submitted 67 grants and contracts with a success rate of 55%, totaling $1,968,218 in funding to the institution (VIU, 2018-jjjj).

VIU’s Professional Development and Training Program Coordinator is leading the Creative Economy and Innovation Initiative which aims to create strategies for a community-based innovation and co-working hub by tapping into the existing cultural sector (VIU, 2019-ii). The initiative, a joint partnership between the City of Powell River, Tla’amin, VIU, quathet Regional District, and Powell River Educational Services Society, has received funding to co-design and deliver an entrepreneurial ecosystem development program. This program was offered beginning in September 2019 with a format consisting of community members being invited to participate in any number of workshops, training opportunities for entrepreneurial skills, and innovation design training (VIU, 2019-ii). Also to provide space for faculty and student research, the Nanaimo campus recently built the Dr. Ralph Nilson Centre for Health and Science and the Discovery Centre for marine, automotive and trades (VIU, 2019-HH). The new buildings house state-of-the-art
In addition to campus-wide research initiatives, many individual departments have ongoing research efforts. In 2017/18, 9 VIU faculty were granted assisted leaves to pursue research: 1 in Health and Human Services, 5 in Social Sciences, 2 in Arts and Humanities and 1 in the Provost’s Office (VIU, 2018-). However, many faculty members engage in research in addition to their full-time teaching positions (Psychology, personal communication, May 17, 2019; Nursing, personal communication, June 4, 2019; Master of Arts in Sustainable Leisure Management, personal communication, June 10, 2019; Art & Design, personal communication, June 11, 2019; English, personal communication, August 22, 2019). For example, among the Bachelor of Science in Nursing program, there are 29 full time faculty and 20 sessional faculty, the majority of which are involved in some sort of research or scholarly activity that involves working with community partners (Nursing, personal communication, June 4, 2019). Additionally, all fourth year Nursing students are working on research outside of their courses with a supervising faculty member (Nursing, personal communication, June 4, 2019). The Psychology department is also very active in research, with 8 research labs on campus for Behavioural Medicine, Environmental Psychology, Fear and Anxiety, Resilience, Sleep and Neuroscience, Electrophysiology, Evolutionary Analysis of Psychology, and Positive Psychology (Psychology, personal communication, May 17, 2019). Each of the 10 Psychology faculty members are involved in research, and approximately 25% of students that are involved in research get paid through work-op positions in one of the 8 labs (Psychology, personal communication, May 17, 2019).
Additionally, students that major in Psychology are required to take four research courses and have the option to do additional research through practicums, directed studies, and honours (Psychology, personal communication, May 17, 2019). All English classes also incorporate research projects in which student write research papers and give presentations (English, personal communication, August 22, 2019).

VIU currently has six Master Degree programs, all of which are comprised mainly of graduate research (VIU, 2019-FF). These programs include the Master of Art in Sustainable Leisure Management, Master of Business Administration, Master of Community Planning, Master of Education in Educational Leadership, Master of Education in Special Education, and Master of Geographic Information Systems (GIS) Applications (VIU, 2019-FF). In 2018/19, 1,630 graduate students engaged in research (VIU, 2019-ii).

<table>
<thead>
<tr>
<th>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</th>
<th>9.a.1 Total official international support (official development assistance plus other official flows to infrastructure)</th>
<th>This target was not included as it was beyond the scope of this project to determine how much international support Canada is offering regarding this topic.</th>
</tr>
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<tbody>
<tr>
<td>9.b Support domestic technology development, research</td>
<td>9.b.1 Proportion of medium and high-tech</td>
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and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities

<table>
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<tr>
<th>industry value added in total value added</th>
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This target was deemed not applicable to an educational institution.

<table>
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<tr>
<th>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</th>
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<tr>
<th>9.c.1 Proportion of population covered by a mobile network, by technology</th>
</tr>
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</table>

VIU does not have the ability to quantify the proportion of its population that is covered by a mobile network. However, through providing free WIFI to its faculty, staff, students, and guests, VIU is able to support the use of the mobile network (VIU, 2018-rr).

Addressing the target, the entire VIU population has access to technology through the library computers and other computer labs across campus. Technology services are also available to the VIU community. Employees of VIU are set up with a VIU email account and offices and classrooms have phones. In 2012, VIU introduced the Assistance Phone System on the Nanaimo Campus, which provides student access to assistance phones that are strategically placed all over campus and can be used in the case of an emergency (VIU, 2018-ss). This system was an addition to the Yellow Call Boxes on campus (VIU, 2018-ss).

The Media Studies Department and Computing Sciences Department educate students on how to use technology (Media Research Lab, personal communication, October 3, 2018; Computing Sciences, personal communication, September 25, 2018). Courses at VIU educate students about technology, social media, or inequalities.
that may exist in regard to technology. These courses include: SOCI 209 (Social Inequality), SOCI 205 (Messages and the Media), SOCI 306 (Sociology of Popular Culture), SOCI 365 (Surveillance and Society), and SOCI 460 (Issues in the Information Society) (VIU, 2018-j).
### Appendix M

Compiled Data for Goal 10: Reduce Inequality within and among countries

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>2018 Data</th>
<th>2019 Data</th>
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<tbody>
<tr>
<td>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</td>
<td>10.1.1 Growth rates of household expenditure income per capita among the bottom 40 per cent of the population and the total population</td>
<td>This target was not included in this study as the indicator looks at household expenditures and income, which was deemed irrelevant to an educational institution.</td>
<td></td>
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<tr>
<td>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</td>
<td>10.2.1 Proportion of people living below 50 per cent of median income, by sex, age and persons with disabilities</td>
<td></td>
<td>Addressing this target, is a student club at VIU, Student Organization for Social Change (Facebook, 2015). Student Organization for Social Change is an activist club that aims to raise social consciousness and give students access to networks and resources to facilitate social change (Facebook, 2015). The club is anti-sexist, pro-feminist, anti-racist, pro-diversity, anti-homophobic, and pro-LGBTQ (Facebook, 2015). As described in more detail in Goal 4 (indicator 4.a.1) in the 2019 data, recent and ongoing upgrades across VIU campuses have helped increase access to education for people with disabilities or barriers to education on campus (Universal Access Committee, personal communication, January 7, 2020). This increased access to education provides inclusion of all for in political, economic, and social rights (Universal Access Committee, personal communication, January 7, 2020).</td>
</tr>
</tbody>
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| 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 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 | VIU’s Human Rights and Respectful Workplace Office (HRRWO) produces an annual report; in the 2015/16 report there was a total of 35 alleged discrimination complaints that year (VIU, 2016).

To address discrimination and/or harassment at VIU, VIU requires all employees to take the Preventing and Addressing Workplace Harassment-Rights and Responsibilities Course (VIU, 2018-D). As well, VIU has Policy 21.05 (Personal Harassment), Policy 21.03 (Human Rights), Procedure 21.05.001 (Responding to Complaints of Personal Harassment), and Procedure 21.03.001 (Human Rights Education Initiatives & Complaint Resolution) (VIU, 2018-S). Both policies state that VIU aims to provide an environment free of harassment and discrimination of all kinds. The HRRWO has an online Toolkit for Addressing Workplace Harassment available to anyone (VIU, 2018-II).

VIU offers the Workplace Essential Skills and Training (WEST) certificate program (VIU, 2018-JJ). The program is designed to assist students with development and cognitive disabilities in developing skills required to obtain and maintain employment (VIU, 2018-JJ). Students in this program learn the skills necessary to foster personal growth and independence (VIU, 2018-JJ). WEST graduates are prepared to serve in several sectors of the workforce, such as customer services, retail, and hospitality (VIU, 2018-JJ).

VIU has also taken on initiatives on campus to address discrimination and harassment, such as the Know More Campaign and the Positive Space Campaign, along with a series of workshops hosted by the HRRWO for students and employees each year (VIU, 2018-Y; VIU, 2018-Z). In 2013/14 HRRWO presented | VIU’s HRRWO is working on their 2017/2018 annual report with updated statistics of alleged discrimination complaints (Human Rights and Respectful Workplace Office, personal communication, May 27, 2019). HRRWO notes that complaints are not always formal, but the number of people filing complaints and seeking help increases with education about the resources available (Human Rights and Respectful Workplace Office, personal communication, May 27, 2019). HRRWO uses climate audits as a strategy to gain a better understanding of possible discrimination cases (Human Rights and Respectful Workplace Office, personal communication, May 27, 2019). The climate audits consist of confidential interviews with members of a workplace where workplace conflicts have been identified with unknown causes (Human Rights and Respectful Workplace Office, personal communication, May 27, 2019). HRRWO engages in strategies to provide a comfortable and welcoming space for students to disclose complaints (Human Rights and Respectful Workplace Office, personal communication, May 27, 2019). As mentioned in the 2018 data for this indicator, HRRWO facilitates workshops and events. These workshops are custom-built and are available to all faculty, staff, and students, which can be delivered one on one or for a group (Human Rights and Respectful Workplace Office, personal communication, May 27, 2019). One workshop in 2019 was delivered to a student audience that focussed on bullying conflict in relation to teamwork, looking at what conflict is, how it emerges, identifying it, and managing conflict and difference of opinion (Human Rights and Respectful Workplace Office, personal communication, May 27, 2019). Human Resources also hosted a workshop focussing on how to have conversation with people who have disabilities, in order to increase comfort levels of being able to meet the needs of all people (Human Resources, personal communication, October 28, 2019). |
51 educational events and 16 events in 2015/16 (VIU, 2014-a; VIU, 2016).

Additionally, in 2018, a VIU Nursing professor and a team from Island Health received a grant to conduct research on healthcare workers experiences with hostile work environments (VIU, 2018-KK). They aim to develop a strategy to improve the work environments and build resilience for healthcare workers (VIU, 2018-KK).

As described further in Goal 5, VIU Human Resources follows a fair and inclusive recruitment process and ensures equity and inclusion principles are in place at VIU (Human Resources, personal communication, October 28, 2019). VIU’s job postings include a statement that encourages applications from all groups and during the interview process, Human Resources tries to accommodate all accessibility needs (Human Resources, personal communication, October 28, 2019). However, in some situations, Human Resources will apply for an exemption through the Human Rights Tribunal when they have a preference for hiring someone with a specific background that will best fit a position (e.g.: Indigenous applicants for an Indigenous Professor position) (Human Resources, personal communication, October 28, 2019).

In 2020, a new, confidential Human Resources system will be implemented to track how the VIU community identifies themselves in regards to gender and ethnicity (Human Resources, personal communication, October 28, 2019).

VIU has taken many steps to ensure equity and inclusion for Indigenous peoples. For example, the Vancouver Island University Library – 2018 Strategic Plan highlights VIU’s commitment to indigenization work through the guidance of local Indigenous communities, the recommendations of the Truth and Reconciliation Commission, and the United Nations Declaration of the Rights of Indigenous Peoples (VIU, 2018-uuuu).

Additionally, VIU has been selected to participate in two federal grant programs under the Government of Canada’s pilot program, Dimensions: Equity, Diversity and Inclusion Canada (VIU, 2019-GG) the Equity Diversity and Inclusion Capacity Building Grant and the Dimensions Program (Equity, Diversity and Inclusion, personal communication, November 27, 2019; VIU, 2019-GG; Natural Sciences and Engineering Research Council of Canada, 2019). Both programs are Canadian Granting
Agency Initiatives supported by the Social Sciences and Humanities Research Council (SSHRC), the Natural Sciences and Engineering Research Council (NSERC), and the Canadian Institutes of Health and Research (CIHR) (VIU, 2019-GG). The Dimensions Program is a two-year pilot program that looks at all underrepresented groups in all academic disciplines, not just STEM (Equity, Diversity and Inclusion, personal communication, November 27, 2019; Natural Sciences and Engineering Research Council of Canada, 2019). The aim is to create change within the research communities of Canadian post-secondary institutions by eliminating barriers and inequities (Government of Canada, 2019). VIU received $384,000 in March 2019 from the Equity Diversity and Inclusion Capacity Building Grant for a two-year period (Equity, Diversity and Inclusion, personal communication, November 27, 2019; Natural Sciences and Engineering Research Council of Canada, 2019). The funding has supported the development of VIU’s Equity, Diversity, and Inclusion team which is composed of an Equity, Diversity and Inclusion Advisor, Policy Analyst, Postdoctoral Fellow, and a Student Assistant (Equity, Diversity and Inclusion, personal communication, November 27, 2019; VIU, 2019-GG). The team will review and analyze VIU’s policies to create new policies reflecting an equitable, inclusive, and diverse institution (Equity, Diversity and Inclusion, personal communication, November 27, 2019). The Equity, Diversity and Inclusion team will collect data through a survey, focus groups, and interviews with the VIU community to gain an understanding on where VIU currently stands with equity, diversity, and inclusion in order to develop an Action Plan (Equity, Diversity and Inclusion, personal communication, November 27, 2019). Data the team plans to evaluate includes: statistics of visible minorities, pay equity, and aspects that facilitate a sense of inclusion (Equity, Diversity and Inclusion, personal communication, November 27, 2019).
<p>| 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 | Students in MGMT 494 (Strategies for Sustainable Development) learn about inequalities and discrimination (Management and Law, personal communication, June 4, 2019). |
| 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 | This target was not included as looking into labour share of Canada’s GDP was beyond the scope of this study. |
| 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 | 10.6.1 Proportion of members and voting rights of developing countries in international organizations | This target was deemed irrelevant to VIU as its indicators speaks to voting rights in developing nations. |</p>
<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>legitimate institutions</td>
<td></td>
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<tr>
<td>10.7 Facilitate orderly, safe, regular and responsible migration and</td>
<td>10.7.1 Recruitment cost borne by employee as a proportion of monthly income</td>
<td>This indicator was not included as it was beyond the scope of the study and researchers did not have access to this information for VIU.</td>
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<td>mobility of peoples, including through the implementation of planned</td>
<td>earned in country destination</td>
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<td>and well-managed migration policies</td>
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<tr>
<td>10.7.2 Number of countries with migration policies that facilitate</td>
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<tr>
<td>orderly, safe, regular and responsible migration and mobility of people</td>
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<tr>
<td>10.a Implement the principle of special and differential treatment for</td>
<td>10.a.1 Proportion of tariff lines applied to imports from least developed</td>
<td>As a member of the World University Service of Canada (WUSC), VIU’s Student Refugee Program pairs durable resettlement with education by</td>
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<tr>
<td>developing countries, in particular least developed countries, in</td>
<td>countries and developing countries with zero-tariff</td>
<td>bringing refugee students to Canada to study as permanent residents (Education Abroad, personal communication, August 29, 2019; World</td>
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<tr>
<td>accordance with</td>
<td></td>
<td>University Service of Canada, 2018-b). Since joining WUSC in 2008, VIU has sponsored two refugee students per year (VIU, 2018-I). VIU also</td>
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<td>has an International Refugee Newcomer Award for refugees who are new to Vancouver Island and are seeking post-secondary education (VIU, 2019-z). In addition to sponsoring student refugees, the Student Refugee Program provides social support among students, helps build relationships and competency skills, and raises awareness and education around various SDGs such as education for girls and conscious consumption (Education Abroad, personal communication, November 21, 2019).</td>
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<td></td>
<td></td>
<td>This target was not included as understanding Canada’s tariff lines was beyond the scope of this study.</td>
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<td>World Trade Organization agreements</td>
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<tr>
<td>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</td>
<td>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)</td>
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<tr>
<td>10.c By 2030, reduce to less than 3 per cent the transaction costs of migrant remittance and eliminate remittance corridors with costs higher than 5 per cent</td>
<td>10.c.1 Remittance costs as a proportion of the amount remitted</td>
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</table>

This was not looked into as it was beyond the scope of this study to understand how Canada is achieving this target.

This target was not included in this study for the same reason listed in 10.b above.
### Appendix N

Compiled Data for Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>2018 Data</th>
<th>2019 Data</th>
</tr>
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<tbody>
<tr>
<td>11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums</td>
<td>11.1.1 Proportion of urban population living in slums, informal settlements or inadequate housing</td>
<td>VIU’s Carpentry program has partnered with the Malahat Nation to build affordable housing on their land, while offering the students real-world experience on a job site (Carpentry, personal communication, October 22, 2019). So far, VIU students have helped build two duplexes, three single-dwelling unit homes, and they will be working on an eight-plex throughout 2019 and 2020 (VIU, 2019-SS). Another initiative towards this target is VIU’s First Nations Housing Manager Certificate program, which ensures that housing managers are assisting communities to achieve affordable, healthy, high quality, and well-maintained housing (Cowichan campus, personal communication, October 30, 2019). This program is available online, and so far, there have been ten graduates from across Canada (Cowichan campus, personal communication, October 30, 2019).</td>
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<tr>
<td>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</td>
<td>11.2.1 Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities</td>
<td>VIU is a major stop on the City of Nanaimo’s transit system. Through the Students’ Union, students are able to receive discounts on transit passes (VIU, 2018-b). Students who require accessible parking on campus are able to purchase a S.P.A.R.K. parking permit for $25 per year (VIU, 2018-MM). VIU has recently implemented a new parking pass system, which includes a carpooling system (Facilities Services &amp; Campus Development, personal communication, September 21, 2018). Through this, students and employees no longer have to apply for a carpooling pass; any vehicle that arrives to campus</td>
<td>VIU Residence provides new students with a free day bus pass on orientation day to provide the student with an opportunity to learn how to navigate the transit system (Residence, personal communication, July 22, 2019). In 2018, VIU’s Health and Safety Office also partnered with Bikes for Kids, a local non-profit organization (VIU, 2018-AAAA). This partnership provides replacement bikes to VIU students and employees in need (VIU, 2018-AAAA). Also related to affordable and accessible transport, a VIU Masters of Community Planning student is researching people’s attitudes towards e-bikes and whether or not it</td>
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</table>
with two or more people are able to park in the carpooling spots (Facilities Services & Campus Development, personal communication, September 21, 2018). As well, individuals are allowed to share parking passes, which encourages carpooling (Facilities Services & Campus Development, personal communication, September 21, 2018).

Another service available through VIU that provides transportation options is the VIU Grocery Shuttle sponsored by International Education and VIU Student Residence (VIU, 2018-LL). The Grocery Shuttle drives students to and from grocery stores, allowing them to buy goods twice a week (VIU, 2018-LL).

In 2018, VIU initiated a review of the Nanaimo Campus Transportation systems through Watt Consulting group and received a final report, Vancouver Island University TDM Strategy Update (TDM) (Watt Consulting Group, 2018). The report provided VIU with feedback on its current status of the transportation systems and recommended actions to move forward with (Watt Consulting Group, 2018). Currently based off of the TDM, VIU Facilities has implemented 25 of the 200 recommendations (Facilities Services & Campus Development, personal communication, September 21, 2018). Additionally, VIU is expecting a 5,000 hour service increase in January 2019 for the public transit system (Facilities Services & Campus Development, personal communication, September 21, 2018). Although VIU is a stakeholder, the transit system in Nanaimo is controlled by the Regional District of Nanaimo (Facilities Services & Campus Development, personal communication, September 21, 2018).

| those in vulnerable situations, women, children, persons with disabilities and older persons | makes sense for the City of Nanaimo to include this mode of transportation in its cycling plan (VIU, 2019-kk). |
Additionally, VIU offers bike lockers and racks to employees and students to promote alternative transportation. There are three bike lockers located on the Nanaimo campus at buildings 190, 300, and 370 and there are bike racks located all over campus (VIU, 2018-NN; VIU, 2018-OO).

<table>
<thead>
<tr>
<th>11.3.1 Ratio of land consumption rate to population growth rate</th>
<th>This indicator was not included as it was determined irrelevant to VIU as an educational institution.</th>
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<tbody>
<tr>
<td>In Policy 11.02 (Mission, Vision, and Values), it is stated that an objective of VIU is institutional effectiveness (VIU, 2018-e). Institutional effectiveness comes from transparency, respect, accountability, and supporting faculty, staff and student involvement in university leadership and governance (VIU, 2018-e). To understand where the university sits in the eyes of students, VIU has the Canadian University Survey Consortium (CUSC) (VIU, 2018-PP). The CUSC runs a survey once a year to understand the student experience at VIU and is used to inform decisions regarding improvements (VIU, 2018-PP). Each year the survey focuses on different student population, for example the most recent survey from 2017 focused on students in their 2nd and 3rd year (VIU, 2017-e). VIU has also gained feedback throughout 2017/18 with the “VIU People Plan” (VIU, 2018-QQ). The Plan allowed the VIU community, including employees and students, to share their thoughts and opinions about the university through a survey, a World Café, and focus groups (VIU, 2018-QQ). The aim of the Plan is to help employees and students pursue their goals and achieve professional development (VIU, 2018-QQ). Many individual programs such as, VIU Business students and faculty members, are given the opportunity to provide feedback on all business programs, which then gets implemented into future programs (BBA Management, personal communication, June 4, 2019). For example, three new Business Minors are being implemented as a result of these evaluations (BBA Management, personal communication, June 4, 2019). Furthermore, the Faculty of Business is currently doing a full review under the Accreditation Council for Business Schools and Programs (BBA Management, personal communication, June 4, 2019). Enhanced participation in the management of VIU is further addressed, as mentioned in the 2018 data, through the VIU People Plan. The plan allows for the VIU community to share their thoughts through a survey approach. The People Plan Steering Committee is comprised of approximately 23 individuals from varying administrative levels and employee groups, such as faculty, staff, union representatives, and administrators (VIU, 2019-TT). The “Five Invitations for Action” have been identified as key areas to strengthen the support for VIU’s existing workplace (VIU, 2019-TT). VIU’s Human Resources Department has included both short-term and long-term objectives for each of the following Invitations for Action: Cultivate a Healthy Workplace Culture, Support Transformational Leadership and Professional Development, Encourage Employee Well-Being, Advance Operational Effectiveness and Innovation,</td>
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<tr>
<td>11.4 Strengthen efforts to protect and safeguard the world’s cultural and natural heritage</td>
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<tr>
<td>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)</td>
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| VIU values cultures and diversity, which is made apparent through its policies (VIU, 2018-e). VIU’s Policy 11.30 (Governance Policy) states that VIU aims to respect people and place and enhance collaborative relationships with Aboriginal communities (VIU, 2018-e). Also one of the core values outlined in Policy 11.30 is diversity, stating that VIU values “human diversity in all its dimensions” and is committed to “maintaining learning and working environments that are equitable, diverse, and inclusive” (VIU, 2018-e; Policy 11.30, p. 48). Other policies that are related to this indicator are Policy 44.15 (Smudging and Other Ceremonial Uses of Smoke and Tobacco) and Policy 11.02 (Mission, Vision, and Values) (VIU, 2018-e). Policy 44.15 acknowledges smudging as an integral part of Aboriginal culture and indicates guidelines for smudging (VIU, 2018-e). Policy 11.02 states that VIU aims to enhance collaborative relationships with Aboriginal communities (VIU, 2018-e).

There are 1,569 Indigenous students at VIU and 9 Elders-in-Residence (VIU, 2018-VV). Numbers from VIU’s 2017/18 Consolidated Resource Plan show that VIU spends $814,697 on Aboriginal Education and Engagement (VIU, 2018-vv). One of the most prominent aspects of Aboriginal Education and Engagement at VIU is Shq’apthut – A Gathering Place (VIU, 2018-WW). The Gathering Place is home to the Services for Aboriginal Students and is a place where cultural, academic, recreational, and social |

| and Foster Diversity, Fairness and Truth and Reconciliation (VIU, 2019-TT). |
| VIU’s Parks Canada Club exists to bring students together across VIU to appreciate and protect Canada’s cultural and natural heritage (VIU, 2019-UU). This is accomplished through local outdoor outings, conservation efforts, and trips to nearby Parks Canada places (VIU, 2019-UU). VIU has many policies and processes to assist in the preservation, protection, and conservation of Indigenous culture. For example, VIU has an Indigenous Education Plan, which was last updated in January of 2018 (VIU, 2018-vvvv). The annual report includes planning and priorities on the implementation of the Aboriginal Education Plan in order to re-evaluate content and recommendations as needed (VIU, 2018-vvvv). The Education Plan strives to create a holistic experience for Indigenous students on campus (VIU, 2018-vvvv). VIU’s 2019 Institutional Accountability Plan and Report mentions that there are ongoing discussions surrounding the creation of a Faculty of Indigenous Engagement and Learning (VIU, 2019-HH). A series of consultations began in 2017 and have included VIU Elders, Hwulmuxw Mustimuxw Siiem, faculty members, and students (VIU, 2019-HH). As of 2018, in further support of the UN Declaration on the Rights of Indigenous Peoples and the Jay Treaty of 1795, VIU recognizes any Indigenous peoples whose ancestral lands are within Canada as domestic students rather than international students, with the corresponding difference in tuition fees (VIU, 2018-yyyy). As mentioned in the 2018 data, the VIU Nanaimo campus has Shq’apthut (A Gathering Place) and an Elders-in-Residence program. A Report titled Elders-in-Residence at Vancouver Island University: Transformational Learning was produced in 2011 for the Elders-in-Residence program (VIU,
Each year, The Gathering Place hosts approximately 26 cultural and social events, some of which include: Reconciliation Road, Lecture Series, VIU Totem Celebration, and the Witness Blanket Art Installation (Aboriginal Education, personal communication, August 17, 2018; VIU, 2018-WW). Along with these activities, VIU also educates its students about different cultures. Departments such as English, Anthropology, Criminology, Political Studies and First Nations Studies offer courses on Indigenous and cultural topics. These courses include: ENGL 221: North American Indigenous Literatures, ANTH 121: Aboriginal Peoples and Cultures in Canada, ANTH 221: Indigenous Cultures of B.C., CRIM 200: Aboriginal Issues in the Canadian Criminal Justice System, and POLI 151: Law and Politics in Canada (VIU, 2018-j).

The VIU@Cowichan Innovation Lab engages in many different projects that highlight, and are attempting to preserve, Indigenous cultures (VIU@Cowichan Innovation Lab, personal communication, September 20, 2018). Examples of these projects include: Digital Storybook and Language Revitalization and Digitization. The Digital Storybook aims to create an open access interactive digital storybook that focuses on the Uummarmiut linguistic group of the Inuvialuit people (VIU@Cowichan Innovation Lab, 2018-a). The Language Revitalization and Digitization project has been working with a Penelakut Elder and Hul’q’umi’num’ Instructor to digitize the Hul’q’umi’num’ language for use in education (VIU@Cowichan Innovation Lab, personal communication, 2018-b).

Through surveys and interviews with VIU students and employees, the report showed that students valued the Elders’ time, knowledge, and support (VIU, 2011-a). VIU also has initiatives that aim to preserve, protect, and conserve Indigenous culture. VIU’s History 480 (Public History) class, in collaboration with the VIU library, is creating an easily searchable record of Nanaimo’s history, in the hopes of allowing researchers, students and the greater community to take steps towards reconciliation (VIU, 2019-ii). VIU was selected to receive funding for the digitization of the collection, to preserve Canadian cultural heritage, by Libraries and Archives Canada and the National Heritage Digitization Strategy (VIU, 2019-ii). On June 21, 2019, National Indigenous Peoples Day, VIU raised the Snuneymuxw First Nation and Métis Nation flags on the Nanaimo campus to symbolize VIU’s ongoing commitment to nurturing and maintaining relationships with these communities (VIU, 2019-MM). Another initiative is the Garden of Spiritual Healing at the Snaw-naw-as Health Centre (VIU, 2019-ii). In collaboration with the Snaw-naw-as community Garden Committee, MABRRI developed this project with the hopes of assisting in the preservation of language and knowledge pertaining to native plant species (VIU, 2019-ii). Furthermore, the Garden of Spiritual Healing addresses food security, community capacity building, education and outreach, and mental and therapeutic health benefits (VIU, 2019-ii).

VIU’s ‘su’luqw’a’ Community Cousins program is an Indigenous student mentor program with the goal of elevating students, recognizing and celebrating culture, and strengthening community and support on campus (VIU, 2019-NN; VIU, 2017-f). The Celebration of Learning event is also hosted by the Community Cousins program, which brings people together to share their stories and experiences of being a VIU student (VIU, 2017-f); Aboriginal Education, personal communication, November 14, 2019).
Along with Aboriginal cultures, VIU also celebrates the various diverse cultures of all its students and employees. International students at VIU make up 14% (2,013) of the population (VIU, 2018-d). Each year VIU hosts WorldVIU Days, which is a week-long event that explores and celebrates the diverse cultures on campus (VIU, 2018-O). Another event at VIU is the Cultural Couch Series which aims to enhance cross-cultural understanding (VIU, 2018-XX). Students can also participate in Cultural Connections – Day Trips and Activities (VIU, 2018-YY). These day trips and activities allow students to discover Vancouver Island’s vibrant communities and local culture (VIU, 2018-YY).

The topic of natural heritage is discussed in various courses offered at VIU such as: POLI 457 (Public Policy and Global Resources), GEOG 290 (Regions of Canada), GEOG 100 (World Regional Geography), and RMOT 251 (Resource Management Seminars) (VIU, 2018-j).

Another resource for students and faculty is VIU’s Indigenous Perspectives Learning Circle group (VIU, 2019-OO). The student group is made up of Indigenous, international, and domestic students, and the faculty group is open to all faculty members who are seeking guidance in supporting Indigenous culture (Aboriginal Education and Engagement, personal communication, July 12, 2019). Both groups meet monthly to discuss how to better incorporate Indigenous perspectives into their work, studies, and personal lives (VIU, 2019-OO).

Another initiative to address the importance of cultural at VIU is Reconciliation Road: Join the Journey with VIU (VIU, 2019-PP). This initiative demonstrates VIU’s commitment in the responsibilities laid out by Canada’s Truth and Reconciliation Commission (VIU, 2019-PP). VIU’s Reconciliation Road is made up of a series of events and activities that aim to engage the VIU community in the reconciliation process (VIU, 2019-PP). Examples of past events include: The Witness Blanket Art Installation, Soup & Bannock Lunch & Learn Series, Coast Salish Protocol Session, The KAIROS Blanket Exercise, Indigenous Book Circle, National MBA Campaign, Conversations Toward Reconciliation and Healing, Land-Based Traditional Teaching, Indigenous Learning Circles, as well as a number of guest lectures (VIU, 2017-j).

VIU has a number of policies and processes in place to ensure respectful use of Traditional Knowledge and/or Indigenous Intellectual Property. There were also a variety of programs and activities throughout the 2018/19 academic year to facilitate student success, retention, program completion, and support to Indigenous communities, such as: Aboriginal Culture Nights, Aboriginal Service Plan Coordinator, Hwulumuxw Mustimuxw Siem (VIU’s Aboriginal Advisory Group), Penelakut Island Learning Centre, Snuneymuxw House of Learning – Hul’qumi’num Language Revitalization, Malahat Nation Kwunew Kwasun...
In partnership with The Laurier Institution and CBC Radio One Ideas, VIU Nanaimo hosts an annual Indigenous Peoples Speakers Series (VIU, 2015-d). This is one of several initiatives VIU is undertaking to demonstrate its commitment to and respect for Indigenous people in response to the Truth and Reconciliation Commission (VIU, 2015-d). The 2018 talk was titled Re-Imagining Reconciliation: Confronting Myths and The Future of Canada (VIU, 2018-zzzz). Additionally, in 2019 VIU hosted an Indigenous activist, author and educator, to speak to students at the Nanaimo and Cowichan campuses about Indigenous resurgence in the era of reconciliation (Vancouver Island Faculty Association, 2019-RR).

In 2016, VIU became home to the first Fulbright Canada Jarlsowsky Visiting Research Chair in Aboriginal Studies (VIU, 2016-b). The support of this position focuses on engaging VIU’s Aboriginal students in the research process, and strengthening relationships between the University, First Nations, Métis, Inuit, and the broader community (VIU, 2016-b). VIU’s 2019 Fulbright Canada Jarlsowsky Foundation Visiting Research Chair in Aboriginal Studies will explore the similarities and differences between how Indigenous scientific and cultural issues are covered by the media in Canada and the United States (VIU, 2019-LL). This research will help VIU further its efforts to ensure
Indigenous voices and perspectives are present in academia.

VIU’s Cowichan campus also has many initiatives that work towards the preservation, protection and conservation of Indigenous cultures, as well as different cultures in general. For example, the campus hosts film nights that look at cultural issues and topics (Cowichan campus, personal communication, September 4, 2019). Recently, two new totem poles were raised on campus, one of which was carved by an instructor in Cowichan’s Indigenous Education department (Cowichan campus, personal communication, September 4, 2019). In addition to the totem poles, Indigenous art, such as Salish weave collections and a traditional whaling kayak, are displayed on campus (Cowichan campus, personal communication, September 4, 2019). It is estimated that approximately 25% of the student population at the VIU Cowichan campus self-identify as Indigenous (Cowichan campus, personal communication, September 4, 2019).

VIU’s Powell River campus has been involved in numerous initiatives to preserve, protect, and conserve Indigenous culture as well. For example, the campus was involved in a reconciliation canoe carving project where community members learned Indigenous cultural protocols and canoe carving skills (Powell River campus, personal communication, July 23, 2019). The Culinary Arts program in Powell River is working to incorporate Indigenous knowledge into their teaching and general operations (Powell River campus, personal communication, July 23, 2019). This campus has recently been awarded funding to provide traditional skill building workshops (medicine, food, etc.) led by First Nations instructors (Powell River campus, personal communication, July 23, 2019). The VIU Powell River campus also has support systems in place for Indigenous students, including an Elder-in-Residence, a recently upgraded Gathering Place, and an Indigenous
student navigator who provides students with counselling and social and academic support (Powell River campus, personal communication, July 23, 2019). The campus has also hosted community conversation circles that aim to bring awareness to the non-Indigenous population around the topic of Treaty responsibilities (Powell River campus, personal communication, July 23, 2019).

As mentioned in the 2018 data, cultural education is present in many departments and courses at VIU. For example, within the Bachelors of Business Administration faculty, over 50% of the students are international, so understanding cultures is quite important in this faculty (Management and Law, personal communication, June 4, 2019). Additionally, VIU’s English, Child and Youth Care, History, Management, and Social Work programs touch on this topic through many courses. This courses include: ENGL 326 (Topics in Globalization and Culture), ENGL 332 (Topics in Indigenous Literature), ENGL 222 (Travels in World Literature), ENGL 221 (North American Indigenous Literatures), ENGL 331 (Topics in West Coast Literature), ENGL 126 (Literature and Culture: Indigenous Focus), CYC 321 (Contact and Colonization: Implications for CYC Practice), CYC 232 (Diverse Abilities in Child and Youth Care), CYC 212 (Introduction to Activity Based Child and Youth Care Practice), CYC 324 (Community and Program Development in Child and Youth Care Practice), CYC 350A (Law and Social Services), CYC 422 (CYC First Nations Fourth Year Seminar), HIST 230 (Studies in the History of First Nations in Canada), HIST 344 (Indigenous Peoples and the Law in Canada), HIST 345 (Tradition and Transition: Canadian Values and Ideas in the 19th Century), HIST 346 (Aspects of the Modern: Canadian Values and Ideas in the 20th Century), HIST 480 (Public History), MGMT 192 (Principles of Management), MGMT 393 (Workplace Legislation), MGMT 396 (International Human Resource Management), and SOCW 421 (Social Work Practice with Indigenous Communities). (English, personal
communication, August 22, 2019; Child and Youth Care, personal communication, September 18, 2019; History, personal communication, August 27, 2019; Management and Law, personal communication, June 4, 2019).

VIU’s Early Childhood Education and Care program was designed with reference from the Indigenous Early Learning and Child Care Framework as well as the BC Early Learning Framework, which has Indigenous content woven throughout it (Early Childhood Education and Care, personal communication, October 3, 2019). Therefore, traditional Indigenous knowledge and ways of learning and consistently incorporated into the program (Early Childhood Education and Care, personal communication, October 3, 2019).

For example, to familiarize students with Indigenous culture, all first years participate in the KAIROS Blanket Exercise and Orange Shirt Day (ECEC, personal communication, October 3, 2019). Another program that focuses on culture is VIU’s Art and Design faculty (Art and Design, personal communication, June 11, 2019). This program regularly collaborates with the Office of Aboriginal Education and the Gathering Place, in order to host Indigenous artists and art shows (Art and Design, personal communication, June 11, 2019).

Students in VIU’s Nursing programs often complete their placements in Indigenous communities, during which traditional ways of knowing and learning are frequently incorporated into student perspectives and approaches to healthcare (Nursing, personal communication, September 20, 2019). The students working in these Indigenous communities have been invited to attend cultural ceremonies and Elders lunches to learn about culture and protocol (Nursing, personal communication, September 20, 2019). Professors in VIU’s Nursing program are currently looking at how to incorporate language into their teaching – this semester they are working on basic greetings and
numbers and encourage students to consult with those who know the language. Students also advocate for greater awareness for reconciliation and Indigenous issues by participating in Orange Shirt Day each year and exploring the barriers to accessing traditional Indigenous foods (Nursing, personal communication, September 20, 2019).

VIU’s new Program Development Schedule lists the following programs, which address the topic of preserving, protecting, and conserving Indigenous culture: Arts and Humanities: Indigenous Leadership Certificate (2020/21), Master of Arts in Community-Based Cultural Practices (2020/21), International: Post Graduate Certificate in Intercultural Studies (2022/23), Management: Bachelor of Indigenous Leadership Development (2019/20) (Office of University Planning and Analysis, 2019).

VIU’s Indigenous/Xwulmuxw program is a collaboration between the University and the First Nations of Vancouver Island and British Columbia (Indigenous Studies, personal communication, September 23, 2019). Every course in the program addresses the topic of preserving, protecting, and conserving Indigenous culture (Indigenous Studies, personal communication, September 23, 2019). Cultural technicians from local Indigenous communities are hired to assist with teaching, as well as facilitation of cultural activities such as: Indigenous and settler’s relations, language, drumming, and singing (Indigenous Studies, personal communication, September 23, 2019). Outside of the building that the program runs out of there is a statue/figure, erected in 1992, that is representative of the community-based nature of the Indigenous studies program (Indigenous Studies, personal communication, September 23, 2019). At the time of its conception, this program was noted as a bold and innovative attempt to achieve Indigenous control of Indigenous education in a public postsecondary institution (Indigenous Studies, personal communication, September 23, 2019).
In collaboration with Yukon College and the McConnell Foundation, and with support from Colleges and Institutes Canada and Universities Canada, VIU participated in hosting the *Perspectives on Reconciliation* summer institute to support the Canadian post-secondary sector in advancing reconciliation (Yukon College, 2019). The 2019 summer institute in Yukon helped leaders identify and advance pathways for reconciliation, learn from one another’s lessons and best practices, and take inspiration from each other’s reconciliation journeys with the goal of building on these efforts (Yukon College, 2019). Presidents and reconciliation leaders from the participating institutions explored ways to advance reconciliation efforts and identify next steps for meaningful change (Yukon College, 2019).

A Master of Arts in Sustainable Leisure Management student has received a Canada Graduate Scholarships-Master’s award to explore Kwakwaka’wakw Potlatch as a form of Indigenous leisure (VIU, 2019-VV). The student aims to demonstrate that there are forms of leisure to be recognized other than through a Western context (VIU, 2019-VV).

VIU awards Honorary Doctorates to encourage a standard of excellence and innovation which is exemplary to students, employees and society in general (VIU, 2019-HH). At the spring 2019 convocation, fourteen Honorary Doctorates were presented, and of those, thirteen were given in recognition of work done to further the rights of Indigenous Peoples in Canada (VIU, 2019-HH). Nine of these were given to the Skidegate Haida Immersion Program Elders (whose average age was 84) in recognition of their lifetime of dedication to preserving and revitalizing their language, and in doing so, preserving their culture (VIU, 2019-HH). A member of the Heiltsuk First Nation received an Honorary Doctorate of Law from VIU in recognition of his commitment to advancing the causes of Indigenous sovereignty, cultural resilience and environmental
<table>
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<tr>
<th>Objective</th>
<th>Indicator</th>
<th>Notes</th>
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<tbody>
<tr>
<td>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 positions</td>
<td>11.5.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population</td>
<td>This target was determined not relevant to an educational institution. It was beyond the scope of this study to look into the impact of disasters on Canada.</td>
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<td>11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and</td>
<td>11.6.1 Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities</td>
<td>This indicator was deemed not applicable to a post-secondary institute and was therefore not included.</td>
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<td>11.6.2 Annual mean levels of fine</td>
<td>VIU’s Applied Environmental Research Laboratories has a “Mobile Mass Spectrometry Lab” (the Mass Specmobile).</td>
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<td>municipal and other waste management</td>
<td>particulate matter (e.g. PM2.5 and PM10) in cities (population weighted)</td>
<td>The mobile lab is driven around Vancouver Island driven around communities to measure trace-level contaminants, and the sources of different volatile organic compounds in the atmosphere, which impact local air quality (VIU, 2018-ssss). <em>The Mass Specmobile</em> is the only mobile unit of its kind in Canada that is capable of continuously measuring trace level contaminants, allowing researchers to map out the geographical distribution of atmospheric components of volatile chemical compounds and particulate matter (VIU, 2019-ii).</td>
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<td><strong>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</strong></td>
<td>On the Nanaimo campus, all outdoor spaces are available to public use by all peoples. VIU focuses on making as many “destination spaces” on campus as possible, the kinds of places where people what to hang out (Facilities Services &amp; Campus Development, personal communication, September 21, 2018). Currently the Nanaimo campus has a few open gathering places including: the Okayama Gardens, the Kwulasulwut Gardens, the Jarden des Quatorze, the Tamagawa Gardens, and the main courtyard in the centre of campus (VIU, 2018-OO). Within these open spaces people have access to green space, benches, and some tables. The Cowichan campus also offers students and employees access to open spaces with its sheltered seating area and garden on the roof (Vancouver Island University Cowichan, 2018-c). In addition, the VIU community also has quick and easy access to over 880 hectares of parks all over Nanaimo (City of Nanaimo, 2018; City of Nanaimo, 2016). In 2017, graduate students in VIU’s Master of Community Planning program initiated an evaluation of VIU’s campus gathering spaces (VIU, 2018-SS). Through public engagement from the VIU community, the objective of the evaluation is to provide VIU’s Facilities and Services with a final report.</td>
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A VIU Master of Community Planning student is researching how libraries impact people’s quality of life (VIU, 2019-ii). The student’s research is supported by a SSHRC Graduate Scholarship, and the findings aim to help city planners and individuals understand the important role libraries play in communities (VIU, 2019-ii).
<p>| 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 | VIU’s Human Rights and Respectful Workplace Office (HRRWO) produces an annual report; in the 2015/16 report numbers show that there was a total of 35 alleged complaints that year (VIU, 2016). To address discrimination and/or harassment at VIU, VIU has implemented policies and procedures and has engaged in some initiatives which are discussed in more detail in Goal 10 (Appendix M). | As mentioned in Goals 5 and 10 VIU engages in campaigns and initiatives, such as the Know More Campaign, to promote a positive and safe space on its campuses (VIU, 2018-Y). In collaboration with the Positive Space Campaign, VIU’s Residences provide drop-in meetings to students once a week, as a place for students to connect and feel safe in regards to talking about physical and sexual violence (Residence, personal communication, July 22, 2019). VIU’s Psychology program offers courses that address the topic of this indicator. These courses include: PSYC 430 (Abnormal Psychology), PSYC 103 (Psychological Explanations of Criminal and Deviant Behaviour), PSYC 440 (Skills and Techniques in Counselling and Psychotherapy), and PSYC 403 (Forensic Psychology). Psychology students often participate in practicums with Haven Society, an anti-violence organization, and Edgewood Treatment Centre, a drug rehab and alcohol addiction treatment facility, both of which are in Nanaimo (Psychology, personal communication, May 17, 2019). |
| 11.a Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional | 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 | This target was not included as it was deemed inapplicable to a post-secondary institute. |</p>
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<th>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</th>
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<td>This target was not included as it was determined to be beyond the scope of the study to understand Canada’s adaptation and implementation of disaster risk reduction.</td>
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<th>11.b.1 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030</th>
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<tr>
<td>VIU follows the British Columbia Emergency Response Management System (BCERMS) and the Incident Command System (ICS) (VIU, 2017-d). VIU has an Emergency Preparedness Plan, which is guided by Policy 41.09 (Health and Safety Policy) (VIU, 2017-d; VIU, 2018-e). On campus there is the Emergency Operations Centre that is designed to provide support for site emergency or any other emergency events (VIU, 2017-d). In its Emergency Preparedness Plan, VIU highlights that in the case of a Level 3 – Catastrophic Emergency (e.g. natural disasters) – the university “requires coordinated response with local governments, departments, and outside agencies” (VIU, 2017-d, p. 8).</td>
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<th>11.b.2 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies</th>
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<td>As described in more detail in Goal 17, VIU has many international partnerships, some of which offer technical assistance to engage in sustainable practices.</td>
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<td>assistance, in building sustainable and resilient buildings utilizing local materials</td>
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## Appendix O

Compiled Data for Goal 12: Ensure sustainable consumption and production patterns

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<tr>
<th>Target</th>
<th>Indicator</th>
<th>2018 Data</th>
<th>2019 Data</th>
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<tr>
<td>12.1 Implement the 10-Year Framework of Programmes on Sustainable</td>
<td>12.1.1 Number of countries with sustainable consumption and production</td>
<td>This target was determined inapplicable to an educational institution. It</td>
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<td>Consumption and Production Patterns, all countries taking action, with</td>
<td>(SCP) national action plans or SCP mainstreamed as a priority or a target</td>
<td>was beyond the scope of this project to look into Canada’s implementation</td>
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<td>developed countries taking the lead, taking into account the</td>
<td>into national practices</td>
<td>of the 10-Year Framework of Programmes on Sustainable Consumption and</td>
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<td>development and capabilities of developing countries</td>
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<td>Production Patterns.</td>
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<td>12.2 By 2030, achieve the sustainable management and efficient use of</td>
<td>12.2.1 Material footprint, material footprint per capita, and material</td>
<td>The research team was unable to find records of VIU’s material footprint.</td>
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<td>natural resources</td>
<td>footprint per GDP</td>
<td>In regards to paper usage, VIU has reduced its paper use by about 20% from</td>
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<td>2010 to 2018 (Sustainable Advisory Committee, personal communication,</td>
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<td>August 24, 2018). VIU is moving towards a central printing system that</td>
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<td>will reduce the number of printers on campus, further impacting the paper</td>
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<td>usage (Sustainable Advisory Committee, personal communication, August 24,</td>
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<td>2018). In July 2018, VIU transitioned from physical, printed parking</td>
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<td>permits, to</td>
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<td>For additional data related to paper usage, VIU implemented Papercut in</td>
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<td>2019, a secure print release system that places print jobs in a holding</td>
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<td>state until the user authenticates and releases the job at the printer</td>
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<td>(VIU, 2019-XX). Also to acknowledge and address the University’s high</td>
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<td>consumption of paper, toner, and electricity, VIU’s Managed Print Services</td>
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<td>(MPS) program is designed to support environmental initiatives, reduce</td>
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<td>waste, and optimize printing output (VIU, 2019-YY). Through the MPS</td>
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<td>project, VIU is in the process of introducing new Multi-Functional Devices</td>
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a License Plate Recognition (LPR) system (VIU, 2018-ZZ). This new system will be reducing the amount of waste and litter on campus from parking passes (VIU, 2018-ZZ). VIU’s Forestry program has been able to help VIU reduce its material footprint as they shifted away from paper and textbooks in 2014, relying primarily on their iPads and technology (VIU, 2018-fff; VIU, 2018-ggg).

that will offer significant cost and energy savings (VIU, 2019-YY).

Various groups at VIU have been engaging in initiatives related to material footprint. Students in the 2019 Package Studio of the Graphic Design program were challenged to consider the sustainability of product packaging (VIU, 2019-bbb). Their project involved redesigning the package of a product of their choice to make it more ecologically responsible (VIU, 2019-bbb).

The outcomes of this challenge were displayed at The View Gallery on the Nanaimo campus (VIU, 2019-bbb). VIU’s Awareness of Climate Change through Education and Research (ACER) group educates the public on responsible consumption through their carbon footprint quiz and workshops they offer during their annual symposium (Awareness of Climate Change through Education and Research, personal communication, October 3, 2019; VIU, 2019-ccc).

The Powell River campus has played a role in helping the community reduce their material footprint. Fibre Space, located on the Powell River campus, is a space where anyone in the community can go to learn how to make new clothes and textiles out of upcycled garments (Powell River campus, personal communication, July 23, 2019). Additionally, students in MBA 541 (Corporate Social Responsibility) and MGMT 494 (Strategies for Sustainable Development) complete an online footprint calculator and discuss topics such as fast fashion, local food economics, and material consumption (Business Administration in Management and Law, personal communication, June 4, 2019). VIU’s re-designed Master of Business Administration program (Fall 2020) will incorporate the topic of material footprint and domestic material consumption (Management and Law, personal communication, June 4, 2019; VIU, 2019-ddd).
Although not directly related to the indicator, VIU has several programs that focus on the sustainable management and efficient use of natural resources. The Diploma in Resource Management Officer Technology and Bachelor’s Degree in Natural Resource Protection programs at VIU are both designed to prepare students for careers in the protection and management of Canada’s fisheries, wildlife, and parks resources (VIU, 2020-b). The Bachelor of Arts Major in Geography also features two specializations which students can choose from – Sustainable Resource Management or Urban and Social Sustainability (VIU, 2020-k). In the Sustainable Resource Management stream, students take courses that provide them with a general understanding of the environment, along with more specialized courses such as GEOG 350 (Natural Resource Management), GEOG 352 (Managing Natural and Social Capital), GEOG 356 (Policy, Resources and Sustainability), and GEOG 452 (Applications in Natural Resource Management), which prepare them for a career in Natural Resource Management (VIU, 2020-k). VIU also has the Natural Resource Extension Program which offers professional development training courses in a variety of disciplines such as riparian, shellfish, fisheries, safety training, water quality, and environmental (VIU, 2019-ZZ). The First Nations Stewardship Technicians Training program provides students with skills and knowledge required to work for an Indigenous community in jobs such as Coastal Guardian Watchman, fisheries technician, heritage surveyor, or environmental monitor (VIU, 2019-eee).

| 12.2.2 Domestic material consumption, domestic material consumption per capita, and domestic material | VIU’s Policy 42.31 states that “the Purchasing Department is responsible for sourcing, negotiating, and administering the purchase of goods and services” for all of VIU except for the Library and Campus Store (VIU, 2018-e; Policy 42.31, p. 1; Purchasing, personal communication, August 24, 2018). The Purchasing Department follows the guidelines of NAFTA, The New The Culinary Arts program at the Cowichan campus, in partnership with Providence Farm, runs the Farm Table Restaurant which offers a farm-to-table experience (Cowichan campus, personal communication, September 4, 2019; VIU, 2019-qq). The Farm Table Restaurants sources almost 100% of their food locally from Providence Farm and other local fisheries and farms |
consumption per GDP

West Trade Partnership Trade Agreement (NWPTA), the Agreement on Internal Trade (Canada), and the Purchasing Management Association of Canada’s Code of Ethics (NAFTANOW, 2018; New West Partnership Trade Agreement, 2018; Canadian Free Trade Agreement, 2018; Supply Chain Management Association, 2018; Purchasing, personal communication, August 24, 2018). Following these agreements, VIU must have a competitive, open public bidding process for the purchase of all goods and services over $75,000 or $200,000 for construction (Purchasing, personal communication, August 24, 2018). An internal VIU agreement requires all departments to go through Purchasing for any purchase over $50,000 (Purchasing, personal communication, August 24, 2018). Due to this public bidding process, VIU cannot actively seek out local products from local distributors (Purchasing, personal communication, August 24, 2018). However, through their proposal for goods and services they are able to outline requirements which may be better met by local distributors or goods (Purchasing, personal communication, August 24, 2018).

The Campus Store deals with companies in the Workers’ Rights Consortium (WRC), of which VIU is an affiliate (Worker Rights Consortium, 2018; Campus Store, personal communication, August 17, 2018). Although the Campus Store desires to sell local goods and products, the price-point and demand does not support it resulting in a low percentage of all products and goods in the store being domestic and local (Campus Store, personal communication, August 17, 2018). The local products include Hornby Island Bars, handmade local soaps, and local jewellery, with hopes to add more in the future (Campus Store, personal communication, August 17, 2018). In November and

VIU’s Carpentry program is conscious of its material consumption and aims to reduce their amount of waste (Carpentry, personal communication, October 22, 2019). The program tries to work on real-life projects within the surrounding community, so projects don’t have to be built on campus and then torn down to produce waste (Carpentry, personal communication, October 22, 2019). For example, the Carpentry students sided the electrical building on the Nanaimo campus and built an arbour for Shq’apthut, which provided them with hands-on project experience that was applicable to the real world (Carpentry, personal communication, October 22, 2019).
<table>
<thead>
<tr>
<th>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</th>
<th>December the store highlights local artisans (Campus Store, personal communication, August 17, 2018).</th>
</tr>
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<tbody>
<tr>
<td>12.3.1 Global Food Loss Index</td>
<td>VIU composites its food waste as a sustainable method to deal with food loss (Food Services, personal communication, October 2, 2018). Compost bins are provided all across campus where they are needed and provided by VIU Catering when their services are employed (Food Services, personal communication, October 2, 2018). In addition, Food Services has been taking steps with their menu planning to help reduce its food waste (Food Services, personal communication, October 2, 2018). Friday is their Buffet Day and poutine bar where they sell the leftovers from throughout the week rather than tossing them out (Food Services, personal communication, October 2, 2018).</td>
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<tr>
<td>At the Powell River campus efforts are being made to reduce food waste through the campus café, <em>Food for Thought</em> (Powell River campus, personal communication, July 3, 2019). The café uses food leftovers from the Culinary Arts program to make sandwiches (Powell River campus, personal communication, July 3, 2019).</td>
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<tr>
<td>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...</td>
<td>Labs at VIU are required to follow certain standards set out by VIU Health and Safety Services (VIU, 2018-aaa). These standards are in compliance with legislation set out by the municipality, the province of British Columbia, and Canada (VIU, 2018-aaa). WorkSafe BC requires that all persons that are dealing with hazardous materials must follow the Workplace Hazardous Materials Information System (WHMIS) (WorkSafeBC, 2018; Canadian Centre for Occupation Health and Safety, 2018). VIU has Principal Investigators and faculty that ensure that the labs follow the requirements set out (VIU, 2018-aaa). The disposal of chemical waste must also follow the federal, provincial, and municipal regulations and bylaws. Hazardous waste at VIU must be stored in a separate storage room located near the loading bay area and the space must be designed with specialized ventilation (VIU, 2018-aaa; VIU, 2014-b). Facilities Services and Campus Development Health and Safety Manual states that hazardous chemicals are not to be...</td>
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<tr>
<td>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</td>
<td>Within the Carpentry program, all students are required to obtain their WHMIS Level 1 Certificate (Carpentry, personal communication, October 22, 2019). The program does not regularly deal with chemicals, but when they do, outside contractors are brought in to provide in-depth training to the students (Carpentry, personal communication, October 22, 2019). Students can receive certificates for this training offered by outside contractors (Carpentry, personal communication, October 22, 2019). In the VIU Nursing labs, the standards for dealing with hazardous waste and chemicals follows Island Health’s policies for safe handling of prescription drugs and appropriate use and disposal of sharps (Nursing, personal communication, June 4, 2019). Although no hazardous gases are used on campus, all Nursing students are fitted with N95 masks in the case where they may be exposed...</td>
</tr>
<tr>
<td>human health and the environment</td>
<td>poured down drains (VIU, 2014-b). Instead, they are to be placed in appropriate waste containers and properly labelled following provincial and federal regulations (VIU, 2014-b). In 2017, VIU joined the Green Chemistry Commitment (GCC), propelling the Chemistry department to undergo a green transformation, which at that point had only been done by one other Canadian university (University of Toronto) (VIU, 2018-bbb). The GCC was developed by Beyond Benign and it aims to design and develop innovative, efficient, and environmentally sound chemical solutions to the health, safety, and effectiveness of chemical products and processes (VIU, 2018-bbb). Beyond Benign develops green chemistry and sustainable science educational resources for the use of educators, students, and community members (Beyond Benign, 2018). Each year VIU must report back to Beyond Benign about what has been done to reduce the impacts of the chemicals used (Chemistry, personal communication, September 12, 2018). To date, the Chemistry department has eliminated their use of chlorinated chemicals and recycles and reuses the acetone that is used in labs (Chemistry, personal communication, September 12, 2018). All full-time VIU faculty and staff must be WHMIS certified, as well as students that deal with chemicals (Facilities Services &amp; Campus Development, personal communication, September 21, 2018). VIU's Janitorial Services are managed by a contracted provider (Facilities Services &amp; Campus Development, personal communication, September 21, 2018). In September 2018, Alpine Building Maintenance Inc. started a contract with VIU (Facilities Services &amp; Campus Development, personal communication, September 21, 2018). Alpine Building Maintenance Inc. is committed to providing sustainable solutions with a</td>
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Focus on being green through aiming to reduce chemical use, eliminate toxicity, and improve indoor air quality (Alpine Building Maintenance Inc., 2018).

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

The research team was unable to find records of VIU’s hazardous waste. However, as mentioned previously, VIU has joined the GCC, which requires the Chemistry department to report what they have been doing to reduce chemical impacts (Chemistry, personal communication, September 12, 2018).

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

12.5.1 National recycling rate, tons of material recycled

Although there are no records of VIU’s recycling rate, there has been an increase in the awareness of recycling on campus leading to an increase in recycling initiatives (Facilities Services & Campus Development, personal communication, September 21, 2018). Facilities suggests that they have improved their recycling habits and Food Services has taken a step to reduce waste with the eco-tainer program (Food Services, personal communication, October 2, 2018). The eco-tainer program replaces single-use food containers with reusable containers (Food Services, personal communication, October 2, 2018). VIU makes an effort to properly deal with waste and recycle materials, for example batteries and Styrofoam are recycled at VIU (Facilities Services & Campus Development, personal communication, September 21, 2018).

Across campus, VIU has a recycling and garbage system that uses three bins; one for garbage, one for recycling (e.g. bottles) and one for compost (Food Services, personal communication, October 2, 2018). There has been a shown desire to have more options, such as a plastic recycling bin (Food Services, personal communication, October 2, 2018).

As mentioned above, a number of VIU programs are involved in initiatives to help reduce their waste. VIU Graphic Design students redesigned product packaging to be more ecologically responsible (VIU, 2019-bbb). These projects were displayed at The View Gallery on the Nanaimo campus (VIU, 2019-bbb). VIU’s Carpentry program re-uses materials and builds applicable, real-life projects as often as they can (Carpentry, personal communication, October 22, 2019). On the Powell River campus, community members have access to Fibre Space, where they can upcycle garments into new clothes and textiles (Powell River campus, personal communication, July 23, 2019). Fibre Space has hosted the eCouture Wearable Art Fashion Show for the past 5 years, which showcases pieces designed in Fibre Space (Powell River campus, personal communication, July 23, 2019; Powell River Community Calendar, 2019). A series of educational films and talks on upcycling and textile waste are hosted in Powell River leading up to the eCouture Fashion show (Powell River campus, personal communication, July 23, 2019). VIU’s Nanaimo campus hosted its first Slow Couture Fashion Show in September 2019 where individuals could showcase up-cycled items (VIU, 2019-aaa).
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<tr>
<th>12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle</th>
<th>12.6.1 Number of companies publishing sustainability reports</th>
<th>VIU produces an annual Carbon Neutral Action Report (VIU, 2018-ccc). This report contains VIU’s emissions profile, offsets, as well as actions taken and plans to continue to reduce greenhouse gas (VIU, 2018-ccc). These annual Carbon Neutral Action Reports are publicly available on the VIU website (VIU, 2018-ccc).</th>
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<tr>
<td>12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities</td>
<td>12.7.1 Number of countries implementing sustainable public procurement policies and action plans</td>
<td>This target was determined not applicable to VIU as an educational institution, as its only indicator looks at the number of countries implementing public procurement action plans and is beyond the scope of this study.</td>
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| 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 | As mentioned previously in Goal 4, VIU’s Academic Plan’s fifth objective, community engagement, outlines that VIU is committed to fostering awareness of global cultures, issues and conditions (VIU, 2018-D). Also, VIU aims to provide appropriate responses to regional cultural, economic, environmental and social needs through relationships with business and industry communities, educational partners, governments and indigenous communities (VIU, 2018-D).

Education on climate change is taught in courses such as HORT 115T (Horticulture), GLST 211 (Geography of Environmental Change and Sustainability), GLST 391 (Responses to Globalization), SOCI 470 (Environmental Sociology), POLI 457 (Public Policy and Global Resources), and GEOG 101 (Environmental Geography). In addition to the courses mentioned in the 2018 data for this indicator, VIU’s Art and Design, Master of Arts in Sustainable Leisure Management (MASLM), Academic and Career Preparation, and ElderCollege programs also educate students on this topic. Global citizenship education is a key component in the Art and Design program (Art and Design, personal communication, June 11, 2019). Themes of climate change and human rights are brought into courses through projects, guest speakers, and community engagement (Art and Design, personal communication, June 11, 2019). In the MASLM program, the three pillars of sustainability is a major focus, including discussion of climate change (Master of Arts in Sustainable Leisure Management, personal communication, June 10, 2019). Specifically, SLM 601 (Leisure and Sustainability: Principles and Paradigms) |
SCi 350 (Technologies for the Developing World) focuses on technology to assist the developing world with an emphasis on the areas of renewable energy and appropriate technology (VIU, 2018-1). The Horticulture program educates its students about the impact of climate change on soils and plants (Horticulture, personal communication, August 21, 2018). In addition, Political Science and Global Studies students experience a climate change negotiations simulation, where they represent different countries and negotiate on topics such as carbon emissions (Political Studies, personal communication, September 18, 2018).

Aside from courses, students from Aboriginal Education collaborate with fellow students from International Education to learn about different cultures across the globe (Aboriginal Education, personal communication, August 17, 2018). For example, a bannock and naan event promoted sharing of different cultural dances and foods with one another (Aboriginal Education, personal communication, August 17, 2018). Student International Development Projects often include rationale and aspects related to global citizenship, sustainable development, sustainable tourism, and interlink with challenges associated with climate change (International Education, personal education, August 15, 2018).

VIU also hosts events on campus such as Global Citizens Week and WorldVIU Days that focus on Citizen Education. These events are discussed more in Goal 4 (Appendix G).

VIU also offers funding options for faculty and staff to explore and develop international teaching and working opportunities and experiences. The Global Engagement Grant program supports faculty and staff focuses on global citizenship and introduces the SDGs (Master of Arts in Sustainable Leisure Management, personal communication, June 10, 2019). Various courses offered through ElderCollege, as well as the ElderCollege book club, touch on climate change, global citizenship, and human rights (ElderCollege, personal communication, October 16, 2019).

In regard to education for sustainable development, VIU’s Office of Aboriginal Education and Engagement has partnered with the Natural Resource Extension Program (NREP) to deliver courses across the province, as well as offering a First Nations Stewardship Technicians Training program. NREP has done a lot of work with local Indigenous communities that want to learn about being community self-sustainability and capacity building (Natural Resource Extension Program, personal communication, October 21, 2019).
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

Through Education Abroad and International Education, VIU is actively engaged in six international development projects (Education Abroad, personal communication, August 29, 2018). An international project in Ukraine trains civil servants in digital Spatial Data Infrastructure (SDI) to better manage resources, urban areas, and habitats (VIU, 2018-hhh). For this project, VIU shared its license for ArcGIS and helped provide the software and servers needed. Another project partners VIU with Tra Vinh University in Vietnam (VIU, 2018-iii). Undergraduate engineering students from both universities were given an opportunity to design a bridge for the partner country and work together to implement the design (Education Abroad, personal communication, August 29, 2018). VIU is also a part of the Kenya Education for Employment Program (Colleges and Institutes of Canada, 2018). Through this program VIU is working with three other universities to develop and enhance training programs in mechanical engineering, renewable energy, and building technology at three colleges in Kenya (VIU, 2018-jjj). The main goal of this project is to increase employment and economic development opportunities for Kenyan youth and economy (Education Abroad, personal communication, August 29, 2018; Colleges and Institutes of Canada, 2018).

Most of the international projects through Education Abroad have components of environmental sustainability (Education Abroad, personal communication, August 29, 2018). VIU’s Education Abroad department is currently working on a project with travel and program development funding and the International Work Opportunity Grant engages faculty and staff in international workplace-based experiences (VIU, 2018-ddd; VIU, 2018-eee).

VIU has a partnership with Kisii National Polytechnic (KNP) in Kenya that aims to modernize KNP’s trades programs as part of the Kenya Education for Employment Program (Carpentry, personal communication, October 22, 2019; VIU, 2019-fff; Colleges and Institutes of Canada, 2018). Six KNP instructors visited VIU and VIU instructors trained them on new equipment and curriculum development (Carpentry, personal communication, October 22, 2019; VIU, 2019-fff). VIU instructors will travel to KNP to help launch the program in Kenya (VIU, 2019-fff).
### 12.b Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products

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<th>12.b.1 Number of sustainable tourism strategies or policies and implemented action plans with agreed monitoring and evaluation tools</th>
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| VIU offers students a diploma in tourism studies, a Bachelor’s degrees in tourism management, a diploma in recreation and sport, and a masters in sustainable leisure management (VIU, 2018-mmm; VIU, 2018-ooo; VIU, 2018-nnn; VIU, 2018-ppp). Students within these programs learn about social and cultural contexts and the relationship between tourism/recreation and sustainable development (VIU, 2018-mmm; VIU, 2018-ooo; VIU, 2018-nnn; VIU, 2018-ppp).

As mentioned above in indicator 12.a.1, VIU’s Education Abroad department has a project in Tanzania that focuses on sustainable tourism (VIU, 2018-III). Within the last couple of years VIU completed a five-year recreation and tourism internship program in Ghana (VIU, 2018-mmm). The internship program in Ghana focused on reducing poverty through environmental education with key areas looking at health, environment, and ecotourism development (VIU, 2018-nnn).

As mentioned in the 2018 data for this indicator, VIU offers a number of programs on sustainable tourism. Tourism students in both the diploma and Bachelor’s degree programs learn about sustainable tourism strategies, social innovation, and the three pillars of sustainability (Recreation and Tourism, personal communication, July 11, 2019). Specifically, TRMT 396 (Aboriginal Tourism) focuses on the importance of local Indigenous cultures and how to promote Indigenous tourism (Recreation and Tourism, personal communication, July 11, 2019; VIU, 2018-j). Also, TRMT 410 (Leisure Planning for Resilience) touches on local culture and the ability to bounce back after a social or economic downfall (Recreation and Tourism, personal communication, July 11, 2019). Similarly, VIU’s Recreation and Tourism department offers the Aboriginal Ecotourism Training program, as a method of engaging Indigenous learners while also provided them with a certification (Recreation and Tourism, personal communication, July 11, 2019). This program is funded by the Office of Aboriginal Education and Engagement, but is currently in its last cohort due to funding shortages, with the hopes of launching the program again when funding is available (Recreation and Tourism, personal communication, July 11, 2019). Over 100 students have completed the program and receiving a certificate in Adventure Tourism and Recreation, some of which have then continued in other program at VIU (Aboriginal Education and Engagement, personal communication, July 12, 2019).
The program is place-based, and students are given the opportunity to travel to places like Bella Coola, Bamfield, and Tofino, where they engage in local cultural while also learning about adventure tourism (Aboriginal Education and Engagement, personal communication, July 12, 2019). This program is free for Indigenous students, which removes a common financial barrier to education (Recreation and Tourism, personal communication, July 11, 2019).

VIU signed the charter for the VIU World Leisure Centre of Excellence in September 2009 (VIU, 2019-ggg). This charter represents a partnership between VIU and the World Leisure Organization (VIU, 2019-ggg; World Leisure Organization, 2019). The VIU World Leisure Centre of Excellence in Sustainable Leisure includes the creation of a network that engages in dialogue on sustainability and innovation in leisure, collaborative scholarship on sustainability and innovation in leisure for research, and delivery of a Master’s of Arts in Sustainable Leisure Management (MASLM) at VIU (Masters of Arts in Sustainable Leisure Management, personal communication, June 10, 2019; VIU, 2019-ggg). The MASLM program has an in-depth focus on sustainable tourism by looking at social entrepreneurship, as well as teaching students about tourism monitoring and evaluation tools (Recreation and Tourism, personal communication, July 11, 2019). The SDGs are also introduced to students in the MASLM program in the first year and are weaved throughout the entire program (Master of Arts in Sustainable Leisure Management, personal communication, June 10, 2019). In SLM 601 (Leisure and Sustainability: Principles and Paradigms) students compare, contrast, and critique sustainability frameworks in the leisure services industry (Master of Arts in Sustainable Leisure Management, personal communication, June 10, 2019; VIU, 2018-j).
Outside of courses, students in the Department of Recreation and Tourism Management have access to experiential learning opportunities through field schools (Master of Arts in Sustainable Leisure Management, personal communication, June 10, 2019; VIU, 2019-hhh). International field schools are held biannually in collaboration with the World Leisure Organization Congress, where sustainable tourism forms the foundation for the field school (Master of Arts in Sustainable Leisure Management, personal communication, June 10, 2019). In fall 2018, a field school to Brazil looked at methods of incorporating tourism into areas with socioeconomic issues (Master of Arts in Sustainable Leisure Management, personal communication, June 10, 2019). The World Leisure Centre of Excellence at VIU also offers workshops and speaker series related to sustainability such as the Innovation Infusion Series, the Solution Series, and the Sustainability Learning Series (World Leisure Organization, 2019).

VIU faculty and students are engaged in research related to sustainable tourism. In 2019, two VIU faculty members received funding from the Social Science and Humanities Research Council (SSHRC) Insight Development Grant for a study that looks into the role of the cultural sector and creative tourism in the sustainability of rural cities, specifically in northern BC and the Yukon (VIU, 2019-GGG). VIU has a BC Regional Innovation Chair in Tourism and Sustainable Rural Development who is focussing on three areas of innovation in tourism – Indigenous tourism, creative tourism, and tourism evolution (VIU, 2019-iii). Research over the next five years will focus on developing tourism for sustainable rural development, engaging in capacity-building, and creating a long-term alliance of BC rural tourism researchers (VIU, 2019-ii). A VIU MASLM student is exploring the Kwakwaka’wakw potlatch as a form of Indigenous leisure, where tourism
<table>
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<tr>
<th>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</th>
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<th>acts as a way for Indigenous communities to preserve and share their culture (VIU, 2019-ii).</th>
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<tr>
<td>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</td>
<td></td>
<td>This target was not included in this study as it was determined not applicable to an educational institution.</td>
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## Appendix P

Compiled Data for Goal 13: Take urgent action to combat climate change and its impacts

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>2018 Data</th>
<th>2019 Data</th>
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<tbody>
<tr>
<td>13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries</td>
<td>13.1.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population</td>
<td>Indicator 13.1.1 was determined not applicable to an educational institution. It was beyond the scope of this study to look into the impact of disasters on Canada.</td>
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<td></td>
<td>13.1.2 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030</td>
<td>Indicator 13.1.2 was not included as it is a repeat of Indicator 11.b.1 and was determined to be beyond the scope of this study to understand Canada's adaptation and implementation of disaster risk reduction.</td>
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<td>13.1.3 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies</td>
<td>As discussed further in Goal 11 (Indicator 11.b.2), VIU follows the British Columbia Emergency Response Management System (BCERMS) and the Incident Command System (ICS) and has procedures and plans to deal with emergency events on campus (VIU, 2017-d).</td>
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<td>13.2 Integrate climate change measures into national policies,</td>
<td>13.2.1 Number of countries that have communicated the establishment of</td>
<td></td>
<td>As previously mentioned in Goal 7, in 2018, students in GEOG 330 (Cultural Geography) participated in a research project that looked at the enablers and constraints of bio-diesel use in commercial, industrial</td>
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<td>strategies, and planning</td>
<td>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)</td>
<td>and institutional vehicle fleets within the Regional District of Nanaimo (RDN) (VIU, 2018-mmm). Through VIU’s Regional Initiatives Fund, the project was funded with the potential of targeting local greenhouse gas reductions as well as increasing awareness among commercial and industrial fleet operators about bio-diesel as an alternative to fossil fuels (VIU, 2018-mmm).</td>
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<tr>
<td>13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning</td>
<td>13.3.1 Number of countries that have integrated mitigation, adaptation, impact reduction and early warning into primary, secondary and tertiary curricula</td>
<td>Many programs and courses at VIU bring the topic of climate change into the classroom. Some courses that discuss climate change include: GLST 211 (Geography of Environmental Change and Sustainability), GLST 391 (Responses to Globalization), SOCI 470 (Environmental Sociology), POLI 457 (Public Policy and Global Resources), FRST 235: Forest Ecology II: Ecosystems and Management, GEOL 312 (Environmental Geology), GEOL 412 (Climate Change: Past, Present, &amp; Future), GEOG 372 (Climatology), and GEOG 101 (Environmental Geography) (VIU, 2018-j). The Horticulture program educates its students about the impact of climate change on soils and plants (Horticulture, personal communication, August 21, 2018). Political Studies</td>
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<tr>
<td>Additional courses in which climate change was found to be addressed include: TRMT 410 (Leisure and Planning for Resilience), FRST 132 (Forest Ecology I: Ecosystems and Silvics), FRST 352 (Forest Entomology), ENGL 115 (University Writing and Research), ENGL 125 (Literature and Culture), ENGL 220 (Canadian Literature in Context), ENGL 325 (Topics in Environmental Literature), HIST 336 (Rural Life and Environmental Resource Use in Canada to 1914: People of the Land and Sea), HIST 337 (Rural Life and Environmental Resource Use in Canada since 1914: The Quest for Sustainability), and ENGR 112 (Engineering Design I) (Recreation and Tourism, personal communication, July 11, 2019; Forestry, personal communication, May 23, 2019; English,</td>
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and Global Studies students experience a climate change negotiations simulation, where they represent different countries and negotiate on topics such as carbon emissions (Political Studies, personal communications, September 18, 2018).

Outside of the classroom, VIU has hosted events on the topic of climate change. In 2017, two presentations were held discussing climate change; “Climate Science” and “Beyond Climate Change” (VIU, 2018-ooo). A symposium open to the public that addressed climate change was held in 2012 (VIU, 2018-ppp).

Research done by the Coastal Hydrology and Climate Change Research Lab at VIU looks at the influence of climate change on the hydrology of watersheds (Coastal Hydrology and Climate Change Research Lab, 2018). One of their projects is the High Elevation Weather Station Network, which continuously collects data on snow depth, total precipitation, wind, relative humidity, and solar radiation (Coastal Hydrology and Climate Change Research Lab, personal communication, October 10, 2018). All of the publications form the Coastal Hydrology and Climate Change Research Lab are publicly available on their website (Coastal Hydrology and Climate Change Research Lab, personal communication, October 10, 2018).

Researchers at MABRRI are working to monitor the potential effects of climate change on local plants (VIU, 2018-bb). By monitoring the growing seasons of local plants over a long period of time, researchers can identify how the growing seasons are shifting with changing climate patterns (VIU, 2018-bb). Plants are monitored at two different sites: Milner Gardens & Woodlands and the summit of Mount Arrowsmith (VIU, 2018-bb). Since 2017, personal communication, August 22, 2019; History, personal communication, August 27, 2019; Engineering, personal communication, November 7, 2019; VIU, VIU, 2018-ji). In Astronomy courses, students learn about the earth as a system and look at how it has changed over time from both natural and anthropogenic influences (Astronomy, personal communication, November 7, 2019). Professors aim to raise awareness about how humans are impacting Earth’s long-term sustainability (Astronomy, personal communication, November 7, 2019). A 2019 ElderCollege course, Global Challenges, Local Solutions, also looks at climate change, growing inequality, loss of biodiversity, pollution, environmental destruction, and resource depletion (VIU, 2019-li).

VIU student group, Awareness of Climate Change through Education and Research (ACER), brings awareness of climate change to the VIU campus and Nanaimo community (ACER, personal communication, October 3, 2019). The majority of ACER’s work involves educational initiatives focusing on conveying information to the public by following the best practices in scientific communication and using the most current peer-reviewed literature (ACER, personal communication, October 3, 2019). This requires ACER to have an understanding of the social, environmental, cultural, and economic factors of climate change, and share this knowledge with various audiences (ACER, personal communication, October 3, 2019). Since 2008, ACER has presented to approximately 17,000 people and does around 20 presentations per year (ACER, personal communication, October 3, 2019). There are approximately 10 VIU students that are currently actively volunteering with ACER, with facilitation from one student coordinator and two supervising faculty.
data has been collected weekly in the summer and bi-weekly during the spring and fall at Milner Gardens & Woodlands (VIU, 2018-bb). Both sites have weather stations installed in order to compare data to local climate regimes (VI, 2018-bb).

As mentioned in Goal 7 (Appendix J), VIU has three LEED certified buildings and recently implemented the geo-exchange system that uses sustainable energy and methods.

Students in the Bachelor of Nursing program have been learning to understand the impacts of climate change from a different perspective as they complete their community placements with Indigenous communities (Nursing, personal communication, September 20, 2019). Through exploring Indigenous knowledge and ways of knowing through community partnerships, Nursing students are being exposed to different types of awareness and the importance of Indigenous connections to land and season (Nursing, personal communication, September 20, 2019). The BC Regional Innovation Chair in Aboriginal Early Childhood Development at VIU is also encouraging the VIU community to learn about climate change through free online courses provided by UN CC:Learn (Aboriginal Early Childhood Development, personal communication, October 31, 2019).

One of VIU’s student clubs, the VIU Eco Club, aims to increase VIU’s positive impact on the environment and encourage more sustainable behaviours in everyday life by promoting local change (Facebook, 2019-c).

In September 2019, Global Climate Strike activities took place around the world, and VIU faculty, employees, and students were encouraged by the President to attend if they felt inclined (Office of the President, email, September 25, 2019).

| 13.3.2 Number of countries that have communicated the strengthening of institutional, systematic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions | One of VIU’s student clubs, the VIU Eco Club, aims to increase VIU’s positive impact on the environment and encourage more sustainable behaviours in everyday life by promoting local change (Facebook, 2019-c).

In September 2019, Global Climate Strike activities took place around the world, and VIU faculty, employees, and students were encouraged by the President to attend if they felt inclined (Office of the President, email, September 25, 2019). |
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>13.a Implement the commitment undertaken by developed-country parties to</td>
<td>13.a.1 Mobilized amount of United States dollars per year between 2020 and 2025 accountable</td>
</tr>
<tr>
<td>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</td>
<td>towards the $100 billion commitment</td>
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<tr>
<td>This target was determined not applicable to VIU as an educational institution and is beyond the scope of this project to look into how Canada is mobilizing dollars for the Green Climate Fund.</td>
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<tr>
<th>13.b Promote mechanisms for raising the capacity for effective climate change-related planning and management in least developed countries and small island</th>
<th>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</th>
</tr>
</thead>
<tbody>
<tr>
<td>This target was determined irrelevant to VIU as it is targeted to developing nations.</td>
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<tr>
<td>developing States, including focusing on women, youth and local and marginalized communities</td>
<td>raising capacities for effective climate change related planning and management, including focusing on women, youth and local and marginalized communities</td>
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## Appendix Q

Compiled data for Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

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<tr>
<th>Target</th>
<th>Indicator</th>
<th>2018 Data</th>
<th>2019 Data</th>
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</table>
| 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 | VIU offers courses that educate students on the topics of marine debris and eutrophication, such as BIO 223 (Botany), BIO 202 (Aquatic Ecosystems), FISH 322 (Coastal and Estuarine Ecosystems), and RMOT 306 (Environmental Monitoring) (VIU, 2018-j). Within the Fisheries and Aquaculture program, these topics are touched on in most courses and have previously included a guest lecture by a Biology faculty member on the topic of marine debris (Fisheries & Aquaculture, personal communication, October 2, 2018).  

Not only do students learn about marine debris in the classrooms, they also apply their knowledge through research. A group of VIU students in the Community Based Applied Interdisciplinary Research (CBAIR) program conducted research in partnership with the Ocean Legacy Foundation on the topic of marine debris pollution in 2017/18 (VIU, 2018-r; Bowns & Pastro, 2018). The students provided the Ocean Legacy Foundation with a set of policies regarding single use, disposable plastic products (Bowns & Pastro, 2018). Through presenting their research at two different conferences, these students were able to increase public awareness about marine debris (Bowns & Pastro, 2018). Another research project involved a Fisheries and Aquaculture student researching the impacts of plastic intake levels in oysters (Fisheries & Aquaculture, personal communication, October 2, 2018). | |
While Deep Bay Marine Field Station doesn’t conduct research on these topics, it does educate the public on these topics—particularly youth (Deep Bay Marine Field Station, personal communication, August 7, 2018). The Field Station runs a “Perils of Plastic” program and various other events that educate on the topic of the eutrophication filtering benefits of shellfish and the impacts of marine plastic pollution (Deep Bay Marine Field Station, personal communication, August 7, 2018). Additionally, Deep Bay Marine Field Station takes action to conduct beach cleanups and reduce marine debris pollution in the Deep Bay area (Deep Bay Marine Field Station, personal communication, August 7, 2018).

Other VIU initiatives that focus on marine debris include the ban of bottled water on campus, initiated by the VIU Students’ Union, and the ban of single-use straws in the Student Pub (Students’ Union, personal communication, August 28, 2018). Additionally, the Students’ Union promotes the work that VIU student clubs do in regard to beach clean-ups and environmentally focused campaigns and events by providing cost-free promotion (Students’ Union, personal communication, August 28, 2018). A former technician in the Fisheries and Aquaculture department would often organize clean-ups for Chase River and Deep Bay that got students involved in actively caring for the local environment (Fisheries & Aquaculture, personal communication, October 2, 2018). Furthermore, students in the Fisheries and Aquaculture program are permitted to count beach clean ups as their practicum hours, with many of the students choosing to do so (Fisheries & Aquaculture, personal communication, October 2, 2018).
14.2 By 2030, 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 health and productive oceans.

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

As previously described in Goal 9, the Queen Elizabeth Scholars program supports students in pursuing international internships in partner countries on the theme of *Building Resilience in Coastal Communities (BRICC)*. In 2017, students engaged in internships at the six different institutions in Belize, all focusing on building resilience in coastal communities (VIU, 2019-EEE). The goals of BRICC include enhancing coastal communities’ response to climate change, developing sustainable local fisheries and agricultural production, enhancing the management of potable water in coastal zones, and improving the capacity to foster a sustainable and resilient economy (VIU, 2019-ww).

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

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

The Awareness of Climate Change through Education and Research (ACER) group places a large emphasis on the effects of climate change on ocean acidification (ACER, personal communication, October 3, 2019). Ocean acidification is brought into every presentation the group gives to emphasize the extreme negative impacts that changes in marine acidity have on the environment (ACER, personal communication, October 3, 2019). These presentations often include demonstrations that help the audience visualize how salt water changes with the addition of carbon dioxide (ACER, personal communication, October 3, 2019).

14.4 By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and

14.4.1 Proportion of fish stocks within biologically sustainable levels

Education about fish stocks and sustainable fish stock levels occurs within various departments at VIU. Fisheries and Aquaculture and Resource Management and Protection programs offer courses such as, FISH 223 (Introduction to Fisheries Management), FISH 211 (Life History and Management of Salmonids), FISH 321 (Lake and Stream Ecosystems), FISH 322 (Coastal 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 | Estuarine Ecosystems), BIO 202 (Ecology), BIO 457 (Biodiversity and Conservation Biology), RMOT 200 (B.C. Fisheries), and RMOT 400 (Fisheries Conservation and Management) (VIU, 2018-j). The Resource Management and Protection program also has a heavy focus on educating students on governmental regulation of harvesting and fishing and how to enforce these regulations (Resource Management & Protection, personal communication, September 11, 2018). These students also engage in applied research through stock assessments of Coho Salmon (Resource Management & Protection, personal communication, September 11, 2018). Many students from the program graduate to become conservation and fishery officers (Resource Management & Protection, personal communication, September 11, 2018). Students in the Fisheries and Aquaculture program learn about sustainable fishing methods and how aquaculture can be beneficial as students learn about the whole life cycle of species and what can impact them (Fisheries & Aquaculture, personal communication, October 2, 2018).

The Deep Bay Marine Field Station manages shellfish farms within the Deep Bay area, and also makes it a priority to educate locals and visitors about sustainable fishing, fish quotas, and future plans to continue educating the public on sustainable fishing practices (Deep Bay Marine Field Station, personal communication, August 7, 2018).

Programs such as Resource Management and Protection and Geography touch on the topic of marine conservation and management in some of their courses. These courses include: GEOG 456 MABRR1 researchers are working on an ongoing project to identify fish spawning habitats along the eastern coastline of Vancouver Island that may be vulnerable to changing environments (VIU, 2019- |

| 14.5 By 2020, conserve at least 10 per cent of coastal and marine areas, | 14.5.1 Coverage of protected areas in relation to marine areas | Programs such as Resource Management and Protection and Geography touch on the topic of marine conservation and management in some of their courses. These courses include: GEOG 456 MABRR1 researchers are working on an ongoing project to identify fish spawning habitats along the eastern coastline of Vancouver Island that may be vulnerable to changing environments (VIU, 2019- |
consistent with national and international law and based on the best available scientific information | (Issues in Natural Resource Management), GEOG 350 (Natural Resource Management), and RMOT 400 (Fisheries Conservation and Management) (VIU, 2018-j). | kkk). The research aims to understand the timing and location of spawning to fill gaps in baseline data and identify areas in need of protection and implementation of policy and management strategies (VIU, 2019-kkk).

<p>| 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 and subsidies negotiation | 14.6.1 Degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing | This target was not included in this study as its indicator speaks to progress that countries have made to combat illegal, unreported, and unregulated fishing – it is beyond the scope of this study to understand how Canada is meeting this indicator. |</p>
<table>
<thead>
<tr>
<th>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</th>
<th>14.7.1 Sustainable fisheries as a proportion of GDP in small island developing States, least developed countries and all countries</th>
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<tbody>
<tr>
<td>This target was determined irrelevant to VIU and is beyond the scope of this study to understand sustainable fisheries as a proportion of Canada’s GDP.</td>
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<tr>
<th>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</th>
<th>14.a.1 Proportion of total research budget allocated to research in the field of marine technology</th>
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<tr>
<td>As a separate entity associated with VIU, the Deep Bay Marine Field Station funds itself (Deep Bay Marine Field Station, personal communication, August 7, 2018). In other words, it does not receive an annual budget from VIU. Deep Bay Marine Field Station invests money into hatchery technology and better practices, such as a solar powered Floating Larval Upwelling System (Deep Bay Marine Field Station, personal communication, August 7, 2018). An upwelling system, basically an incubator for oysters, pumps nutrient-filled ocean water up to feed young, growing oysters (Massachusetts Oyster Project, 2018). Upwelling systems have been successful at growing oyster seed in Britain and Australia (VIU, 2018-sss). Although Deep Bay is not currently heavily focused on investment in marine technology, they plan to be in the future (Deep Bay Marine Field Station, personal communication, August 7, 2018). The Applied Environmental Research Laboratories (AERL) at VIU has an Underwater Mass VIU’s Deep Bay Marine Field Station received funding in 2018/19 from the BC Ministry of Agriculture towards understanding what is causing commercial oyster mortalities (VIU, 2019-ii). The research team is working towards selectively breeding an oyster that is resistant to the pathogen causing the mortalities, in order to support the local shellfish industry (VIU, 2019-ii). Student researchers that are involved in the project are also testing the water quality of the ocean to monitor the acidity, temperature, and chemicals in the environment (VIU, 2019-ii). To help encourage school-aged children to learn about marine life, researchers at Deep Bay are also working with a VIU Education professor to develop an app that helps facilitate on-site learning at the marine facility (VIU, 2018-rrrr). Similar to Deep Bay’s research, VIU’s Canada Research Chair in Shellfish Health and Genomics is researching diseases in Pacific oysters that are linked to climate change and ways to make oysters more resilient to environmental changes (VIU, 2018-</td>
<td></td>
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<tr>
<td>island developing States and least developed countries</td>
<td>Spectrometer prototype that they want to develop further (Applied Environmental Research Laboratories, personal communication, August 3, 2018). It is used to check water sanitation and quality in real-time by monitoring hydro-carbons and oxygen while being dragged behind a boat (Applied Environmental Research Laboratories, personal communication, August 3, 2018). Additionally, the VIU@Cowichan Innovation Lab has created an Underwater Remotely Operated Vehicle (OpenROV) (VIU@Cowichan Innovation Lab, 2018-c). The OpenROV has the ability to go underwater, up to about 300 feet, and visually record what it is seeing (VIU@Cowichan Innovation Lab, personal communication, September 20, 2018). While the OpenRV may not be considered a marine technology, it has the intended use to introduce youth to marine life (VIU@Cowichan Innovation Lab, personal communication, September 20, 2018). In regard to increasing knowledge and research on the topic of marine technology, a Fisheries and Aquaculture faculty member is conducting research on shellfish traps in partnership with a local organization (Fisheries &amp; Aquaculture, personal communication, October 2, 2018). Their research focuses on redesigning shellfish traps to reduce bycatch (Fisheries &amp; Aquaculture, personal communication, October 2, 2018). The Research Chair has already discovered a method of helping oysters and their offspring become less susceptible to climate change-induced diseases (VIU, 2018-rrrr). Additional marine research in 2018 involved a VIU Fisheries and Aquaculture professor receiving a Discovery Grant from the Natural Sciences and Engineering Research Council (NSERC) to support 5 years of research aimed at understanding how climate change is affecting white sturgeon and salmon populations (VIU, 2018-nnnn). The funding has also allowed undergraduate, Masters, and PhD students to work on the research project (VIU, 2018-nnnn). Regarding an increase in marine knowledge and research, a VIU Indigenous Studies Professor was awarded a Social Sciences and Humanities Research Council (SSHRC) grant in Indigenous Research Capacity and Reconciliation (VIU, 2019-ii). This grant will be used to support the creation of a Secwepemc (Shuswap) youth program to educate youth about the importance of protecting the Pacific Salmon and the Fraser River (VIU, 2019-ii). This project, <em>We Will Survive if the Salmon Survive</em>, is a long-term approach to bring Indigenous youth and Elders together to connect and share traditional knowledge and emphasize the cultural importance of salmon and the Fraser River (VIU, 2019-ii).</td>
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<p>| 14.b Provide access for small-scale artisanal fishers to marine resources and markets | 14.b.1 Degree of application of a legal/regulatory/policy/institutional framework which recognizes and protects | This target was deemed irrelevant to an educational institution as its indicators speaks to whether or not the nation is applying the frameworks established for small-scale fisheries. |</p>
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<tr>
<th>14.c Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in the United Nations Convention on the Law of the Sea, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled by paragraph 158 of “The future we want”</th>
<th>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</th>
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<tr>
<td>This target was deemed inapplicable to VIU as its indicator speaks to how countries are implementing international law.</td>
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**Appendix R**

Compiled Data for Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>2018 Data</th>
<th>2019 Data</th>
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<tbody>
<tr>
<td>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</td>
<td>15.1.1 Forest area as a proportion of total land area</td>
<td>VIU’s Nanaimo campus contains several small forested areas that have been developed with trails for connectivity (VIU, 2018-OO). Off campus, VIU owns a private woodlot with 1,700 hectares providing access to students in the Forestry program (VIU, 2018-vvv). Milner Gardens &amp; Woodland is located on a 28.34 hectare 70-acre parcel of land in Qualicum Beach (VIU, 2018-www). Most of this land (24.28 ha) are under the protection of a forest management plan and are intended to continue to be conserved by VIU and Milner Gardens (Hopwood, 1999). Courses offered through the Forestry department educate students on forest ecosystems, surveying, spatial data, mapping, and inventory (VIU, 2018-xxx). These courses include: FRST 121 (Spatial Data), FRST 11 (Forest Surveying), FRST 112 (Forest Inventory), and FRST 132 (Forest Ecology I: Ecosystems &amp; Silvics) (VIU, 2018-xxx). The Resource Management Officer Technology (RMOT) and Geography programs at VIU also touch on the topic of forested area as total land area in some courses (GEOG 228: Spatial Analysis and RMOT 202: Introduction to Parks and Protected Areas) (VIU, 2018-j)].</td>
<td>As mentioned in 2018 data for this indicator, VIU has an off-campus woodlot that acts as an outdoor classroom, providing opportunities for students in Forestry, Geography, Biology, and Resource Management and Protection to gain hands-on experience (Forestry, personal communication, May 23, 2019). However, due to recent changes in land ownership agreements, the current woodlot is now 694 hectares, down from 1,700 hectares (Forestry, personal communication, May 23, 2019). Approximately 93% of the woodlot areas is forested land, with the remaining land area used for roads and access (Forestry, personal communication, May 23, 2019).</td>
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<td>15.1.2 Proportion of important sites for terrestrial and freshwater biodiversity that</td>
<td>Programs such as Resource Management and Protection, Forestry, and Geography educate students on this topic. Courses that teach this subject include: RMOT 102 (Introduction to Parks and Protected Areas), RMOT 202 (Introduction to Parks and Protected Areas), RMOT 206 (Habitat Management), FRST 242</td>
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<p>| 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 | The topic of sustainable forest management is covered in the Forestry, Resource Management and Protection, and Geography departments at VIU (VIU, 2018-xxx; VIU, 2018-j). Some examples of courses that teach this within these departments include: FRST 235 (Forest Ecology II: Ecosystems and Management), FRST 261 (Forest Harvesting Systems), FRST 242 (Integrated Resource Management), RMOT 401 (Wildlife Management), RMOT 206, GEOG 330 (Environmental Geography), GEOG 350 (Natural Resource Management), and GEOG 356 (Policy, Resources and Sustainability) (VIU, 2018-j). Additionally, the Economics department offers a course (ECON 330) that looks at the relationship between economics and sustainable environmental management (VIU, 2018-j). |
| 15.2.1 Progress towards sustainable forest management | As mentioned previously, this indicator is covered in the VIU Forestry program as sustainable forest management runs through the entire program (Forestry, personal communication, May 23, 2019). At the VIU woodlot, students and instructors practice sustainable forest management methods such as harvesting on a sustained yield basis and prompt reforestation (Forestry, personal communication, May 23, 2019). VIU is also required to submit a stewardship plan to the Ministry of Forests, which indicates how the woodlot and VIU will protect and accommodate the values of a forest outlined by the Ministry (Forestry, personal communication, May 23, 2019). Additionally, students in the Indigenous Studies program learn about sustainable forest management and practices through cultural teachings (Indigenous Studies, personal communication, September 23, 2019). The program hires local Indigenous cultural technicians who share their knowledge with students, which includes harvesting methods and protecting the environment (Indigenous Studies, personal communication, September 23, 2019). |
| 15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive | Courses such as GEOG 352 (Managing Natural and Social Capital), FRST 132 (Forest Ecology I: Ecosystems and Silvics), RMOT 306 (Environmental Monitoring) educate students on land degradation and disturbances (VIU, 2018-j). |
| 15.3.1 Proportion of land that is degraded over total land area | In addition to the courses listed in the 2018 data, this topic is also covered in FRST 271 (Forest Road Design), FRST 212 (Silviculture Assessment), and two courses through VIU’s Natural Resources Extension Program, Erosion &amp; Sediment Control and Environmental Monitoring for Construction (Forestry, personal communication, May 23, 2019; Natural Resource Extension Program personal communication, October 21, 2019). Land degradation comes up in FRST 271 and FRST 212 within the context of properly planning roads and cut blocks to avoid land degradation and disturbance. |</p>
<table>
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<tr>
<th>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</th>
<th>15.4.1 Coverage by protected areas of important sites for mountain biodiversity</th>
<th>The Resource Management and Protection program at VIU educates students about protected areas and all levels of ecosystems (VIU, 2018-j; Resource Management &amp; Protection, personal communication, September 11, 2018). However, we are unsure whether or not these courses, or research happening at VIU, is related to mountains in particular.</th>
<th>The Coastal Hydrology and Climate Change Research Lab at VIU has been researching the impacts that climate change has on the hydrology of watersheds, which influence mountain ecosystems (Coastal Hydrology and Climate Change Research Lab, 2019). Further description is provided in Goals 6 (indicator 6.6.1) and 13 (indicator 13.3.1).</th>
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<tr>
<td>15.5 Take urgent and significant action to reduce the degradation of natural</td>
<td>15.5.1 Red List Index</td>
<td>Many departments at VIU educate students on species at risk: GEOG 373 (Biogeography), BIO 457 (Biodiversity and Conservation Biology), BIO 202 (Ecology), HORT 115T (Introductory Plant Identification), HORT 116T</td>
<td>As mentioned in the 2018 data, VIU’s Forestry program educates students on species at risk. Loss of biodiversity and species at risk comes up in FRST 242 (Integrated Resource Management) and FRST 235 (Forest Ecology II: Ecosystems and Management) (Forestry, personal communication, May 23, 2019). Through the Natural Resource Extension Program, the Environmental Monitoring for Construction Projects course trains participants on skills and procedures for environmental monitoring related to construction projects (Natural Resource Extension Program, personal communication, October 21, 2019; VIU, 2019-mmm). The Erosion and Sediment Control course trains participants on effective erosion and sediment control planning, construction, and maintenance (Natural Resource Extension Program, personal communication, October 21, 2019; VIU, 2019-mmm). To meet the needs of the industry gaps, the Natural Resource Extension Program is developing courses on land reclamation (Natural Resource Extension Program, personal communication, October 21, 2019).</td>
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habitat, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.


The topic of species at risk has been a large focus of research at VIU. Within the Biology and Geography programs, there have been a few studies conducted on species at risk (Biology, personal communication, September 10, 2018; Geography, personal communication, October 11, 2018). Some of these studies looked at Vancouver Island marmots, western screech owls, sea otters, and humpback whales, among others (Biology, personal communication, September 10, 2018; Geography, personal communication, October 11, 2018). Often these research projects are done in collaboration with regional partners, who have the power to actively conserve the species (Biology, personal communication, September 10, 2018). The International Centre for Sturgeon Studies engages in the conservation of white sturgeon through research (International Centre for Sturgeon Studies, personal communication, August 24, 2018). The Centre is exploring alternative food sources for producing sturgeon and conducting research to aid in the conservation of wild populations (International Centre for Sturgeon Studies, personal communication, August 24, 2018). Since 1984, when the Centre started working with sturgeon, they have seen an increase in the numbers of wild tagged sturgeon in the Fraser River (International Centre for Sturgeon Studies, personal communication, August 24, 2018). Related to another at risk species, in the fall of 2018 a VIU Biology professor was awarded a grant to expand their research on the endangered Vancouver Island marmot population for the next five years (VIU, 2018-zzz). This research will look at inbreeding, genetic rescue and the consequences of captive breeding on the marmot species (VIU, 2018-zzz).

communication, May 23, 2019). The Red List Index of Threatened Species is specifically discussed in FRST 242 and FRST 261 (Forest Harvesting Systems) (Forestry, personal communication, May 23, 2019).

In 2019, VIU was designated as a bee campus through Bee City Canada – being the first post-secondary institution to do so (VIU, 2019-lll). Through this designation, VIU has indicated its commitment to create, maintain, and improve pollinator habitats, educate on the importance of pollinators, and participate in National Pollinator Week (VIU, 2019-lll).
Milner Gardens and Woodland hosts the Shoots with Roots program for local youth (VIU, 2018-AAA). Through the program, children from kindergarten to grade 3 learn about basic plant and animal identification (VIU, 2018-AAA). Through their guided tours, Milner Gardens and Woodland staff and volunteers informally educate them about plants; this requires the staff or volunteers to have a base level of understanding of local plants and animals, which may include listed species (Milner Gardens & Woodland, personal communication, August 23, 2018). Another event that engages in species identification is the MABR BioBlitz (Mount Arrowsmith Biosphere Region Research Institute, 2018; VIU, 2018-bb)). This annual event is organized by The Mount Arrowsmith Biosphere Region (MABR) and Mount Arrowsmith Biosphere Region Research Institute and provides an opportunity for local citizen scientists to conduct a rapid biological survey of plant and animal species in the identified areas (VIU, 2018-f; Mount Arrowsmith Biosphere Region Research Institute, 2018).

<p>| 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 agree | 15.6.1 Number of countries that have adopted legislative, administrative and policy frameworks to ensure fair and equitable sharing of benefits | This target was not included as it was beyond the scope of this study to look into how Canada has adopted the policies outlined in the indicator. |</p>
<table>
<thead>
<tr>
<th>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</th>
<th>The Resource Management and Protection program at VIU educates students on wildlife poaching and hunting methods (Resource Management &amp; Protection, personal communication, September 11, 2018). Courses that touch on these topics include: RMOT 397 (Natural Resource Forensic Investigations), RMOT 194 (Resource Acts and Regulations), and RMOT 201 (B.C. Wildlife) (VIU, 2018-j).</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.7.1 Proportion of traded wildlife that was poached or illicitly trafficked</td>
<td>VIU Facilities does not have a specific campaign or focus on removing and controlling invasive alien species when they are encountered (Facilities Services &amp; Campus Development, personal communication, September 21, 2018). However, when Facilities workers come across them, they are removed, thereby preventing the spread of invasive species on campus (Facilities Services &amp; Campus Development, personal communication, September 21, 2018). To also help with this issue, Facilities uses native species when planting new areas (Facilities Services &amp; Campus Development, personal communication, September 21, 2018). Within classrooms at VIU, students learn about invasive species. Many courses in the Resource Management and Protection program touch on the topic of invasive species, both plant and animal. These Resource Management and Protection courses include: RMOT 194 (Resource Acts and Regulations), RMOT 200 (B.C. Fisheries), RMOT 201 (B.C. Wildlife), RMOT 400 (Fisheries Conservation and Management), and RMOT 401 (Wildlife Management) (VIU, 2018-j). Resource Management and Protection students also learn about the control of invasive plant species through field projects (Resource Management &amp; Protection, personal communication, September 11, 2018). Other</td>
</tr>
<tr>
<td>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</td>
<td>VIU’s Parks Canada Club brings students together to appreciate and protect Canada’s cultural and natural heritage (Facebook, 2017). The club has hosted a number of activities to get students into nature and participate in conservation efforts (Facebook, 2017). For example, the club has hosted invasive species cleanups in the local Hawthorne Park (Facebook, 2017). The invasive species cleanup was done in partnership with another VIU club, the VIU Eco Club (Facebook, 2019-a). VIU Eco Club leads students to discuss current ecological topics and engage in more sustainable behaviours (Facebook, 2019-c). In addition to the Hawthorne Park cleanup, the VIU Eco Club has hosted litter pick-up events (Facebook, 2019-c).</td>
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</table>
departments, such as Biology, Geography, and Forestry, also offer courses on this topic, such as BIOL 372 (Plant Ecology), BIOL 402 (Evolution), GEOG 373 (Biogeography), FRST 132 (Forest Ecology I: Ecosystems & Silvics), and FRST 234 (Forest Ecosystem Assessment & Mapping) (VIU, 2018-j). For students in the VIU Horticulture program, learning about invasive and native species is important as they are surrounded by them at the G.R. Paine Horticultural Training Centre (Horticulture, personal communication, August 21, 2018). About 10-15% of the plants at the Centre are native (Horticulture, personal communication, August 21, 2018). Horticulture students are educated on plant identification and species in HORT 115T (Introductory Plant Identification), and HORT 116T (Advanced Plant Identification) (VIU, 2018-j; Horticulture, personal communication, August 21, 2018).

<table>
<thead>
<tr>
<th>15.9 By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts</th>
<th>15.9.1 Progress towards national targets established in accordance with Aichi Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011-2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>This target was not included as it was beyond the scope of this study to investigate Canada’s progress in strategic planning for biodiversity.</td>
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</table>

| 15.a Mobilize and significantly increase financial resources from all sources to | 15.a.1 Official development assistance and public expenditure on conservation and |
| Programs such as Resource Management and Protection, Geography, and Forestry educate their students on the topics of conservation and the sustainable use of biodiversity and ecosystems through courses such as: RMOT 206 (Habitat Management), RMOT 400 (Fisheries Conservation and Management), |
| Students learn about the conservation and sustainable use of biodiversity and ecosystems in a number of different programs at VIU. History courses highlight past examples where humans have had negative impacts on the environment (History, personal communication, August 27, 2019). These courses include: HIST 336 (Rural |
conserve and sustainably use biodiversity and ecosystems

sustainable use of biodiversity and ecosystems

GEOG 356 (Policy, Resources and Sustainability), GEOG 373 (Biogeography), and FRST 132 (Forest Ecology I: Ecosystems & Silvics) (VIU, 2018-j).

Additionally, Mount Arrowsmith Biosphere Region Research Institute has various projects that are related to biodiversity and ecosystems (VIU, 2018-bb). One project involves conducting a 5-year research initiative to map and classify wetlands within the Regional District of Nanaimo with the purpose of informing future policy around wetland ecosystems and freshwater management (VIU, 2018-bb). Another project from the institute is the “Global Observational Research Initiative in Alpine Environments” (VIU, 2018-bb). This project is engaging in long-term alpine monitoring of Mount Arrowsmith with the purpose to develop standardized observations of alpine biodiversity, vegetation patterns and mountain top temperatures (VIU, 2018-bb).

Life and Environmental Resource Use in Canada to 1914: People of the Land and Sea) and HIST 337 (Rural Life and Environmental Resource Use in Canada since 1914: The Quest for Sustainability) (History, personal communication, August 27, 2019). In the Aboriginal Ecotourism Training program there is a large focus on creating a connection to land, which students learn from traditional knowledge shared by Elders (Aboriginal Education, personal communication, July 12, 2019). Similarly, VIU’s Cowichan campus offers a Land-based Sustainability course where Elders from Cowichan Tribes teach a holistic, experiential, and land-based approach to sustainability (VIU, 2018-DDDD; VIU, 2019-P). Key outcomes of the course are to foster a deeper appreciation for the culture of local First Nations communities, and a strong connection between humans and nature (VIU, 2018-DDDD). Additionally, the Natural Resource Extension Program focuses on ecosystem conservation (Natural Resource Extension Program, personal communication, October 21, 2019; VIU, 2019-ZZ). The Riparian Area Regulation course focuses on stream and riparian area conversation and land management, and the Erosion and Sediment Control course focuses on conservation of terrestrial landscapes (Natural Resource Extension Program, personal communication, October 21, 2019; VIU, 2019-mmm).

Through VIU’s Building Resilience in Coastal Communities programs, known as VIU’s BRiCC Knowledge Network, students can receive funding through the Queen Elizabeth Scholarship to engage in developing solutions to challenges that are faced by coastal communities around the world (VIU, 2019-xx). The BRiCC Knowledge Network has two international partners, the University of Belize and the College of African Wildlife Management in Tanzania, and five goals (VIU, 2019-xx). One of the goals relates to this indicator as it aims to “develop and
<table>
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<tr>
<th>15.b.1 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</th>
<th>15.b.1 Official development assistance and public expenditure on conservation and sustainable use of biodiversity and ecosystems</th>
</tr>
</thead>
<tbody>
<tr>
<td>This target was not included as it was beyond the scope of the study to look into how much Canada expends on meeting indicator 15.b.1.</td>
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<tr>
<th>15.c Enhance global support for efforts to combat poaching and trafficking of protected species,</th>
<th>15.c.a Proportion of traded wildlife that was poached or illicitly trafficked</th>
</tr>
</thead>
<tbody>
<tr>
<td>This target was deemed irrelevant to VIU as the indicator focuses on poached or trafficked wildlife, which is already discussed in Target 15.7 above.</td>
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</table>
including by increasing the capacity of local communities to pursue sustainable livelihood opportunities
### Appendix S

Compiled Data for Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>2018 Data</th>
<th>2019 Data</th>
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<tbody>
<tr>
<td>16.1 Significantly reduce all forms of violence and related death rates everywhere</td>
<td>16.1.1 Number of victims of intentional homicide per 100,000 population, by sex and age</td>
<td>Within the Criminology department most of the courses touch on the topic of homicide (VIU, 2018-j). Through courses such as CRIM 101 (Intro to Criminology), CRIM 230 (Criminal Law), CRIM 321 (Crime Prevention and Criminal Justice Policy), and CRIM 400 (Law and Human Rights), students learn about the statistics of homicide, the law and how it operates in relation to homicide, and social factors that contribute to this type of violence (Criminology, personal communication, September 28, 2018). Additionally, in CRIM 400 students learn about the dynamics of terrorism and political violence (Criminology, personal communication, September 28, 2018). Criminology students also learn about homicide prevention and mental health as a form of intentional homicide reduction (Criminology, personal communication, September 28, 2018). Examples from the UK are brought into courses about how police response to perpetrators with mental health issues focuses on non-lethal force (i.e. not ‘shoot to kill’) (Criminology, personal communication, September 28, 2018).</td>
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<td>16.1.2 Conflict-related deaths per 100,000 population, by sex, age and cause</td>
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<td>This indicator was deemed inapplicable to an educational institution; cases such as this would not be addressed by the institution but by the local authorities instead — understanding Nanaimo’s statistics regarding this indicator was beyond the scope of this project.</td>
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<td>16.1.3 Proportion of population subjected to (a) physical violence,</td>
<td>VIU’s Human Rights and Respectful Workplace Office (HRRWO) produces an annual report that provides statistics related to incidents reported on campus; in</td>
<td></td>
<td>VIU is a member of the Scholars at Risk program along with approximately 500 other universities (Education Abroad, personal communication, November 21, 2019). The international network protects scholars under</td>
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| (b) psychological violence and (c) sexual violence in the previous 12 months | the 2015/16 report numbers show that there was a total of 35 alleged complaints that year (VIU, 2016). To address discrimination and harassment on its campuses, VIU requires that all full-time employees take the Preventing and Addressing Workplace Harassment: Rights and Responsibilities course (VIU, 2018-DDD). In addition, VIU has Policy 21.05 (Personal Harassment), Policy 21.03 (Human Rights), Procedure 21.05.001 (Responding to Complaints of Personal Harassment), and Procedure 21.03.001 (Human Rights Education Initiatives & Complaint Resolution) (VIU, 2018-S). The HRRWO also has an online Toolkit for Addressing Workplace Harassment available to anyone (VIU, 2018-II).

VIU’s International Education and Education Abroad departments are involved with the Scholars at Risk program that provides a safe haven for scholars fleeing danger from their home country and invites them to be guest lecturers and scholars at VIU (Education Abroad, personal communication, August 29, 2018). VIU is also looking at building a regional approach to the Scholars at Risk program that allows the scholars to move between universities to share their experiences (Education Abroad, personal communication, August 29, 2018). VIU is also actively involved with the Student Refugee Program through the World University Service of Canada (WUSC), which provides a full-year sponsorship for refugee students as permanent residents and pairs their settlement with education (World University Service of Canada, 2018-b; Education Abroad, personal communication, August 29, 2018). Since 2008, VIU has sponsored two students per year (VIU, 2018-I).

16.1.4 Proportion of population that feel safe walking | VIU has taken steps to ensure that students and employees feel safe while on campus. Policy 41.09 (Health & Safety Policy) states that VIU is committed to threat for expressing their ideas and academic knowledge, by finding them temporary academic opportunities at sponsoring universities (Scholars at Risk Network, 2019-a). This not only protects scholars from dangerous conditions, but also allows them to continue their research or academic work in a safe place (Education Abroad, personal communication, November 21, 2019). In 2017, VIU hosted an Iranian scholar of law and human rights for a two-week residency, who delivered a public lecture series and a keynote presentation titled “Speaking Truth to Power in Iran” (Scholars at Risk Network, 2019-b). The VIU Safety App has a feature that allows anyone to submit electronic reports of anything on campus that requires attention by facilities or campus maintenance.
| alone around the area they live | promoting a safe and healthy working and learning environment (VIU, 2018-e). VIU has a Violence Prevention program, which outlines the requirements and procedures for the prevention, management, and investigation of violence in the workplace (VIU, 2018-FFF). Moreover, on the Nanaimo and Cowichan campuses, and at the Deep Bay Marine Field Station, VIU offers emergency telephones (VIU, 2018-GGG). These telephones are available 24/7 and are located in general locations for anyone to use (VIU, 2018-GGG). For individuals who are cautious about walking alone in the dark, VIU has the Safe Walk program (VIU, 2018-HHH). This program provides campus security officers as escorts around campus (VIU, 2018-HHH). The VIU Safety app is also available for anyone to download for free and provides users with many features (emergency procedures, a flashlight, campus map, alert systems, safety toolbox, safe walk, and reporting suspicious activity) (The Nav, 2018-b).

Within the Masters of Community Planning (MCP) program, students are educated on the topic of Crime Prevention Through Environmental Design (CPTED) in PLAN 504 (Community Design) (VIU, 2018-j; Masters of Community Planning, personal communication, September 18, 2018). CPTED looks at how neighbourhoods can be designed to be safer through principles that focus on lighting and visibility (Masters of Community Planning, personal communication, September 18, 2018). Students in Criminology are offered CRIM 321 (Crime Prevention and Criminal Justice Policy), which includes topics on crime prevention through various methods such as environmental design (VIU, 2018-j). However, the topic of safety and security planning for neighbourhoods and cities is not a strong focus within the Criminology department at VIU, which looks at this topic through (Universal Access Committee, personal communication, January 7, 2020; VIU, 2020-d). In addition, anyone in the community is able to access Human Resources or the Universal Access Committee to discuss a need they may have towards campus accessibility and safety (Universal Access Committee, personal communication, January 7, 2020). |
more of a theoretical lens (Criminology, personal communication, September 28, 2018).

| 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 | Students in the Child and Youth Care program and Psychology learn about youth who experience physical punishment or psychological aggression. Some courses that touch on these topics include: CYC 362 (Child Abuse and Neglect Concerns), CYC 404 (Law and Social Services), PSYC 430 (Abnormal Psychology), PSYC 440 (Skills and Techniques in Counselling and Psychotherapy), and PSYC 335 (Infant and Child Development) (VIU, 2018-j). Additionally, students in the Studies in Women and Gender program may learn about this in SWAG 102 (Social Justice Issues and Children) (VIU, 2018-j). To build on data collected in 2018, a Child and Youth Care course, CYC 362 (Child Abuse and Neglect Concerns) is a mandatory course in the program, informing students of the best practices in child safety and how to take disclosures from children (Child and Youth Care, personal communication, September 18, 2019). To further raise awareness on the topic, the Child and Youth Care department is considering opening the course to students in other disciplines (Child and Youth Care, personal communication, September 18, 2019). |
| 16.2.2 Number of victims of human trafficking per 100,000 population, by sex, age and form of exploitation | Students in the Criminology program learn about human trafficking in a few different courses, such as CRIM 135 (Intro to Canadian Law and Legal Institutions: A Criminal Justice Perspective) and CRIM 480 (Organizational Crime: A Global Perspective) (VIU, 2018-j; Criminology, personal communication, September 28, 2018). Other courses touch on the topic of human trafficking periodically (Criminology, personal communication, September 28, 2018). Additionally, many Criminology students graduate and work for non-governmental organizations and work to create policies to reduce human trafficking (Criminology, personal communication, September 28, 2018). |
| 16.2.3 Proportion of young women and men aged 18–29 years who experienced sexual violence by age 18 | As mentioned above, the HRRWO annual report illustrates statistics on incidents report on campus. In the 2015/16 report numbers show that there was just one alleged case of sexual harassment at VIU (VIU, 2016). This does not suggest that only one incident occurred, however, just that one was reported. As mentioned previously in indicator 16.1.3, VIU has policies addressing discrimination and harassment and |
requires all employees to take the Preventing and Addressing Workplace Harassment: Rights and Responsibilities Course.

VIU has also taken on some initiatives to address discrimination and harassment, including the Know More Campaign and the Positive Space Alliance, along with a series of workshops hosted by the HRRWO for students and employees each year (VIU, 2018-Y; VIU, 2018-Z). In the 2013/14 school year HRRWO presented 51 educational events and 16 events in 2015/16 (VIU, 2014-a; VIU, 2016). VIU is a strong supporter of the Moose Hide Campaign, a grassroots movement that is standing up against violence towards women and children (Moose Hide Campaign, 2018). In 2017, VIU hosted the MBA games and throughout the games they fundraised almost $100,000 for the Moose Hide Campaign which also led to increased awareness of the cause (VIU, 2018-JJJ). In addition, sexual harassment awareness is raised amongst the VIU athletes, which is often a high-risk group (Student Affairs, personal communication, September 10, 2018). For example, in the fall of each year the athletes attend presentation that focuses on sexual harassment and consent (Student Affairs, personal communication, September 10, 2018).

| 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 | As mentioned previously, VIU’s Human Rights and Respectful Workplace Office (HRRWO) produces an annual report, in the 2015/16 report numbers show that there was a total of 35 alleged complaints that year (VIU, 2016).

Additionally, VIU – in coordination with Haven Society and Ending Violence Association of BC (EVA BC) – has taken steps to provide competent personnel by offering training sessions for faculty and staff to learn how to receive disclosures of sexual violence (Haven Society,
<table>
<thead>
<tr>
<th>Resolution</th>
<th>2018; Ending Violence Association of BC, 2018; VIU, 2018-EEE).</th>
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<tbody>
<tr>
<td>16.3.2 Unsentenced detainees as a proportion of overall prison population</td>
<td>VIU Criminology students are educated on this topic in courses such as CRIM 241 (Intro to Corrections) and CRIM 330 (Advance Topics in Criminal Law and Procedure) (VIU, 2018-j).</td>
</tr>
<tr>
<td>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</td>
<td>16.4.1 Total value of inward and outward illicit financial flows (in current United States dollars) Data was not collected for this target as it was deemed inapplicable to an educational institution.</td>
</tr>
<tr>
<td>16.5 Substantially reduce corruption and bribery in all their forms</td>
<td>16.5.1 Proportion of persons who had at least one contact with a public official and who paid a bribe to public official, or were asked for a bribe by those public officials,</td>
</tr>
</tbody>
</table>
| 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) | In VIU’s Policy 11.02 (Mission, Vision, and Values), it is stated that an objective of VIU is institutional effectiveness (VIU, 2018-e). Institutional effectiveness comes from transparency, respect, accountability, and supporting faculty, staff and student involvement in university leadership and governance (VIU, 2018-e).

VIU’s two main revenue sources are student tuition and provincial government grants and contracts (VIU, 2018-eeee). Since VIU is publicly funded, its budget is transparent and accessible online (VIU, 2018-vv). |
| 16.6.2 Proportion of population satisfied with their last experience of public services | VIU’s Office of University Planning and Analysis conducts campus-wide surveys to gain feedback about courses, programs, campus services, student mobility, convocation, and housing, as well as student awareness of Indigenous People and topics (VIU, 2019-rrr). The data collected from surveys is used to improve the university’s best practices and guide program development and improvement (Office of University Planning and Analysis, personal communication, |

Data was not collected for this target as it was deemed inapplicable to an educational institution.
<table>
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<tr>
<th>16.7 Ensure responsive, inclusive, participatory and representative decision-making at all levels</th>
<th>16.7.1 Proportions of positions in national and local public institutions, including (a) the legislatures; (b) the public service; and (c) the judiciary,</th>
<th>In the academic year of 2016/17, VIU had a total of 1,227 employees (VIU, 2018-d). Of these employees, 63% (773) were female and 37% (454) were male (VIU, 201-d). A demographic review for the 2010 Campus Master Plan found that approximately 20% to 30% of staff and faculty at VIU were over the age of 55 years (VIU, 2009).</th>
<th>One of VIU’s student clubs, Model United Nations, is an interdisciplinary club which helps students gain an understanding of international politics (VIU, 2019-ooo). The interactive club operates by role-playing as international delegates for United Nations simulation conferences, providing students an opportunity to build leadership, public speaking, cooperation, and critical thinking skills (Facebook, 2018-b).</th>
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September 27, 2019). Program reviews are also conducted as a method for faculty and staff to evaluate the outcomes of current programs in order to inform future program implementation (VIU, 2019-sss). Launching in fall 2020, Summative Program Assessments will be used to evaluate all programs at VIU under the same criteria, where every program will report on their results and the Office of University Planning and Analysis will decide whether the program will be maintained, enhanced, or reviewed (Office of University Planning and Analysis, personal communication, September 27, 2019).

VIU ensures that Alumni continue to participate at VIU by offering an Alumni Ambassador program (Advancement and Alumni, personal communications, November 14, 2019). This program engages graduates from around the world, which provides them the opportunity to participate with the VIU community, fellow alumni, and the greater Nanaimo community. This program ensures a strong VIU through ongoing contact with the alumni community, which strengthens communication and connection between the university, local communities, and prospective students (VIU, 2019-tt). For example, the student call centre aims to connect current students with alumni that may be able to answer questions about their VIU experience and current career situations (Advancement and Alumni, personal communications, November 14, 2019).
compared to national distributions, by sex, age, persons with disabilities and population groups

Looking at the Nanaimo 2016 census, the numbers in the labour force status section show that 48,215 people aged 15 years and older were employed (Statistics Canada, 2018-e). Of these people, 50% (24,260) were male and 50% (23,955) were female (Statistics Canada, 2018-e). Finally, reviewing the national census for Canada shows that 17,230,040 people were employed in 2016 and of this employed population 52% (923,540) were males and 48% (8,306,490) were female (Statistics Canada, 2018-f). Comparing VIU’s population to both Nanaimo’s and Canada’s, one can see that in the 2016/17 school year VIU had a higher proportion of employed females than in Nanaimo and Canada (63% versus 50% and 48%, respectively), but a lower proportion of employed males than Nanaimo and Canada (37% versus 50% and 52%, respectively).

Researchers were unable to find demographic characteristics other than gender and minimal age data on VIU’s website.

Along with 500 other Peace Ambassadors from over 40 countries, two VIU students travelled to the 2018 Peace Summit of Emerging Leaders’ in Bangkok to learn how to implement strengthening peace efforts around the world (VIU, 2019-ppp). Youth that attended the summit committed to leading peace initiatives of their own as well as encouraging other youth to become active in creating inclusive communities (VIU, 2019-ppp). The two students who attended the summit also helped organize VIU Model United Nations events during Global Citizens Week in February 2018 (VIU, 2019-ppp).

16.7.2 Proportion of population who believe decision-making is inclusive and responsive, by sex, age, disability and population group

The Universal Access Committee at VIU regularly invites students to discuss their experiences with campus accessibility (Universal Access Committee, personal communication, January 7, 2020). These consultations often result in bringing awareness to students’ needs, followed by changes that are made around the campus to provide accessibility and inclusion for all (Universal Access Committee, personal communication, January 7, 2020).

16.8 Broaden and strengthen the participation of developing countries in the institutions of

16.8.1 Proportion of members and voting rights of developing countries in international organizations

This target was deemed irrelevant to a Canadian educational institution as the indicator involves looking into the involvement of developing countries in the voting rights of international organizations.
<table>
<thead>
<tr>
<th>global governance</th>
<th>16.9 by 2030, provide legal identity for all, including birth registration</th>
<th>16.9.1 Proportion of children under 5 years of age whose births have been registered with a civil authority, by age</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This target was deemed irrelevant to a post-secondary educational institution as its indicator is focused on knowing whether or not children under 5 years of age have been registered at birth.</td>
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<td>16.10 Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements</td>
<td>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</td>
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<td>The Criminology program at VIU educates its students on these topics within various courses. These courses include: CRIM 101 (Intro to Criminology), CRIM 204 (Deviance, Crime and Social Control), CRIM 400 (Law and Human Rights), CRIM 470 (Dynamics of Terrorism), and CRIM 480 (Organizational Crime: A Global Perspective) (VIU, 2018-j). Additionally, Sociology students also learn about these topics in SOCI 382 (Crimes Against Humanity) (VIU, 2018-j).</td>
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<td>16.10.2 Number of countries that adopt and implement constitutional, statutory and/or policy guarantees for public access to information</td>
<td>VIU’s Policy 31.13 (Intellectual Property) promotes openness, sharing of ideas, academic freedom, safeguarding proprietary rights and recognizing principles of scholarly integrity (VIU, 2018-e). Following shifts in Canadian policy about open access to information, VIU has taken steps to make sure information is publicly available (Scholarship, Research and Creative Activity, personal communication, September 6, 2018). Information from research done at VIU is available on VIUSpace, which digitally preserves and showcases research done at VIU and is publicly available (VIU, 2018-KKK). In addition, the Scholarship,</td>
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<td>As an effort to increase public access to information, History students started The Canadian Letters and Images Project in 2000 as an online archive that digitizes any correspondences, diaries, photos, or other personal materials of Canadians at war (VIU, 2019-qqq). Since the start of the project, History students have made approximately 30,000 letters available to the public on the Canadians Letters and Images Project website (History, personal communication, August 27, 2019). A goal of this project is to help the public understand what people went through during wars to</td>
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Research and Creative Activity Office at VIU is working towards making more information and research publicly available (Scholarship, Research and Creative Activity, personal communication, September 6, 2018).

The VIU Library takes intellectual and academic freedom seriously and protects the privacy and rights of student and faculty researchers at VIU (Library Administration, personal communication, August 30, 2018). VIU does not monitor search trend analysis, nor does it share personal data of students or faculty with vendors (Library Administration, personal communication, August 30, 2018).

To further ensure public access to information, VIU is one of the first five universities in Canada to offer the Inside-Out Prison Exchange Program (VIU, 2019-FFF). The program brings together university students and incarcerated students for semester-long learning, providing both inside and outside students with meaningful academic and experiential learning opportunities (The Inside-Out Prison Exchange Program, 2020; VIU, 2019-FFF). The program takes an innovative pedagogical approach to facilitating dialogue across differences, with a deep commitment to social justice (The Inside-Out Prison Exchange Program, 2020). Inside-Out has been running at Nanaimo Correctional Centre since 2016 and funding from the Vancouver Foundation has helped the program expand to the Vancouver Island Regional Correctional Centre in Victoria (VIU, 2019-FFF). VIU’s Criminology department currently offers two courses for the program: CRIM 299 (Exploring Issues of Crime and Justice Behind the Walls) and CRIM 499 (From Social Exclusion to Social Inclusion) (VIU, 2019-FFF).

<p>| 16.a Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence | 16.a.1 Existence of independent and national human rights institutions in compliance with the Paris Principles | As previously mentioned in 2019 data for indicator 16.7.1, two VIU students travelled to the 2018 Peace Summit of Emerging Leaders’ in Bangkok to learn how to implement strengthening peace efforts around the world (VIU, 2019-ppp). Youth that attended the summit committed to leading peace initiatives of their own as well as encouraging other youth to become active in creating inclusive communities (VIU, 2019-ppp). |</p>
<table>
<thead>
<tr>
<th>and combat terrorism and crime</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.b Promote and enforce non-discriminatory laws and policies for sustainable development</td>
</tr>
<tr>
<td>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</td>
</tr>
<tr>
<td>As mentioned previously, HRRWO produces an annual report, which showcased a total of 35 alleged complaints in the 2015/16 academic year (VIU, 2016). Also, VIU has a number of policies that address discrimination and/or harassment and requires (VIU, 2018-e).</td>
</tr>
<tr>
<td>To promote non-discrimination, VIU and the University of Victoria collaboratively created a travelling banner display entitled 150 Years and Counting: Fighting for Justice on the Coast (VIU, 2018-EEEE). The banner provides stories from different perspectives of those who have faced discrimination, such as Indigenous communities and Asian Canadians, who fought for justice in the face of colonialism and racist exclusions (VIU, 2018-EEEE).</td>
</tr>
</tbody>
</table>
### Appendix T

Compiled Data for Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>2018 Data</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.1 Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection</td>
<td>17.1.1 Total government revenue as a proportion of GDP, by source</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>17.1.2 Proportion of domestic budget funded by domestic taxes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>2018 Data</th>
<th>2019 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>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 gross national income</td>
<td>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’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

These targets are all related to nations’ finances and were therefore not included in this study, as looking into how Canada is achieving these indicators was beyond the scope of this study.
<table>
<thead>
<tr>
<th>for official development assistance (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</th>
<th>gross national income (GNI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.3 Mobilize additional financial resources for developing countries from multiple sources</td>
<td>17.3.1 Foreign direct investment (FDI), official development assistance and South-South cooperation as a proportion of total domestic budget</td>
</tr>
<tr>
<td>17.3.2 Volume of remittances (in United States dollars) as a proportion of total GDP</td>
<td></td>
</tr>
<tr>
<td>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</td>
<td>17.4.1 Debt service as a proportion of exports of goods and services</td>
</tr>
</tbody>
</table>

| 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, | 17.6.1 Number of science and/or technology cooperation agreements and programmes between countries, by type of cooperation |

Through Education Abroad and International Education, VIU has made partnerships with other international institutions regarding technology. For example, an international project in Ukraine trains civil servants in digital Spatial Data Infrastructure (SDI) to better manage resources, urban areas, and habitats (VIU, 2018-hhh). For this project, VIU shared its license for ArcGIS and helped to provide the software and servers needed. Another project partners VIU with Tra Vinh University in

Many departments at VIU hold ongoing agreements and partnerships, both internal and external, which help to enhance knowledge-sharing and access to science and technology (International Education, personal communication, November 21, 2019; Recreation and Tourism, personal communication, July 11, 2019; Business Administration in Management and Law, personal communication, June 4, 2019; Health and Human Services, personal communication,
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

| Vietnam (VIU, 2018-iii). Undergraduate engineering students from both universities were given an opportunity to design a bridge for the partner country and work together to implement the design (Education Abroad, personal communication, August 29, 2018). VIU also offers a number of international internships and exchanges to students in various programs (VIU, 2018-mmm). |

communication, July 3, 2019; Nursing, personal communication, June 4, 2019) . The Awareness of Climate Change Through Education and Research (ACER) group partners with many different community groups through the presentations they deliver, and their 2018 annual symposium was facilitated in partnership with the City of Nanaimo and the Regional District of Nanaimo (ACER, personal communication, October 3, 2019). As previously mentioned, the Earth Science department recently formed an agreement with Nanaimo schools in which VIU faculty and students assemble teaching kits for the schools to enhance knowledge of earth science among youth (Nanaimo News Bulletin, 2019-b). Each year, students in the Fundamentals of Engineering Certificate program complete a design project as part of ENG 121 (Engineering Design II), which are entered into a competition sponsored by Herald Engineering, Helijet International Inc., and Engineers and Geoscientists of BC (Engineering, personal communication, November 7, 2019).

As described in Goal 4 (indicator 4.7.1), LED Africa, a charity founded by a VIU Physics professor provides lighting to schools in Malawi, Africa. In 2013, the Science For All project started, which initially provided partner secondary schools with math and science textbooks, basic science demonstration equipment, manuals, and workshops for teachers (LED Africa, 2019). For the foreseeable future, the focus of the charity will be on running science competitions at schools in Malawi to engage youth in active participation and learning (Physics, personal communication, November 7, 2019).

The Natural Resources Extension Program (NREP) at VIU provides professional development and skills training for those in the environmental and natural
### 17.6.2 Fixed Internet broadband subscriptions per 100 inhabitants, by speed

<table>
<thead>
<tr>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>This indicator was not included as it was deemed irrelevant to an educational institution.</td>
<td></td>
</tr>
</tbody>
</table>

### 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

<table>
<thead>
<tr>
<th>Sub-section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.7.1 Total amount of approved funding for developing countries to promote the development, transfer, dissemination and diffusion of environmentally sound technologies</td>
<td>A science course at VIU, SCIE 352 (Technologies for the Developing World) looks at examples where science and technology have been applied to assist the developing world (VIU, 2019-www). There is a focus on renewable energy and appropriate technology, and students gain an understanding of the solutions and challenges associated with projects in developing countries (VIU, 2019-www).</td>
</tr>
<tr>
<td>Terms</td>
<td>17.8.1 Proportion of individuals using the Internet</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>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</td>
<td>As mentioned in Goal 4, VIU provides free WIFI to its employees, students, and guests (VIU, 2018-rr). All students and employees at VIU have free access to computers and the internet.</td>
</tr>
<tr>
<td>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</td>
<td>As discussed previously, VIU has various international projects and partnerships through Education Abroad. Some of these projects are aiding developing countries. In Tanzania, VIU’s Education Abroad and Recreation and Tourism programs are trying to help develop a degree program in hospitality management so locals can hold managerial positions rather than these positions only being available to foreigners (VIU, 2018-lll; Education Abroad, personal communication, August 29, 2018). Another project involves a partnership between VIU’s Professional Esthetics program and an institute in Trinidad. Cosmetology is a growing sector in Trinidad, so through the partnership, the two institutions have been working to develop a cosmetology program that matches the need of Trinidad (Education Abroad, personal communication, November 21, 2019). VIU’s involvement with Kenyan education is through a partnership with Kisii National Polytechnic (KNP) to support a new building technology program at KNP (VIU, 2019-fff). In May 2019, 6 KNP instructors visited VIU for technical skills training, which also resulted in VIU instructors gaining knowledge and new</td>
</tr>
</tbody>
</table>
through North-South, South-South and triangular cooperation

<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.10</td>
<td>Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization,</td>
</tr>
<tr>
<td>17.10.1</td>
<td>Worldwide weighted tariff-average</td>
</tr>
</tbody>
</table>

| 325 | personal communication, August 29, 2018; VIU, 2018-MMM). VIU also has an international project in Ukraine that has been working to train civil servants in digital SDI (see indicator 17.6.1 above). |
| 325 | perspectives (International Education, personal communication, November 21, 2019). The VIU-KNP partnership is for 3-5 years and is part of the Kenya Education for Employment Program, funded by Global Affairs Canada (VIU, 2019-fff). VIU is also working with Humber College, Durham College, and Selkirk College to develop and enhance training at 3 Kenyan colleges (VIU, 2019-fff). |
| 325 | VIU is a member of Leave for Change, a program run by Uniterra (a Canadian International development program that is jointly operated by CECI and WUSC), which offers member employees a personal and professional development opportunity to participate in a short term international volunteer assignment (International Education, personal communication, November 21, 2019; Uniterra, 2019). Uniterra operates in 14 countries, particularly where women and youth are underrepresented, working to support the development and expansion of economic opportunities and foster an inclusive environment. The Uniterra program at VIU aims to engage VIU faculty and staff in high quality international workplace-based experiences that fulfill objectives of VIU’s International Education Strategic Plan (Uniterra, 2019; VIU, 2019-xxx; VIU, 2017-k). |
including through the conclusion of negotiations under its Doha Development Agenda

<table>
<thead>
<tr>
<th>17.11</th>
<th>Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries’ share of global exports by 2020</th>
<th>17.11.1 Developing countries’ and least developed countries’ share of global exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.12</td>
<td>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</td>
<td>17.12.1 Average tariffs faced by developing countries, least developed countries and small island developing States</td>
</tr>
</tbody>
</table>

These targets all focus on international trade, and were therefore deemed irrelevant to a post-secondary institute and were beyond the scope of this study to investigate.
preferential rules of origin applicable to imports from least developed countries are transparent and simple, and contribute to facilitating market access

<table>
<thead>
<tr>
<th>17.13 Enhance global macroeconomic stability, including through policy coordination and policy coherence</th>
<th>17.13.1 Macroeconomic Dashboard</th>
<th>This target was not included as it was deemed irrelevant to a post-secondary institute.</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.14 Enhance policy coherence for sustainable development</td>
<td>17.14.1 Number of countries with mechanisms in place to enhance policy coherence of sustainable development</td>
<td></td>
</tr>
<tr>
<td>17.15 Respect each country’s policy space and leadership to establish and implement policies for poverty eradication and</td>
<td>17.15.1 Extent of use of country-owned results frameworks and planning tools by providers of development cooperation</td>
<td>These targets were not included as it was beyond the scope of this study to look into Canada’s achievement of Indicators 17.14.1 and 17.15.1</td>
</tr>
</tbody>
</table>
| sustainable development | 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 | VIU offers many opportunities for students to travel abroad and learn internationally. Each year, 15 field schools are held with approximately 300 student participants and 20 faculty members. In 2018/19, there were 38 incoming exchange students, 46 outgoing exchange students, and 32 international internships (Education Abroad, personal communication, November 27, 2019). As previously mentioned in Goal 14, the Queen Elizabeth Scholarship program also provides students with the opportunity to participate in international internships. VIU has partnerships with the following universities for student exchange programs: University of Canberra, Deakin University, Victoria University, University of the West Indies, Zhejiang Ocean University, University of Hertfordshire, Burgundy School of Business, Frankfurt School of Finance and Management, University College Cork, J.F. Oberlin University, Chung-Ang University, Hogeschool Utrecht, Breda University, UArctic Network, Nord University, University of Huelva, and University of Highlands and Islands (VIU, 2019-yy). Also as previously mentioned above and in Goal 4, VIU has a 3-year, $1.67-million partnership with Kisii National Polytechnic in Kenya to help provide education in Kenya and support and strengthen the use of technology (VIU, 2018-yyy).

As a component of both the Master of Arts in Sustainable Leisure Management program and the World Leisure Centre of Excellence at VIU, *Visiting Scholars* bring local and international leaders to VIU to engage with students, faculty, and community members (World Leisure organization, 2019). This engagement helps to enrich student experience,
share research and ideas, and explore possibilities for future collaborations such as research projects, exchanges, and field schools (World Leisure organization, 2019). VIU also holds a partnership with Innovation Island for VI Solutions, an initiative that aims to match students and organizations together to provide work experience for students and labour benefits to the organizations (VIU, 2019-zzz). The Centre for Experiential Learning at VIU has developed strong relationships with local, national, and international employers who have provided learning opportunities for students through co-operative education and internships, and have become Partners in Learning (businesses and organizations committed to providing internships for VIU students) (VIU, 2019-uuu). Each year, awards are given to students who have made a significant impact at their work term organization, as well as to VIU industry partners that have demonstrated a strong commitment to experiential education through the support and hiring of co-op and internship students (VIU, 2019-d).

As well as large scale institutional partnerships, many of VIU’s departments and faculties offer international opportunities to students through partnerships. In particular, the Faculty of Recreation and Tourism holds partnerships with Island Health, BC and National Parks, Calgary Zoo, Tourism Vancouver Island, the City of Nanaimo, and the World Leisure Organization (Recreation and Tourism, personal communication, July 11, 2019). The VIU Forestry department partners with the Ministry of Forests and the Truck Loggers Association, and works collaboratively with other universities such as UNBC, UBC, U of A, Lakehead University and University of New Brunswick (Forestry, personal communication, May 23, 2019). The Faculty of Management partners
with the University of Hertfordshire, Qingdao University of Science and Technology, Shanghai Lixin University of Commerce, and Shandong Institute of Business and Technology to offer international education opportunities for students (VIU, 2019-AAA). The Faculty also works with the Nanaimo Business Chamber to collaborate on marketing events that VIU hosts (Business Administration in Management and Law, personal communication, September 11, 2019). VIU’s English department offers international field schools and has hosted international visiting scholars (English, personal communication, August 22, 2019). Faculty members of the English department pioneered VIU’s Interdisciplinary Studies Courses (INTR) which began as a partnership between English and Media Studies (English, personal communication, August 22, 2019). The Child and Youth Care Program is very active in connecting with communities and has contracts with local schools to work collaboratively, and the program advisory committee consists of 12 community members who provide input for the program curriculum (Child and Youth Care, personal communication, September 18, 2019). There are approximately 176 partners, a number of which are Indigenous communities, involved with VIU’s Nursing program as the students are very engaged in applied experiential learning opportunities (Faculty of Health and Human Services, personal communication, July 3, 2019). VIU’s History department provides financial support to Nanaimo Archives each year and also works with The Scotland’s War Project from the University of Edinburgh to archive war materials for public access (History, personal communication, August 27, 2019).

Many research efforts across VIU also involve partnerships and collaborative work. For example,
VIU’s Community-Based Applied Interdisciplinary Research program forms many partnerships between VIU and community organizations that allow students to create social change through their support and work for local organizations (VIU, 2018-rrrr). As discussed in Goal 9 (indicator 9.5.1), the Regional Initiatives Fund was launched through a partnership between VIU and the Province of BC in support of communities on Vancouver Island (VIU, 2018-rrrr). Funding allows VIU to collaboratively work on projects with local communities in response to their needs, along with the promotion of innovation and sustainability with a particular focus on supporting Indigenous communities and projects (VIU, 2018-rrrr). VIU’s Regional Innovation Endowment Chair in Aboriginal Early Childhood Development has an advisory committee comprised of community representatives from: Aboriginal Success by Six, BC Aboriginal Child Care Society, BC Aboriginal Head Start, BC Infant Development Programs, Chemainus Native College, Coast Salish Employment and Training, Kwumut Lelum Child and Family Services, School District 68 Aboriginal Education, Snuneymux’w Child Care Programs, Tlilicum Lelum Friendship Centre, VIU Elders in Residence, VIU Aboriginal Education, VIU Health & Human Services, and VIU Early Childhood Education and Care program (VIU, 2019-BBB). VIU researchers are also working on a UNESCO global research project, Re-orienting Education and Training Systems to Improve the Lives of Indigenous Youth (VIU, 2018-rrrr).

Funded by the Island Coast Economic Trust, the Powell River campus is one of five partners involved with the Powell River Creative Economy and Innovation Initiative, along with Powell River Education Services Society, Tla’amin Nation, City of Powell River and qathet Regional District (VIU, 2019-
The initiative is working in response to Powell River’s increasing innovation demands by mapping potential growth opportunities in Powell River’s cultural sector as well as developing a community-based innovation/co-working hub (PR Creative Economy & Innovation Initiative, 2018). As a partner in this initiative, VIU is acting as a convening method for bringing different community members, individuals, and organizations together to synthesize different ideas towards sustainability (Powell River campus, personal communication, July 23, 2019). VIU Powell River is also currently conducting a research project that looks at whether the innovation/co-working hub will support inclusive education with a focus on persons with disabilities, and has raised approximately $35,000 for community engagement and development (Powell River campus, personal communication, July 23, 2019).

VIU holds numerous partnerships related to reconciliation and engagement with Canadian Indigenous peoples. For example, in partnership with The Laurier Institution and CBC Radio One Ideas, VIU hosts an annual speakers’ series focused on reconciliation as an initiative to demonstrate commitment to and respect for Indigenous peoples in response to the Truth and Reconciliation Commission (VIU, 2019-vv). Another example is VIU’s partnership with Yukon College and the McConnell Foundation, supported by Colleges and Institutes Canada and Universities Canada, to host a summer institute, Perspectives on Reconciliation supporting the Canadian post-secondary sector in advancing reconciliation (Yukon College, 2019). The summer institute started in August 2019, during which presidents and reconciliation leads from the participating institutions spent 5 days at Yukon College and in the surrounding First Nations.
communities exploring ways to advance reconciliation through services, programs, research, policy, and governance (Yukon College, 2019). Another institutional partnership is with McGill University, formed in 2018 when McGill and VIU signed a Memorandum of Understanding agreeing to explore how the universities can work together to support research and learning for Indigenous education and studies (VIU, 2018-FFFF). VIU is now in its fourth year of funding from the Jarislowsky Foundation as the first home of the Fullbright Canada Jarislowsky Visiting Research Chair in Aboriginal Studies (VIU, 2016-b). The support of this position focuses on engaging VIU’s Aboriginal students in the research process and strengthening relationships between the University, First Nations, Métis, Inuit, and the broader community (VIU, 2016-b). As previously described in Goal 1, the EleV program at VIU is offered in partnership with the MasterCard Foundation as an effort to work collaboratively to ensure Indigenous learners become full partners in their education with a focus on listening, identifying needs, and building a network of support across Canada (Aboriginal Education, personal communication, July 12, 2019; VIU, 2019-d). The program is based on a co-creation model where VIU builds proposals for the MasterCard Foundation based on community needs (Aboriginal Education, personal communication, July 12, 2019). For professional development purposes, the Office of Aboriginal Education and Engagement, the Centre for Innovation and Excellence in Learning, and International Education are engaging students as partners in teaching, learning and leadership capacity (VIU, 2019-DDD). Both faculty and student learning groups have been formed to give students opportunities to share their perspectives inside and outside of the classroom (Aboriginal Education,
As previously described in Goal 8 (indicator 8.5.2), VIU offers an Indigenous Intern Leadership Program. This program was developed in partnership with the Assembly of First Nations, the Business Council of BC, and VIU (VIU, 2019-oo). Another collaborative program is the Stewardship Technicians Training program, which is a partnership between the Coastal First Nations Great Bear Initiative and VIU (VIU, 2018-GGGG).

17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships

<table>
<thead>
<tr>
<th>17.17.1 Amount of United States dollars committed to (a) public-private partnerships and (b) civil society partnerships</th>
</tr>
</thead>
</table>
| Although it is difficult to measure the amount of dollars put towards partnerships, it is clear that VIU does engage in public-private and civil society partnerships. As mentioned in indicator 17.6.1, VIU engages in international partnerships through projects, internships, and exchanges. International internships are offered to students in Anthropology, Global Studies, Nursing, Business, Education, Health and Human Services, and Recreation and Tourism (VIU, 2018-mmm).

Looking more locally, VIU also has various partnerships within Canada and on Vancouver Island (VIU, 2018-LLL). The Community Based Applied Interdisciplinary Research (CBAIR) program partners student researchers with local organizations to apply their research skills and make recommendations to address issues and policies (VIU, 2018-r). Students participating in CBAIR in 2018/19 are partnering with Nanaimo Food Share, Zonta Club of Nanaimo, and Wildwood Ecoforest (Sociology, personal communication, September 25, 2018). In 2017, CBAIR students partnered with Ocean Legacy Foundation and Central Vancouver Island Multicultural Society (Sociology, personal communication, September 25, 2018; Zonta Club of Nanaimo, 2015; TLC, 2016). The Masters of Community Planning (MCP) program at VIU partners with local governments, such as the City of Nanaimo and the City of Parksville, as well as First Nation personal communication, July 12, 2019). As previously mentioned, the Regional Initiatives Fund provides funding for VIU to work collaboratively with local communities to address their needs. The VIU Powell River campus has also recently received $350,000 towards community engagement and development for the PR Creative Economy and Innovation Initiative (Powell River campus, personal communication, July 23, 2019). The Queen Elizabeth Scholars program also provides funding to support VIU students in pursuing international education. In 2018, VIU received $300,000 in funding to support the expansion of the program (VIU, 2018-rrrr).

In 2018/19, VIU had 556 community partners who sponsored work-integrated learning students, with work terms in Australia, Canada, China, Egypt, France, Japan, Korea, Tanzania, and USA (Centre for Experiential Learning, personal communication, December 18, 2019).
communities (Masters of Community Planning, personal communication, September 18, 2018). The VIU@Cowichan Research Lab has partnered with Queen Margaret’s School and Red Willow Womyn’s Family Society in Duncan to address gender inequalities (VIU@Cowichan Innovation Lab, personal communication, September 20, 2018). In addition, Mount Arrowsmith Biosphere Region Research Institute (MABRRI) engages in many projects that involve partnerships, such as with the Pacific Biological Station within Fisheries and Oceans Canada, Ministry of Forests, Lands, Natural Resource Operations & Rural Development, and the Village of Gold River, to name a few (VIU, 2018-bb). The Centre for Community Outreach and Care has also engaged in various partnerships with organizations like Vancouver Island Health Association, Kids International Development Agency, local elementary schools, Nanaimo Aboriginal Centre, and first responders in Nanaimo (Centre for Community Outreach and Care, personal communication, September 27, 2018).

<table>
<thead>
<tr>
<th>17.18</th>
<th>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</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.18.2 Number of countries that have</td>
<td></td>
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</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Targets 17.18 and 17.19 were both deemed inapplicable to an educational institution because they focus on how nations monitor and are accountable for meeting the SDGs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>national statistical legislation that complies with the Fundamental Principles of Official Statistics</td>
</tr>
<tr>
<td>17.18.3 Number of countries with a national statistical plan that is fully funded and under implementation, by source of funding</td>
</tr>
<tr>
<td>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</td>
</tr>
<tr>
<td>17.19.1 Dollar value of all resources made available to strengthen statistical capacity in developing countries</td>
</tr>
<tr>
<td>17.19.2 Proportion of countries that (a) have conducted at</td>
</tr>
<tr>
<td>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</td>
</tr>
</tbody>
</table>
Appendix U
Completed SDG Ratings from Accelerating the SDGs

Group Average

Group 1

Scale: 1 (weak) – 4 (strong)