Vancouver Island University & the United Nations Sustainable Development Goals:
A Review & 3-year Roadmap

Prepared by: Mount Arrowsmith Biosphere Region Research Institute
January, 2019
Acknowledgements

The Mount Arrowsmith Biosphere Region Research Institute (MABRRI) at Vancouver Island University (VIU) conducted all of the primary research and report writing for this project. This research has been conducted under the supervision and guidance of MABRRI Research Director, Dr. Pamela Shaw PhD MCIP RPP FRCGS, and was supported by Graham Sakaki MCP, MABRRI Research and Community Engagement Coordinator, and Larissa Thelin, MABRRI Assistant Research and Community Engagement Coordinator.

We would first like to thank Dr. Ralph Nilson, President and Vice-Chancellor of Vancouver Island University, for the opportunity to work on this project and his support throughout the process.

We would also like to thank both Robin McLay, Senior Advisor to the President, and Patrick Brennan, Special Advisor to the President, for their advice and support. We also wish to thank Mark Holland and Rebecca Mellett for presenting at our symposium on October 18, 2018.

Finally, we would like to extend a heartfelt thank you to all the faculty and staff of Vancouver Island University that generously volunteered their time to meet with us and to provide valuable information for this study, for the faculty, staff, and students that attended the symposium and provided recommendations for this report, and for the volunteers who helped to facilitate that event.
MABRRI Research Project Team

Contributing Authors

Courtney Vaugeois, Community Engagement Projects Coordinator
Larissa Thelin, Assistant Research & Community Engagement Coordinator
Jessica Pyett, Senior Research Assistant
Kidston Short, Senior Research Assistant
Graham Sakaki, Research & Community Engagement Coordinator

Other Staff Involved

The following lists other members of the MABRRI team that were involved in this project. They contributed by helping to facilitate meetings with faculty and staff and by assisting with the facilitation of the symposium hosted on October 18. Names are listed alphabetically by last name.

Carson Anderson, Research Assistant
Alan Cavin, Research Assistant
Cassidy Funk, Research Assistant
Kayla Harris, Research Assistant
Lindsay Malbon, Research Assistant
Chrissy Schellenberg, Research Assistant
Ashley Van Acken, Former Coordinator of the Mount Arrowsmith Biosphere Region
Ariel Verhoeks, GIS & Remote Sensing Specialist
# Table of Contents

Acknowledgements ii  
MABRRI Research Team iii  
Table of Contents iv  
List of Figures & Tables v  

**Introduction**  1 – 3  
  The United Nations & the Sustainable Development Goals  1  

**Methodology**  3 – 6  
  Preliminary Measures  3  
  VIU Website Review  4  
  Meetings with VIU Faculty and Staff  4  
  Analysis of Other Initiatives  5  
  Symposium  5  
  Data Analysis  6  

**The Sustainable Development Goals & VIU**  7 – 56  
  Goal 1: End poverty in all its forms everywhere  7  
  Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture  10  
  Goal 3: Ensure healthy lives and promote well-being for all at all ages  13  
  Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all  17  
  Goal 5: Achieve gender equality and empower all women and girls  21  
  Goal 6: Ensure availability and sustainable management of water and sanitation for all  24  
  Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all  27  
  Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all  29  
  Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation  32  
  Goal 10: Reduce inequality within and among countries  35  
  Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable  37  
  Goal 12: Ensure sustainable consumption and production patterns  40  
  Goal 13: Take urgent action to combat climate change and its impacts  44  
  Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development  46  
  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  48  
  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  51  
  Goal 17: Strengthen the means of implementation and revitalise the global partnership for sustainable development  54  

**Limitations**  56 – 57  

**Recommendations**  57 – 60
References

Appendices
Appendix A: Data collection methodology for the review of the VIU website
Appendix B: Meetings with VIU faculty and staff
Appendix C: Example interview questions: Department of Global Studies
Appendix D: Compiled data for Goal 1: No poverty
Appendix E: Compiled data for Goal 2: Zero hunger
Appendix F: Compiled data for Goal 3: Good health and well-being
Appendix G: Compiled data for Goal 4: Quality education
Appendix H: Compiled data for Goal 5: Gender equality
Appendix I: Compiled data for Goal 6: Clean water and sanitation
Appendix J: Compiled data for Goal 7: Affordable and clean energy
Appendix K: Compiled data for Goal 8: Decent work and economic growth
Appendix L: Compiled data for Goal 9: Industry, innovation, and infrastructure
Appendix M: Compiled data for Goal 10: Reduced inequalities
Appendix N: Compiled data for Goal 11: Sustainable cities and communities
Appendix O: Compiled data for Goal 12: Responsible consumption and production
Appendix P: Compiled data for Goal 13: Climate action
Appendix Q: Compiled data for Goal 14: Life below water
Appendix R: Compiled data for Goal 15: Life on land
Appendix S: Compiled data for Goal 16: Peace, justice, and strong institutions
Appendix T: Compiled data for Goal 17: Partnerships for the Goals

List of Figures & Tables

Figure 1: The 17 United Nations Sustainable Development Goals
Table 1: Table topics at the UN SDGs & VIU Symposium HOSTED ON October 18, 2018
Figure 2: An example of the posters presented at the UN SDGs & VIU Symposium:
Table 1 (Goals 1 & 2)
Table 2: Demographic statistics for Vancouver Island University for the academic
year of 2016/17
Table 3: Three-year roadmap to assist VIU in meeting the SDGs
Table 4: Recommendations from the VIU community related to how VIU can achieve
each of the 17 SDGs
Introduction

Vancouver Island University (VIU) was established in 1936 when Jack McReady 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’a’mín First Nation territory (Tla’a’mín 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 comprised 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 2018 (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-c; Figure 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 comprised 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).
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). 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 first review VIU’s educational foci and initiatives. It will also include recommendations from the VIU community and provide examples of initiatives implemented by other universities. Finally, this report will outline a three-year roadmap that showcases actions that VIU can take to continue to assist Canada in achieving the UN SDGs by 2030. This study 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).

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, with the exception of those that are currently ranked as Tier III by the UN as “no internationally established methodology or standards are yet available for [these] indicators” (United Nations, 2018-h, para. 4). For the remaining indicators, the team established a separate ranking system and ranked them as relevant, somewhat relevant, or not relevant to VIU. The majority of indicators that were ranked not relevant 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 focused on how VIU is currently meeting the indicators that were ranked relevant and somewhat relevant.

**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 event pages, 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. The data were categorized by Goal, Targets, and Indicators along the y-axis with different types of data that the information collected organized along the x-axis— for example, data was separated into Programs, Courses, Policies, and more (Appendix A). As mentioned above, only the targets deemed relevant and somewhat relevant were included in the review.

**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. Due to limited resources, the researchers were not able to meet with faculty from the Powell River and Parksville campuses, but will expand the research to those areas in future phases of the project. While the majority of the meetings were held on VIU’s main campus in Nanaimo, the team was able to meet with one research institute at the Cowichan campus— the VIU@Cowichan Research Lab — and with researchers at the Deep Bay Marine Field Station. 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 an attempt to ensure the correct people were involved in the interviews, the head of each program or department was contacted first — as an example, a Dean of a program was asked to meet rather than reaching out to each Chair of the departments within that program. In most cases, however, the Deans directed the research team to the Department Chairs instead, preferring that the Chairs speak on behalf of their department. Between August and October of 2018, the team facilitated a total of 43 meetings with members of the VIU community (Appendix B). The meetings were semi-structured — each participant was provided a list of questions in advance of the meeting (see example in Appendix C) that was meant to guide conversation, but offered space to allow for the introduction of new ideas and topics. 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 include in this report’s three-year roadmap. 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.

Symposium

On October 18, 2018 MABRRI hosted a symposium titled “The United Nations Sustainable Development Goals & VIU” 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).

The purpose of the World Café was to address the second objective of this study: to develop a list of recommendations that assist the University in achieving selected SDG targets. During the World Café, participants had the opportunity to sit at three of seven tables over a one hour period. Each “table topic” was two or three SDGs that were similar in focus (Table 1). 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 least relevant to VIU were removed from the World Café discussions.

Table 1: Table topics at the UN SDGs & VIU Symposium hosted on October 18, 2018

<table>
<thead>
<tr>
<th>Table ID #</th>
<th>Goals Discussed at the Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Goal 1: No Poverty, Goal 2: Zero Hunger</td>
</tr>
<tr>
<td>2</td>
<td>Goal 3: Good Health and Well-being, Goal 6: Clean Water and Sanitation</td>
</tr>
<tr>
<td>3</td>
<td>Goal 4: Quality Education, Goal 8: Decent Work and Economic Growth</td>
</tr>
<tr>
<td>4</td>
<td>Goal 5: Gender Equality, Goal 10: Reduced Inequalities</td>
</tr>
<tr>
<td>5</td>
<td>Goal 7: Affordable and Clean Energy, Goal 11: Sustainable Cities and Communities</td>
</tr>
<tr>
<td>6</td>
<td>Goal 9: Industry, Innovation and Infrastructure, Goal 12: Responsible Consumption and Production</td>
</tr>
<tr>
<td>7</td>
<td>Goal 13: Climate Action, Goal 14: Life Below Water, Goal 15: Life on Land</td>
</tr>
</tbody>
</table>

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.

**Indicator topics**
- Proportion of population living below the national poverty line
- Social protection systems
- Access to basic services

**Examples of VIU's initiatives**
- Tuition Waiver Program
- Events: Chew on This!
- Centre for Community Outreach and Care
- Departmental focus: Anthropology; Sociology; Social Work; Global Studies; Criminology

**Examples of other initiatives**
- University of Alberta
  - Families First Edmonton project: connects low income families with existing services
  - All In For Youth Initiative: supporting families, children, and youth of inner-city schools

**Examples of VIU's initiatives**
- Undernourishment
- Food insecurity
- Agriculture

**Examples of other initiatives**
- Good Food Box Program
- Grocery Shuttle
- Meal Plans
- Farmers Markets
- Workshops (Elder College)
- Centre for Community Outreach and Care
- Departmental focus: Sport, Health & Physical Education; Nursing; Sociology

**Examples of other initiatives**
- University of Northern Colorado
  - Bear Pantry: 5 food or toiletry items twice per week

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

**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 World Café. 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 (Appendices D to T). This data was then summarized further to showcase how VIU is meeting each Goal more broadly. This summary, the recommendations gained through the World Café, and examples from other university initiatives together informed the development of a three-year roadmap. This roadmap outlines comprehensive steps VIU can take to continue to move the SDG project forward.
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 has 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, entitled 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 off of 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 is living below the international poverty line. However, student populations in Canada are generally of a low-income status, generally because 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). 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 the 2016/17 academic year (VIU, 2018-h). In addition, VIU offers a wide range of scholarships and bursaries to students in financial need (VIU, 2018-i) (Appendix D).
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, or Political Studies (Appendix D). These departments teach VIU students about social welfare in Canada, global economic issues, 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 as policy analysts, developing policies related to poverty (Political Studies, personal communication, September 18, 2018; Sociology, personal communication, September 25, 2018).

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 low socio-economic status (VIU, 2018-k; Centre for Community Outreach and Care, personal communication, September 27, 2018) (Appendix D).

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: the purpose was to spread 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 Campaign helped 52,177 people across Central and Northern Vancouver Island (VIU, 2018-m).

The Centre for Community Outreach and Care also engages in many engagement 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 pursing post-secondary education (Centre for Community Outreach and Care, personal communication, September 27, 2018; Appendix D). Each year, the Centre engages over 500 children in their programs (Centre for Community Outreach and Care, personal communication, September 27, 2018).
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.

Recommendations from the VIU community

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 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).

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). Between 2011 and 2012, 8.4% of Canadian households (or more than 2 million people) reported experiencing food insecurity (Government of Canada, 2018). 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).

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), 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; and two private food establishments (Starbucks and Subway) (VIU, 2018-n) (Appendix E). There are also vending machines placed across campus (VIU, n.d.-a). While Food Services provides a variety of choices and price-point options, 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 in 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, while the Farmers Market is offered at least once per week during Vancouver Island’s growing season (VIU, 2018-q).

At the Cowichan campus, a cafeteria offers a variety of foodstuffs, including beverages, sandwiches, soups, and lunch specials (Vancouver Island University Cowichan, 2018-a). The only food service
available on the Powell River campus is the Future Chefs’ Café, a dining room that requires reservations (Vancouver Island University Powell River, 2018). As this was the only information available online, and because the research team did not meet with other campuses regarding this Goal, it is unclear how available and accessible food is at each of VIU’s other campuses.

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, 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 Club SHAPE 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).

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).

While it is clear that VIU’s Nanaimo campus provides a variety of ways for students and faculty to gain access to food, which is sometimes local, it is unclear if all of VIU’s campuses are doing the same. 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.

**Recommendations from the VIU community**

Discussions from the World Café 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. Similarly, the discussion at the table led to keeping bees on campus. These ideas indicate that many participants showed a desire to have VIU produce more of its own food in order to address nutrition and food insecurity. 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 that VIU should buy imperfect produce, or produce that does not look like the ideal produce, which would typically result in it being wasted but can sometimes 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 and food to members of the VIU community that are not in programs such as SHAPE.

**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 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 happy 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 examine physical and mental health, sexual and reproductive health, access to health care services, and substance use (United Nations, 2018-h). Furthermore, one 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 have access to benefit plans: students are offered the Students’ Benefit Plan and 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 students also have access to the Health and Wellness Centre, which provides both physical and mental health care services to students (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). As well, the Health and Wellness Centre is not available to faculty, 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).

Aside from offering basic health care services, VIU’s Health and Wellness Centre has a very 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 Studies, 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 Studies, 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).

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 alcohol and drug use (Health and Wellness Centre, personal communication, August 15, 2018) 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).

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 racquetball and squash courts, fitness and weight rooms, 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).

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 September 2018, VIU started a janitorial contract with Alpine Building Maintenance Inc. (Facilities Services & Campus Development, personal communication, September 21, 2018). Alpine Building Maintenance Inc. is committed to providing sustainable solutions by aiming to reduce chemical use, eliminating toxicity, and improving indoor air quality (Alpine Building Maintenance Inc., 2018), all of which relate to contaminants that potentially could have a negative impact on human 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.

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).

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 eight departments; after graduation, students will have experience and knowledge on research related to substance abuse, pharmacology, and addiction (VIU, 2018-y).

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 Applied Environment Research Laboratories (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 much of their research (AERL, personal communication, August 3, 2018).
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 many students on campus, and tend to focus on students at VIU’s Nanaimo campus (Campus Recreation, personal communication, August 14, 2018).

Recommendations from the VIU community

At the World Café participants discussed many ideas on how to better meet Goal 3. Although VIU already offers health services and initiatives, participants 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. There was 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 14% of students are over the age of 50 (VIU, 2018-d) (Table 2; 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. 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 represent 14% of the VIU population: again, these numbers exceed the national statistics (VIU, 2018-d). 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.

Table 2: Demographic statistics for Vancouver Island University for the academic year of 2016/17 (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 make up 43% of the total VIU population).

<table>
<thead>
<tr>
<th>Demographic Cohort</th>
<th>VIU Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>6,125 (43%)</td>
</tr>
<tr>
<td>Female</td>
<td>8,119 (57%)</td>
</tr>
<tr>
<td>Under 18</td>
<td>677 (5%)</td>
</tr>
<tr>
<td>18 – 24 years</td>
<td>6,470 (45%)</td>
</tr>
<tr>
<td>25 – 49 years</td>
<td>5,068 (35%)</td>
</tr>
<tr>
<td>50 years and older</td>
<td>2,066 (14%)</td>
</tr>
<tr>
<td>Indigenous</td>
<td>1,156 (11%)</td>
</tr>
<tr>
<td>International</td>
<td>2,013 (14%)</td>
</tr>
<tr>
<td>Registered with Disability Access Services (2017/18)</td>
<td>1,000 (7%)</td>
</tr>
<tr>
<td>Total Enrolment</td>
<td>14,386</td>
</tr>
</tbody>
</table>

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 office 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 a total of 409 stairs (VIU, 2018-ee), a barrier-free route is available for those with mobility issues (VIU, 2018-F). Facilities have also created a plan to update the barrier-free route to address some problem areas (Facilities Services & Campus Development, personal communication, September 21, 2018).

In addition, VIU provides free access to computers and WIFI to students, employees, and guests (VIU, 2018-rr). VIU also offers educational technology for peoples with disabilities. For example, the institution provides assistive stations and technology that offers access to programs such as Kurzweil, Zoom Text, and Inspiration. Kurzweil offers a text-to-speech program that reads text out loud for individuals with limited visual abilities (VIU, 2018-G; Kurzweil Education, 2018). It is unclear, however, if this technology is offered at all of VIU’s campuses, or just the Nanaimo campus.

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,
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 initiative 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 refugee students per year (VIU, 2018-i). The Tuition Waiver Program, discussed in Goal 1, also helps to aid students that are likely in financial need (VIU, 2018-j).

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 that they must be a graduate from a secondary school (VIU, 2018-k). For international students, they must prove that they are proficient in English, along with meeting the requirements for their program (VIU, 2018-k).

**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 are 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).

Global citizenship education is a fundamental component for some departments at VIU, such as Political Studies, Global Studies, and Sociology (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: inter-cultural 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).

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).

**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. 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).

**Recommendations from the VIU community**

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. A desire for more interdisciplinary and collaborative projects between departments was also
expressed. 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.

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-l). 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 sex does not only happen towards women, but unfortunately none of the SDGs discuss discrimination towards any other gender or towards individuals who may not identify with a traditional gender. 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 genders and sexes.
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) (VIU, 2018-S; Appendix H). 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). VIU’s 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. 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 that have been 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, 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 out of 26 Deans are women and almost half of the Department Chairs are women (26 out of 55) (VIU, 2018-U).

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 contraceptives are covered (Greenshield Canada, 2018). The VIU Health and Wellness Centre, located on the Nanaimo campus, offers various services and information for female 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, 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, and Criminology educate students on topics related to gender inequalities (Appendix H). Students in these programs 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).

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 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).

**Recommendations from the VIU community**

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 through 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-\textit{m}). In Canada, access to drinking water and proper sanitation is generally not considered an issue (Government of Canada, 2018). Yet, some First Nations 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. \textit{Safe Drinking Water for First Nations Act}) and long-term strategies for drinking water on First Nations’ 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-\textit{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 (VIU, 2018-aa; Appendix I). 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 the 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). 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-\textit{gg}; Horticulture, personal communication, August 21, 2018; Deep Bay Marine Field Station, personal communication, August 7, 2018). Lastly, VIU follows the Regional District of Nanaimo’s water regulations (Facilities Services & Campus Development, personal communication, September 21, 2018; Regional District of Nanaimo, 2018). For example, 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 all over 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 Resource Management and Protection, students measure water quality parameters in various local water systems (e.g. Millstone, Cottle Creek, Richards Creek, and Englishman River) (Resource Management and Protection, personal communication, September 11, 2018). As well, students in BIO 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 and Lake Monitoring in the Little Qualicum Region (Appendix I) (VIU, 2018-bb). The Wetland Mapping project, through a partnership with the Regional District of Nanaimo, is aimed towards gaining 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 student research assistants to monitor lake health following the BC Lake Stewardship Society’s (BCLSS) standards (VIU, 2018-bb).

In addition to MABRRI, many other research projects relating to water quality exist at VIU. One notable project 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). Other notable projects done by the Coastal Hydrology and Climate Change Research Lab at VIU have monitored 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).
**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 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).

**Recommendations from the VIU community**

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 could 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 the 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 (MacEwan University, 2018). 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

VIU is committed to being a sustainability leader (VIU, 2018-e, Policy 11.02). To help define 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 (VIU, 2018-gg; Appendix J). Currently, VIU has two Leadership in Energy and Environmental Design (LEED) certified buildings at the Nanaimo campus (Buildings 250 and 480) and soon the new Health and Science Centre (Building 210) and Building 108 will be LEED certified as well (Facilities Services & Campus Development, personal communication, September 21, 2018). 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). 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 provides energy to the new Health and Science Centre 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). 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).

Departmental focus

VIU offers Geography and Science courses that include the topic of renewable energy (VIU, 2018-j; Appendix 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).

Engagement

There are two energy conservation incentive programs that currently exist on campus (Appendix J). The first program, Energy Naughty or Nice?, promotes energy use awareness 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 is the 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 won a pizza party (VIU, 2018-jj).

Recommendations from the VIU community

At the World Café, many participants recommended expanding coverage of this topic across many disciplines. It was noted that educational learning regarding energy usage should be also directed towards VIU employees, not just towards students. Outdoor classrooms were also suggested as a way to reduce energy use. Another idea was to introduce more bike-powered chargers around campus. Currently, the campus has 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. Participants discussed ideas that included tangible numbers and targets, such as counting paper towel usage or establishing an energy consumption competition between departments.

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 as 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 offers many services and opportunities for students in regards to training, education, and finding employment (Appendix K). Through Career Services, students have access to job and opportunity postings, career advisors, and personal or professional development events (VIU, 2018-II). 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 for students in grades 10-12 (VIU, 2018-P). In 2016/17, 677 students under the age of 18, 4,152 students in between 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).

VIU 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 Trade 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 communication, August 24, 2018). However, through the phrasing of their proposals for goods and services they can outline requirements to encourage bids from local distributors (Purchasing, personal communication, August 24, 2018).

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 are 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. 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).

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 (VIU, 2018-mm; VIU, 2018-nn; VIU, 2018-oo; Appendix K). 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 Regional District of Nanaimo, or with cruise lines, recreation and sport companies, and local governments (VIU, 2018-qq).

Recommendations from the VIU community

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.

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 CO₂ 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.

**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 the 2016/17 academic year report, VIU’s total CO₂ emissions were 2,995.97 tonnes (VIU, 2017-a). However, 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 attempt to replace large service vehicles with smaller ones that produce less emissions (Facilities Services & Campus Development, personal communication, September 21,
2018). Lastly, the geo-exchange system in Buildings 210 and 205 is effective in offsetting VIU’s greenhouse gas emissions (Facilities Services & Campus Development, personal communication, September 21, 2018).

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 at the Nanaimo campus (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).

**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, while 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 are a total of 12 research centres, 1 research institute, and 4 research labs at VIU (VIU, 2018-tt). 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). Aside from research centres, institutes, and labs, many faculty and students are conducting individual research projects. Unfortunately the 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. Similarly, students that partake in research through directed studies or applied courses are 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).

Over $1 million of VIU’s budget goes towards the Scholarship, Research and Creative Activity (SCRA) 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 a number of 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 a number of 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). 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 SCRA’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). Furthermore, the SCRA website provides students with a list of many funding opportunities related to research (VIU, 2018-CC).

**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 daylong 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, 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). This group’s primary mandate is to share information across campus and to the wider community, and they provide cost-free presentations, which include scientific demonstrations, on the topics of climate change and CO₂ emissions (VIU, 2018-HH).

**Recommendations from the VIU community**

At the World Café it was suggested that VIU should create a common platform for the community to share ideas about research and initiatives on campus. 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 and policies.

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) aims to provide a working and learning environment that is free of harassment and discrimination at all times (VIU, 2018-S; Appendix M). As a preventative measure, all 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).
There are 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.

**Departmental focus**

VIU offers the Workplace Essential Skills and Training (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).

**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).

**Recommendations from the VIU community**

At the World Café, the VIU community came together to offer suggestions for reducing inequality at VIU. These recommendations were made in tandem with Goal 5: Achieve gender equality and empower all women and girls. Several participants expressed a desire for improved support from counselling services, as students had expressed the need for more services. One solution offered was to provide more holistic counselling services, potentially including the guidance of Elders. Another issue was identified with the lack of accessibility for individuals with limited mobility. It was recommended that all spaces in general, but particularly offices and washrooms, must be made more accessible. 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 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, with the most recent one addressing sexual orientation and gender identity resources for BC schools (Simon Fraser University, 2018-a). 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 LGBTTTQQIPA+ (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.

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 many services related to accessing transportation (Appendix N). The Students’ Union offers students discounted transit passes to utilize the Nanaimo Regional District Bus system (Vancouver Island University Students’ Union, 2018-b). Another service available for students without access to a vehicle 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 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 at Buildings 190, 300, and 370 and several bike racks located on the Nanaimo campus (VIU, 2018-NN; VIU, 2018-OO).

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 Services & Campus Development, personal communication, September 21, 2018). Although VIU is a stakeholder, the transit system in Nanaimo is managed by the Regional District of Nanaimo and BC Transit (Facilities Services & Campus Development, personal communication, September 21, 2018). The service is continually being expanded: a 5,000 hour service increase is planned for January 2019 for the Nanaimo system (Facilities Services & Campus Development, personal communication, September 21, 2018).

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). Currently the Nanaimo campus has a number of these spaces, including the Okayama Gardens, the Kwulasulwut Gardens, the Jarden des Quatorze, the Tamagawa Gardens, and the main courtyard in the centre of campus (i.e. the Library Quad) (VIU, 2018-OO). In these spaces, people have access to green areas, benches, and tables. The Nanaimo VIU community has easy access to over 880 hectares of community parks in close proximity to the Nanaimo campus (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 a garden on the roof (Vancouver Island University Cowichan, 2018-c).

VIU values cultural diversity, which is made apparent through its policies (Appendix N). 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). Policies and procedures have been implemented to address discrimination and harassment, which are discussed in more detail in Goal 10 (Appendix M).

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 are 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 (VIU, 2012-a; VIU, 2012-b; VIU, 2010-b; VIU, 2012-c). These evaluations survey the students’ satisfaction of their programs.

*Departmental focus*

VIU has many programs designed to educate students about various cultures (Appendix N). These departments include English, Anthropology, Criminology, Political Studies, and First Nations Studies (VIU, 2018-j). 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).

*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, 2108). Notable projects include a 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 school curriculum (VIU@Cowichan Innovation Lab, 2018-b).

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’s Facilities and Services with a final report for consideration in developing future gathering spaces and work is currently underway (VIU, 2018-UU).

*Engagement*

The University is a place where history and traditions are acknowledged (Appendix N). Currently, there are 11 Elders-in-Residence and 1,419 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). One of the most prominent aspects of Aboriginal Education and Engagement is Shq’apthut – A Gathering Place, located on Nanaimo’s campus (VIU, 2018-WW). The Gathering Place is home to the Services for Aboriginal Students (VIU, 2018-WW). It is also a place where cultural, academic, recreational, and social activities are promoted and celebrated (VIU, 2018-WW). Each year, The Gathering Place hosts approximately 26 cultural and social events (Aboriginal Education, personal communication, August 17, 2018; Appendix N). Although Shq’apthut has become a central hub for Aboriginal students at Nanaimo’s campus, it is unclear if VIU’s other campuses house a similar space, as this information was not available on VIU’s website.
In addition to Aboriginal cultures, VIU makes an effort to celebrate other cultures on campus as international students make up 14% (2,013) of the population (VIU, 2018-d). Each year, VIU’s Nanaimo campus hosts WorldVIU Days, a week-long event that explores and celebrates 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 that allow students to discover Vancouver Island’s vibrant communities and local culture (VIU, 2018-YY). Again, the research team was unclear whether these opportunities are available to students attending VIU’s other campuses.

Recommendations from the VIU community

At the World Café, participants proposed new ideas for how VIU can meet Goal 11. In terms of access to public transportation, it was suggested that there should be a shuttle between campus locations (i.e. that runs between the Nanaimo, Cowichan, and Parksville-Qualicum campuses). The University could also invest in alternate employee vehicles (e.g. hybrid cars), charging stations, and e-bike stations. Lastly, a participant recommended that VIU should implement a bus pass sharing program so multiple people can use one bus pass.

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 increases understanding and respect of various religions on campus (University of Toronto, 2018-c). Either of these strategies could be used to reduce inequality at VIU and its surrounding communities.

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 would 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 tech 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 paper usage, the number of printers on campus is being reduced in favour of a central printing system that discourages unnecessary printing (Sustainable Advisory Committee, personal communication, August 24, 2018). Additionally, printed parking permits were entirely replaced in 2018 with a License Plate Recognition system that uses less paper (VIU, 2018-ZZ). 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). Between 2010 and 2018, VIU reduced its paper usage by 20% (Sustainable Advisory Committee, personal communication, August 24, 2018).

VIU has many other waste reduction strategies. In general, VIU makes an effort to sustainably deal with waste and recyclable materials by providing campus-wide 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). In addition, at any event catered by VIU’s Food Services, bins are always provided (Food Services, personal communication, October 2, 2018). However, to reduce the amount of food that may be thrown away, Food Services offers a buffet and poutine bar every Friday that sells leftovers from throughout the week (Food Services, personal communication, October 2, 2018). Another waste reduction strategy Food Services implements is an Eco-Tainer program, which replaces single-use food containers with reusable containers (Food Services, personal communication, October 2, 2018). VIU’s Janitorial Services, managed by Alpine Building Maintenance Inc., is committed to providing sustainable solutions with a focus on being green by aiming to reduce chemical use, eliminate toxicity, and improve indoor air quality (Alpine Building Maintenance Inc., 2018).

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).

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 publically available on VIU’s website (VIU, 2018-ccc).

VIU 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, and

In regard to global citizenship education, VIU’s Education Abroad and International Education departments are actively engaged in international development projects (Education Abroad, personal communication, August 29, 2018). International development 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 increasing employment and economic development opportunities for Kenyan youth (Colleges and Institutes of Canada, 2018).

The Masters 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 (Masters of Community Planning [MCP], personal communication, September 18, 2018). The topic of sustainability in general is taught throughout the program (MCP, personal communication, September 18, 2018). Sustainable development is used as a foundational structural element in the design of courses in the program (MCP, personal communication, September 18, 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). A 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).

Recommendations from the VIU community

Discussions from the World Café related to Goal 12 primarily focused on increasing awareness around sustainability, material consumption, and supporting local goods on campus. 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. VIU has been making efforts to support local businesses, and more can be done to make this efficient and cost effective. As an example, VIU can increase awareness and promote supporting local businesses on campus. Additionally, there was a 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. Participants also felt that compost bins should be provided at every catered event.

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 climate change. Indicators for Goal 13 addressed 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).
With respect to climate change, VIU has implemented carbon offset strategies – three of its buildings are LEED-certified, and two of its buildings host geo-exchange systems that use sustainable energy and methods (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

Many 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, students in Geography and Geoscience are offered courses that specifically focus on the science of climate change (VIU, 2018-j).

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). In addition, in 2012, a symposium open to the public addressed climate change (VIU, 2018-ppp). As mentioned previously in Goal 6, ACER provides cost-free presentations to classrooms and the public on the topic of climate change (VIU, 2018-HHH). In 2016, ACER hosted a symposium on Climate Change: Policy for a Sustainable Future that brought awareness of greenhouse gas emissions to the community (VIU, 2018-GGG).

Research

Research conducted by the Coastal Hydrology & 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 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 locations: VIU’s Milner Gardens and Woodlands and near the summit of Mount Arrowsmith (VIU, 2018-bb). Both sites have weather stations installed in order to compare data to local climate regimes (VIU, 2018-bb).

Recommendations from the VIU community

At the World Café, the VIU community provided recommendations on how VIU can meet Goal 13. Participants suggested that all programs should engage students in outdoor education, not just the physical science courses. In doing so, students will be more involved with the environment and sustainability. Another participant noted that climate change is difficult to visualize and understand. One
suggestion for addressing this issue looks to engaging the Art Department in the development of an art piece related to climate change that would remind the VIU community of Goal 13.

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. Indictors 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 on campus.

How VIU currently contributes to Goal 14

*Departmental focus*

Many 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). As well, students in the past 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 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). An example of VIU’s beach clean-ups are organized by 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). In addition to students, beach clean-ups are 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 filtering benefits of shellfish and the impacts of marine plastic pollution (Deep Bay Marine Field Station, personal communication, August 7, 2018).

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). As a separate entity associated with VIU, the Deep Bay Marine Field Station is self-funding (Deep Bay Marine Field Station, personal communication, August 7, 2018). In other words, it 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 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 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).

Aside from the research occurring at Deep Bay, the Community Based Applied Interdisciplinary Research 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, students developed policies and recommendations regarding single-use and disposable plastic products (Bowns & Pastro, 2018). Another VIU project, initiated by a Fisheries and Aquaculture student, was researching the impacts of plastic intake levels in oysters (Fisheries and Aquaculture, personal communication, October 2, 2018).

In addition to marine sustainability, many 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).
Additionally, 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).

Recommendations from the VIU community

At the World Café, recommendations were made on how VIU can improve Goal 14, particularly in terms of what VIU can do to increase awareness of watershed impacts and health. One participant proposed the Yellow Fish Road program (Yellow Fish Road, n.d.). The program would involve students in marking campus storm drains with a yellow fish, which helps to educate on water pollution (Yellow Fish Road, n.d.). 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 on 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 was creating 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 5 years to protect Canada’s Nature Legacy, which is allocated for 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 focussed 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 1,700 hectare woodlot primarily used and managed by the Forestry program (VIU, 2018-vvv). 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 have a specific focus on removing and controlling invasive alien 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).

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). Additionally, the Economics department has a course devoted to the relationship between economics and sustainable environmental management while the Biology program includes curriculum on species at risk and invasive species (VIU, 2018-j). VIU’s Horticulture department is also contributing to the education of students on biodiversity and land conservation; students are exposed to invasive and native species at the G.R. Paine Horticultural Training Centre (VIU, 2018-yyy).

**Research**

Species at risk and conservation has been a major focus of research at VIU (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). Often undergraduate Biology projects are 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).

The ICSS engages in the conservation of white sturgeon through research (ICSS, personal communication, August 24, 2018). The Centre is exploring sustainable ways to produce sturgeon for consumption and 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 also has various projects that are related to biodiversity and ecosystems (VIU, 2018-f; VIU, 2018-bb). One project involves conducting a 5-year research initiative to map and classify wetlands within the Regional District of Nanaimo for the purpose of informing future policy around wetland ecosystems and freshwater management (VIU, 2018-bb). Another project that MABRRI is engaged in is Global Observational Research Initiative in Alpine Environments (GLORIA) (VIU, 2018-bb). This project involves long-term alpine monitoring of Mount Arrowsmith as part of an international network with the purpose of developing 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).

**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 (Milner Gardens & Woodland, personal communication, August 23, 2018). Answering questions from the public requires volunteers at Milner Gardens to have a base level of understanding and education on plants and animals (Milner Gardens & Woodland, personal communication, August 23, 2018). The MABR BioBlitz also educates attendees on plant and animal species (VIU, 2018-BBB). The BioBlitz, organised by the MABR and MABRRRI, 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).

Recommendations from the VIU community

Members of the VIU community contributed recommendations for 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. One suggestion for achieving this was through outdoor education, and 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 in 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 provided 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 (VIU, 2018-HHH). This program offers campus security officers to escort students around campus (VIU, 2018-HHH). The VIU Safety app is also available to download for free (The Nav, 2018-b). Features included in the app include emergency procedures, a flashlight, campus map, alert systems, safety toolbox, safe walk, and reporting suspicious activity (The Nav, 2018-b). 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, the HRRWO produces an annual report related to incidents reported on campus (VIU, 2016). In the 2016/17 academic year 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).

VIU is also actively involved in programs that support 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). 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). 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).
With respect to proportions of positions, sex and age vary at VIU, in Nanaimo, and in Canada. At VIU, there was 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). Finally, 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).

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). Additionally, the Masters of Community Planning program educates students on the topic of Crime Prevention Through Environmental Design, an area of study that proves that neighbourhoods can be designed to be safer by changing aspects such as lighting and visibility (VIU, 2018-j; Masters 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 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).

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 at the Nanaimo campus is working towards making more information and research publically 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).

Recommendations from the VIU community

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). Therefore, no recommendations for Goal 17 were provided from the VIU community.

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 development 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 (Education Abroad, personal communication, August 29, 2018). For example, VIU is 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 involves VIU’s Education Abroad and Recreation and Tourism program (VIU, 2018-III). The purpose of this project is to develop a degree program related to hospitality management (VIU, 2018-III; 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-III; 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). Additionally, VIU engages in partnerships through international internships offered to students in Anthropology, Global Studies, Nursing, Business, Health and Human Services, and Recreation and Tourism (VIU, 2018-mmm).

**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 participating in the program in the 2018/19 academic year are partnering 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,
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, MABRRI 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). 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 Masters of Community Planning 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 (Masters of Community Planning, personal communication, September 18, 2018).

Recommendations from the VIU community

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 recommendations for Goal 17 were provided from the VIU community.

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* 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 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. 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 time proved to be another limitation to this study that primarily impacted the meetings with faculty and staff as well as the data collected at the World Café. Ideally, many more interviews could have been conducted across all campuses; however, this was not possible due to the extensive time and resources involved with each interview. 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. Similarly with the symposium, it would have been ideal if the entire campus community could have been involved, but participation at the event was limited by room capacity and logistics. 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.

**Recommendations**

This report proposes recommendations for meeting the SDGs. It is important to note that these recommendations were established by the MABRRI team and in no way commit VIU to specific actions or define a ratified plan for VIU.

This three-year roadmap (Table 3) indicates the timeframe for initiating the following recommendations: short (Year 1), medium (Year 2), and long-term (Year 3) actions that VIU may consider as it continues implementing the SDGs, as well as actions that may be considered ongoing. The roadmap also includes potential costs associated with these recommendations, using the following code: $ = <$10,000; $$ = $10,000 to $20,000; $$$ = $20,000 to $50,000; and $$$$ = >$50,000.
Table 3: Three-year roadmap to assist VIU in meeting the SDGs

<table>
<thead>
<tr>
<th>ID #</th>
<th>Recommendation</th>
<th>Timeframe</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Redesign and continue interview process with research centres/institutes/labs, programs, departments, and services that were not included in the original report. Include questions on SDGs 16 and 17. It is estimated that an additional +90 interviews are required to cover VIU’s campuses.</td>
<td>Short</td>
<td>$$</td>
</tr>
<tr>
<td>2</td>
<td>Host a community engagement series for the VIU community highlighting the recommendations produced by this report, and seeking further input. The world café format worked well in the first round and it is recommended that several café events could be held across VIU’s campuses. In addition, other formats, such as a film/discussion night and focus groups could be used to add depth to the data.</td>
<td>Short</td>
<td>$</td>
</tr>
<tr>
<td>3</td>
<td>Further analyze the data from interviews and community engagement series into original report. Complete a full statistical analysis using available software programs. Ensure that the analysis allows for the inclusion of future data as the project continues to unfold.</td>
<td>Short</td>
<td>$</td>
</tr>
<tr>
<td>4</td>
<td>Develop reader-friendly communication materials on the outcomes of this research and how VIU is contributing to the SDGs. This would involve designing and formatting all materials around a common presentation format and creating a range of documents/materials (pamphlets, short reports, PowerPoints, video, etc.) to ensure the findings are widely distributed, clear, transparent, and easily understood.</td>
<td>Short</td>
<td>$$</td>
</tr>
<tr>
<td>5</td>
<td>Create a new VIU webpage linked to the appropriate department that features work undertaken by the VIU community related to the SDGs.</td>
<td>Short</td>
<td>$</td>
</tr>
<tr>
<td>6</td>
<td>Disseminate information through publications, conferences, and events of interest to other universities to ensure VIU is identified as an institutional leader in meeting the SDGs.</td>
<td>Medium</td>
<td>$</td>
</tr>
<tr>
<td>7</td>
<td>Leverage funding to employ a Sustainability Officer (or similar title) whose partial responsibility is increasing sustainability awareness and initiatives on VIU’s campuses, including the specific recommendations associated with each SDG (Table 4). In general, this could include presentations in classes, a biannual survey on activities/research at VIU, events, connecting with other universities, and outreach in Canada and beyond.</td>
<td>Medium</td>
<td>$$$</td>
</tr>
<tr>
<td>8</td>
<td>Work with VIU’s Sustainability Committee and/or a new SDG Committee to launch a campaign to increase the awareness of SDGs throughout VIU’s campuses. Participate in already scheduled events (Global Citizens Week, CREATE, etc.) to reach the campus community.</td>
<td>Short</td>
<td>$</td>
</tr>
<tr>
<td>9</td>
<td>Promote partnerships and share experiences and materials among other universities and institutions.</td>
<td>Medium</td>
<td>$</td>
</tr>
<tr>
<td>10</td>
<td>Establish a certificate program based on student involvement in specific courses or extracurricular activities that contribute to SDG certificate (see examples from TRU in Goals 4 and 13).</td>
<td>Long</td>
<td>$$</td>
</tr>
<tr>
<td>11</td>
<td>Work through existing connections and establish new alliances to ensure that the United Nations is aware of the work being completed at the local level.</td>
<td>Ongoing</td>
<td>--</td>
</tr>
<tr>
<td>12</td>
<td>Work with the grant facilitators and VIU Foundation to leverage outside sources of funding to establish an internal pocket of funds that can be accessed via applications specific to projects that aim to meet the SDGs.</td>
<td>Ongoing</td>
<td>--</td>
</tr>
</tbody>
</table>

The following recommendations are based on feedback from the VIU community and from examples/best practices at other educational institutions (Table 4). This is a preliminary list: it is anticipated that further research will much more fully define recommended actions for VIU. It is noted
that Goals 16 and 17 are not included in this table as they were not specifically addressed at the World Café and limited comments were received on these SDGs through the interviews.

Table 4: Recommendations from the VIU community related to how VIU can achieve each of the 17 SDGs.

<table>
<thead>
<tr>
<th>Goal</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 No poverty</td>
<td>Implement additional parent student focused funding and programming to encourage this cohort to attend VIU (e.g. lower tuition costs, offer low-cost daycare services). Creatively examine VIU’s strengths and abilities and establish outreach actions that help to reduce poverty in the mid-Island area (e.g. Further develop the links between trade students and needs in the community; build on the successful outreach programs already underway in VIU’s programs; assist faculty in creating community based research and/or applied projects of benefit to the wider community). Request exit interviews for students that leave VIU before completing their program to better understand their issues and seek recommendations on positive change.</td>
</tr>
<tr>
<td>2 Zero hunger</td>
<td>Grow more food on campus by focusing efforts on the Community Garden and creating new spaces for foodstuffs and food trees. Work towards VIU becoming a bee-friendly campus. Work with Campus Catering and the Culinary Arts program to link excess foodstuffs (sandwiches from meetings, bruised fruit) to students in need. Support local suppliers as much as is possible. Consider the development of a campus food bank.</td>
</tr>
<tr>
<td>3 Good health and well-being</td>
<td>Build on the extensive programming already offered on campus through various departments and the Health and Wellness Centre. Recommendations include: on campus counselling services for employees; increased focus on mental health resources; and workshops on mindfulness and meditation. Continue to advertise and promote events/activities widely across all campuses. Designate additional indoor and outdoor spaces for meditation, gathering, and exercise – add seating, covers, and other furnishings that will encourage year-round use of outdoor spaces.</td>
</tr>
<tr>
<td>4 Quality education</td>
<td>Continue to add new programming and amend course offerings to recognize a changing world. Expand resources/activities available to faculty on teaching and learning. Expand support programs for students (for example, the Writing Centre and the addition of a new Research Centre to support undergraduate and graduate students).</td>
</tr>
<tr>
<td>5 Gender equality</td>
<td>Designate an officer/staff person to assist students and employees with gender-related issues on VIU’s campuses. Increase the promotion of “safe places” on campus (e.g. increase sticker usage to promote “safe places”, including faculty offices).</td>
</tr>
<tr>
<td>6 Clean water and sanitation</td>
<td>As new buildings are constructed or if significant renovations are planned, increase the use of grey water, research and use new materials such as permeable pavement, reduced water use infrastructure, add rain gardens, and continue to implement other methods for decreasing water use.</td>
</tr>
<tr>
<td>7 Affordable and clean energy</td>
<td>Implement outdoor classrooms, both to gain the benefits of connecting with nature and to reduce the use of hydro in indoor classrooms. Promote campus-wide awareness campaigns related to reducing energy usage (e.g. count paper towel usage in each building or monitor energy usage across campus, such as electricity or water, to create competition between buildings/departments).</td>
</tr>
<tr>
<td>8 Decent work and economic growth</td>
<td>Increase the availability of co-op programs across all programs where feasible and ensure that the co-op positions are fair paid employment. Provide subsidized, on-campus childcare services for VIU students.</td>
</tr>
</tbody>
</table>
| 9 | Industry, innovation and infrastructure | Create additional work op and paid employment opportunities for students across campus.  
Establish an online platform for the VIU community to share ideas about research and initiatives.  
Promote incentives to get people to use alternative methods of transportation (e.g. free e-bikes or bike share program).  
Promote and install more showers on campus to accommodate people using alternative modes of transportation.  
Make it mandatory for students to print double-sided or hand in electronic copies of course assignments  
Increase opportunities for students to connect with smart tech and innovative industries through career fairs, presentations, co-ops, and field experiences. |
|---|---|---|
| 10 | Reduced inequalities | Designate additional indoor and outdoor spaces for students, faculty, and staff to practice their respective faiths/religions. This could double as the meditation, gathering, and exercise space described in Goal 3.  
Improve health counselling services for employees and students, similar to Goal 3.  
Implement a mandatory course for all VIU students to take during their first year that focuses on issues such as gender equality, eliminating harassment, and lateral bullying, similar to the courses that currently offered to employees. |
| 11 | Sustainable cities and communities | Investigate the feasibility of implementing a shuttle between VIU’s Nanaimo and Cowichan campuses to increase student access to opportunities offered at both venues.  
Move towards hybrid or electric fleet vehicles as new vehicles are purchased.  
Increase the number of charging stations for both electric vehicles and electric bicycles on VIU’s campuses. |
| 12 | Responsible consumption and production | Move towards mandatory online paper submissions across campuses.  
Increase awareness of supporting local products/businesses (e.g. installing signage in VIU’s cafeteria and campus store).  
Work towards sourcing as much local food as possible.  
Ensure recycling and composting is both universal and easily accessible across VIU’s campuses. |
| 13 | Climate action | Promote outdoor education.  
Investigate the expansion of the geo-thermal system to other buildings.  
Implement the highest standards of materials to reduce climate impacts in renovations and new construction. |
| 14 | Life below water | Increase awareness of water use on campus and beyond through signage, presentations, and field trips.  
Implement a Yellow Fish Road program on all VIU campuses/facilities.  
As renovations/site work proceeds, shift toward a full rainwater reuse approach that minimizes the use of storm drains and keeps water on each VIU site to eliminate run-off into surface water collectors and the ocean. |
| 15 | Life on land | Promote outdoor education and activities that acknowledge and learn from Indigenous ways of knowing. |
References


Dignity for all. (2018). *Chew on this!*. Retrieved from https://dignityforall.ca/chew-on-this/


Karl, T., R., Diamond, H., J., Bojinski, S., Butler, J., H., Dolman, H., Haeberli, W., ... Zillman, J. (2010). Observation needs for climate information, prediction and application: capabilities of existing and future observing systems. *Procedia Environmental Sciences, 1*. Retrieved from https://ac.els-cdn.com/S1878029610000149/1-s2.0-S1878029610000149-main.pdf?_tid=05a90016-9755-4722-a8b5-f91961dc0b22&acdnat=1545162653_7eb0994c5a94d3da75c9a76195b28a49


Statistics Canada. (2018-b). *Unemployment rate, participation rate, and employment rate by type of student during school months, monthly, unadjusted for seasonality*. Retrieved from https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410002101&pickMembers%5B0%5D=1.1&pickMembers%5B1%5D=4.1&pickMembers%5B2%5D=5.4

Statistics Canada. (2018-d). *Postsecondary enrolments, by program type, credential type, age groups, registration status and sex.* Retrieved from https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?id=3710001501&pickMembers%5B0%5D=1.1&pickMembers%5B1%5D=2.2&pickMembers%5B2%5D=5.7&pickMembers%5B3%5D=6.1


Vancouver Island University. (2017-c). *Consultation Report: To accompany the Strategic Plan: Scholarship, Research and Creative Activity.*


# 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 review of VIU was organized. Along the y-axis of the spreadsheet, all indicators related to each Goal were listed, and along the top were 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. UN Tier III indicators were ranked as not relevant (3) to VIU since they are not yet internationally defined and accepted. 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>Notes on Relevance</td>
<td>This section reflects the researcher’s thought process and method for determining the indicators relevance to VIU.</td>
</tr>
<tr>
<td>Thoughts</td>
<td>This column allowed for researchers to provide ideas of which VIU department or faculty should be contacted to meet and discuss the indicator.</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>
</tbody>
</table>
## Appendix B
Meetings with VIU faculty and staff

<table>
<thead>
<tr>
<th>Area</th>
<th>Description</th>
<th>Date of meeting (2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Programs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Sciences</td>
<td></td>
<td>September 7</td>
</tr>
<tr>
<td>Arts &amp; Humanities</td>
<td></td>
<td>September 11</td>
</tr>
<tr>
<td>Management</td>
<td></td>
<td>October 26</td>
</tr>
<tr>
<td><strong>Instructional</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Departments</td>
<td>Trades &amp; Applied Technology: Horticulture</td>
<td>August 21</td>
</tr>
<tr>
<td></td>
<td>Biology</td>
<td>September 10</td>
</tr>
<tr>
<td></td>
<td>Resource Management and Protection</td>
<td>September 11</td>
</tr>
<tr>
<td></td>
<td>Chemistry</td>
<td>September 12</td>
</tr>
<tr>
<td></td>
<td>Sport, Health and Physical Education</td>
<td>September 14</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td>September 17</td>
</tr>
<tr>
<td></td>
<td>Political Studies</td>
<td>September 18</td>
</tr>
<tr>
<td></td>
<td>Masters of Community Planning</td>
<td>September 18</td>
</tr>
<tr>
<td></td>
<td>Global Studies</td>
<td>September 24</td>
</tr>
<tr>
<td></td>
<td>Computing Sciences</td>
<td>September 25</td>
</tr>
<tr>
<td></td>
<td>Sociology</td>
<td>September 25</td>
</tr>
<tr>
<td></td>
<td>Criminology</td>
<td>September 28</td>
</tr>
<tr>
<td></td>
<td>Fisheries &amp; Aquaculture</td>
<td>October 2</td>
</tr>
<tr>
<td></td>
<td>Geography</td>
<td>October 11</td>
</tr>
<tr>
<td><strong>Services</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Counselling Services</td>
<td>August 7 (email)</td>
</tr>
<tr>
<td></td>
<td>Centre for Innovation and Excellence in Learning</td>
<td>August 9</td>
</tr>
<tr>
<td></td>
<td>Campus Recreation</td>
<td>August 14</td>
</tr>
<tr>
<td></td>
<td>Health &amp; Wellness Centre</td>
<td>August 15</td>
</tr>
<tr>
<td></td>
<td>International Education</td>
<td>August 15</td>
</tr>
<tr>
<td></td>
<td>Campus Store</td>
<td>August 17</td>
</tr>
<tr>
<td></td>
<td>Aboriginal Education</td>
<td>August 17</td>
</tr>
<tr>
<td></td>
<td>Purchasing</td>
<td>August 24</td>
</tr>
<tr>
<td></td>
<td>Sustainable Advisory Committee</td>
<td>August 24</td>
</tr>
<tr>
<td></td>
<td>Students’ Union</td>
<td>August 28</td>
</tr>
<tr>
<td></td>
<td>Office of the President</td>
<td>August 28</td>
</tr>
<tr>
<td></td>
<td>Education Abroad</td>
<td>August 29</td>
</tr>
<tr>
<td></td>
<td>Disability Access Services</td>
<td>August 29</td>
</tr>
<tr>
<td></td>
<td>VIU Library</td>
<td>August 30</td>
</tr>
<tr>
<td></td>
<td>Scholarship, Research and Creative Activity</td>
<td>September 6</td>
</tr>
<tr>
<td></td>
<td>Student Affairs</td>
<td>September 10</td>
</tr>
<tr>
<td></td>
<td>Facilities Services &amp; Campus Development</td>
<td>September 21</td>
</tr>
<tr>
<td></td>
<td>Food Services</td>
<td>October 2</td>
</tr>
<tr>
<td><strong>Research Institutes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Applied Environmental Research Lab (AERL)</td>
<td>August 3</td>
</tr>
<tr>
<td></td>
<td>Deep Bay Marine Field Station</td>
<td>August 7</td>
</tr>
<tr>
<td></td>
<td>International Centre for Sturgeon Studies</td>
<td>August 24</td>
</tr>
<tr>
<td></td>
<td>VIU@Cowichan Innovation Lab</td>
<td>September 20</td>
</tr>
<tr>
<td></td>
<td>Centre for Community Outreach and Care</td>
<td>September 27</td>
</tr>
<tr>
<td></td>
<td>Media Research Lab</td>
<td>October 3</td>
</tr>
<tr>
<td></td>
<td>Coastal Hydrology and Climate Change Research Lab</td>
<td>October 10</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Milner Gardens &amp; Woodland</td>
<td>August 23</td>
</tr>
<tr>
<td></td>
<td>VIU High School</td>
<td>September 17</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.

---

1 https://academicimpact.un.org/content/global-citizenship-education
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?

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”\(^2\).

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?

\(^2\) https://socialsciences.viu.ca/global-studies
### Appendix D
Compiled data for Goal 1: No poverty

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>VIU</th>
</tr>
</thead>
</table>
| By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than $1.25 a day | 1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than $1.25 a day | 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). This 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 it (VIU, 2018-h). In 2016/17, VIU supported 70 students through the Tuition Waiver Program (VIU, 2018-h). 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-j). 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 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; 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 Campaign (University Relations, personal communication, October 4, 2018).

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 affecting policies regarding poverty (Sociology, personal communication, September 25, 2018).

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

The following provides a description of why most of the targets and indicators for Goal 1 were not included in the table above.

Indicator 1.2.2 (*Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions*) was deemed irrelevant to VIU by our team. 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.

Target 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*) 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.

Target 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*) was not included in this study as indicator 1.4.1 is classified as Tier III and indicator 1.4.2 is irrelevant to an educational institution – it was beyond the scope of this project to understand how Canada secures tenure rights to land.

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

Target 1.a *(Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions)* was determined not relevant to an educational institution. It was beyond the scope of this project to look into how Canada meets this indicator.

Target 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)*, was not looked into for this report as the only indicator is rated Tier III.

Although the above targets and indicators were deemed irrelevant to an educational institution or beyond the scope of this project, this does not mean that the general topic of poverty is not relevant to a university. Simply put, we suggest the rewording of these indicators to better reflect that of an educational institution.
### Appendix E
Compiled data for Goal 2: Zero hunger

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>VIU</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>2.1.1 Prevalence of undernourishment.</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 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 detect and therefore hard to measure (Sport, Health and Physical Education, personal communication, September 14, 2018). However, with the potential low-income status of the primarily young demographic at VIU, there are likely students who face undernourishment. For those with dietary restrictions, such as culturally-related diet 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 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).</td>
</tr>
<tr>
<td>2.1.2 Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)</td>
<td>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” 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, para. 3). Although VIU does not appear to 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 (as described in 2.1.1 above). 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, 2018-j). 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). In addition, each year, the student-led Club SHAPE raises money for the Breakfast Club in Nanaimo (Sport, Health and Physical Education, personal communication, September 14, 2018).</td>
<td></td>
</tr>
</tbody>
</table>

92
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). In addition, students in the Community Based Applied Interdisciplinary Research 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 (the upper and 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). The only food service that appears to be available on the Powell River campus is the Future Chef’s Café, a dining room that requires reservations (Vancouver Island University Powell River, 2018).

On the Nanaimo campus, 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 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 and providing affordable food options, 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 of 2018 who discussed “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 therefore typically 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 throughout the year (Centre for Community Outreach and Care, personal communication, September 27, 2018). Furthermore, VIU Residence offers the “Good Food Box” program to both students and employees (VIU, 2018-q). The Program offers $15 produce boxes, the contents of which were purchased in bulk from wholesalers and local farmers (VIU, 2018-q). Finally, VIU’s Farmers Market sits outside of the cafeteria, offering affordable locally-grown produce, at least once every week during Vancouver Island’s growing season (VIU, 2018-NNN).

2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices

### 2.4.1 Proportion of agricultural area under productive

Both VIU’s Milner Gardens & Woodland and the G.R. Paine Horticulture Training Centre 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 & Woodland, personal communication, August 23, 2018). Although the G.R. Paine
practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality

<table>
<thead>
<tr>
<th>Horticulture Training Centre has three greenhouses that are sometimes used to grow food plants, the overall area used for agriculture at Vancouver Island University is limited (Horticulture, personal communication, August 21, 2018).</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 13ST (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 about 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 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 Sturgeon Studies is helping protect wild sturgeon as people do not have to fish for them to access the meat (International Centre for Sturgeon Studies, personal communication, August 24, 2018). |

The following provides a description of why most of the targets and indicators for Goal 2 were not included in the table above.

**Target 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)* 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.

**Target 2.3** *(By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment)* was not included in this study as both indicators (2.3.1 and 2.3.2) are classified as Tier III (United Nations, 2018-h).
Target 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) was deemed irrelevant to an educational institution as it is beyond the scope of this project to determine how Canada may be financially aiding developing countries in this regard.

Target 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) was determined not relevant to an educational institution. It was beyond the scope of this project to look into how Canada subsidizes agricultural export.

Target 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) was not included in this study as the its indicator (2.c.1) is classified as a Tier III (United Nations, 2018-h).

Although the above targets and indicators were deemed irrelevant to an educational institution or beyond the scope of this project, this does not mean that the topic of hunger itself is not relevant to a university. Simply put, we suggest the rewording of these indicators to better reflect that of an educational institution.
### Appendix F
Compiled data for Goal 3: Good health and well-being

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>VIU</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 Canada with more graduates of health-related backgrounds, VIU is helping to indirectly achieve this indicator.</td>
</tr>
<tr>
<td>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</td>
<td>3.3.1 Number of new HIV infections by 1,000 uninfected population, by sex, age and key populations</td>
<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 students gain an understanding of chronic and episodic health challenges and develop nursing practices related to these 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>
<tr>
<td></td>
<td>3.3.2 Tuberculosis incidence per 1,000 population</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.3.3 Malaria incidence per 1,000 population</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.3.4 Hepatitis B incidence per 100,000 population</td>
<td></td>
</tr>
<tr>
<td>3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and wellbeing.</td>
<td>3.4.1 Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease.</td>
<td>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 is taught in most of the program’s courses; students learn about these health issues through multiple approaches such as 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 &amp; Wellness programs, which offer physical activity options or bring awareness to health issues (Campus Recreation, personal communication, August 14, 2018; Health and Wellness Centre, personal communication, August 15, 2018). For 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, both which promote healthy living to everyone on campus (Campus Recreation, personal communication, August 14, 2018).</td>
</tr>
</tbody>
</table>
Regarding research, the Centre for Community Outreach and Care focuses its work on children’s exposure to trauma, as trauma has been 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 equipment, but they have to pay service fees (VIU, 2018-PPP).

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

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

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-v). 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).
| 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). |
| 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. | 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). 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. |
| 3.8.1 Coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access, among the general and the most disadvantaged population. | 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 (VIU, 2018-a; VIU, 2018-u). |
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).

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 their research (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).

As discussed above, VIU’s Addiction Studies Certificate teaches students about the use of tobacco, among other substance abuse (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 communication, August 15, 2018). The Health and Wellness Centre has also offered free smoking cessation products to students in an attempt to encourage them to quit smoking (Health and Wellness Centre, personal communication, August 15, 2018).

Aside from the benefit programs offered to students and faculty, VIU’s Human Resources office offers multiple campus-wide Free Flu Shot Clinics every year (VIU, 2018-SSS).

VIU’s new Health and Science Centre received $40.9 million in funding from the federal and provincial governments (VIU, 2018-TTT). The funding for the new building has provided VIU students with access to state-of-the-art learning, training, and research environments (VIU, 2018-TTT).

VIU’s Faculty of Health and Human Services Students offers a wide range of programs, including a certificate in Health Care Assistant and Dental Assistant, a diploma in Dental Hygiene, and a degree in Nursing, all of which produce individuals equipped for employment in health sectors (VIU, 2018-UUU). The Faculty of Health and Human Services has a reputation for quality undergraduate education and research, which is represented in one of the three goals of the Faculty (VIU, 2018-UUU). One of the goals of the Faculty of Health and Human Services is to “support leading edge teaching and research in health and human services thinking and practice by students and faculty who bring real world experience, knowledge, and workplace context” (VIU, 2018-UUU, para. 5). In the Nursing

<table>
<thead>
<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>
<th>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).</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.9.1 Age-standardized prevalence of current tobacco use among persons aged 15 years and older.</td>
<td>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 their research (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>
</tr>
<tr>
<td>3.1 Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate.</td>
<td>As discussed above, VIU’s Addiction Studies Certificate teaches students about the use of tobacco, among other substance abuse (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 communication, August 15, 2018). The Health and Wellness Centre has also offered free smoking cessation products to students in an attempt to encourage them to quit smoking (Health and Wellness Centre, personal communication, August 15, 2018).</td>
</tr>
<tr>
<td>3.1.1 Proportion of the target population covered by all vaccines included in their national programme.</td>
<td>Aside from the benefit programs offered to students and faculty, VIU’s Human Resources office offers multiple campus-wide Free Flu Shot Clinics every year (VIU, 2018-SSS).</td>
</tr>
<tr>
<td>3.1.2 Total net official development assistance to medical research and basic health sectors</td>
<td>VIU’s new Health and Science Centre received $40.9 million in funding from the federal and provincial governments (VIU, 2018-TTT). The funding for the new building has provided VIU students with access to state-of-the-art learning, training, and research environments (VIU, 2018-TTT). VIU’s Faculty of Health and Human Services Students offers a wide range of programs, including a certificate in Health Care Assistant and Dental Assistant, a diploma in Dental Hygiene, and a degree in Nursing, all of which produce individuals equipped for employment in health sectors (VIU, 2018-UUU). The Faculty of Health and Human Services has a reputation for quality undergraduate education and research, which is represented in one of the three goals of the Faculty (VIU, 2018-UUU). One of the goals of the Faculty of Health and Human Services is to “support leading edge teaching and research in health and human services thinking and practice by students and faculty who bring real world experience, knowledge, and workplace context” (VIU, 2018-UUU, para. 5). In the Nursing</td>
</tr>
</tbody>
</table>
Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all.

program students have the opportunity to engage in research in their last two years of the degree (VIU, 2018-VVV). Additionally, a VIU faculty member from the Nursing program, along with a team from Island Health, received a $10,000 Reach Award in the fall of 2018 to fund their research project that involves looking at how to improve the healthcare worker experience in work environments (VIU, 2018-KK).

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

Through the Health and Human Services program, VIU is actively increasing the density and distribution of health workers in the Nanaimo region. VIU offers a variety of venues for students interested in health care — from many certificate options, such as Health Care Assistant or Hospital Unit Coordinator, to diplomas in Dental Hygiene and Practical Nursing, to a Bachelor of Science in Nursing, and even to a Graduate Diploma in Gerontology (VIU, 2018-UUU).

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.

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 or 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 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 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).

The following provides a description of why most of the targets and indicators for Goal 3 were not included in the table above.

Target 3.2 (By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births) was deemed irrelevant to an educational institution as it is beyond the scope of this project to determine how Canada is addressing this target. As discussed in target 3.1 above, we would again argue that our Health graduates, who end up working in maternity, are indirectly helping to achieve this indicator.

Target 3.6 (By 2020, halve the number of global deaths and injuries from road traffic accidents) was not included in this study as we determined that it was irrelevant to a post-secondary institution.

A number of indicators were omitted for the targets included in the table above due to them being irrelevant to a post-secondary institution or being beyond the scope of this project. These indicators include: 3.7.2, which looks at the annual number of live births for young women (ages 10 to 19) – a topic...
beyond the scope of this project; 3.8.2, which discusses total expenditures on health care – similar to 3.8.1; 3.9.3, related to death by unintentional poisoning – a topic not relevant to a post-secondary institution; 3.b.3, which looks at if health facilities have essential medicines available – something that is a national scope, rather than an institutional one.

Although the above targets and indicators were deemed irrelevant to an educational institution or beyond the scope of this project, this does not mean that the general topics of health and well-being are not relevant to a university. Simply put, we suggest the rewording of these indicators to better reflect that of an educational institution.
### Appendix G

Compiled data for Goal 4: Quality education

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>VIU</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university</td>
<td>4.3.1 Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex</td>
<td>In 2016/17, VIU had a total enrolment of 14,386 students (VIU, 2018-d). Of this, 57% of the students were female and 43% were male (VIU, 2018-d). In the two age group cohorts (18 and under as well as 18 to 24) there were 7,147 (VIU, 2018-d). The age group of 25 to 49 years had a total of 5,068 students and 2,066 students were aged 50 and over (VIU, 2018-d).</td>
</tr>
<tr>
<td>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</td>
<td>4.4.1 Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill</td>
<td>The departments of Information Technology (IT) Services, The Centre for Innovation and Excellence in Learning (CIEL), Computing Sciences, Applied Business Technology, Media Studies &amp; 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 &amp; Digital Media Technology program at VIU begins educating its new 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 &amp; 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 in society (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 themselves (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 in the surrounding communities (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 campus to use programs like VIULearn (Centre for Innovation and Excellence in Learning, personal communication, August 9, 2018).</td>
</tr>
<tr>
<td>4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for</td>
<td>4.5.1 Parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability</td>
<td>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).</td>
</tr>
</tbody>
</table>
| the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations | status, indigenous peoples and conflict-affected, as data become available for all education indicators on this list that can be disaggregated | 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-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).

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-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).

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 VIU is committed to fostering awareness of global cultures, issues, and conditions (VIU, 2018-D). In addition, the Academic Plan states that VIU aims to provide appropriate responses to regional cultural, economic, environmental, and social needs through relationships with business

| 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). Students applying to Academic Programs 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).

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) curricula; (c) teacher | 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 VIU is committed to fostering awareness of global cultures, issues, and conditions (VIU, 2018-D). In addition, the Academic Plan states that VIU aims to provide appropriate responses to regional cultural, economic, environmental, and social needs through relationships with business |
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 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 focuses on educating students on global issues with an unbiased perspective (Political Studies, personal communication, September 18, 2018). Also, the notion of global citizenship education is important for the VIU High School (VIU High School, personal communication, September 17, 2018). The High School is intentional about inter-cultural awareness and global inequalities and is participating, along with eight other school districts in BC, in 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 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).

### 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 students

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

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 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,
Furthermore, 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 (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 22 new 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 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). Unfortunately the 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 its main problem areas (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 (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 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 (VIU@Cowichan, personal communication, September 20, 2018).
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. 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 any student attending VIU (VIU, 2018-i). Additionally, VIU offers around 200 bursaries: 11 for Aboriginal students; 15 for students enrolled in Academic & Career preparation; 3 for Business students; 5 for Culinary Arts and Hospitality Management; 8 for Education; 3 for Fisheries & Aquaculture; 8 for Forest Resources; 23 for Health and Human Services; 10 for Science and Applied Science; 2 for Tourism and Recreation; 11 for Trades and Applied Technology; a varying number for those in Performing Arts; a varying number for the VIU International Refugee Newcomer award; and over 100 for General Criteria Bursaries (VIU, 2018-H).

| 4.c By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States | 4.c.1 Proportion of teachers in: (a) pre-primary; (b) primary; (c) lower secondary; and (d) upper secondary education who have received at least the minimum organized teacher training (e.g. pedagogical training) pre-service or in-service required for teaching at the relevant level in a given country | 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 enrolled, but the numbers have been growing and by 2021 they expect to have approximately 186 students (Education, personal communication, September 17, 2018). In 2018, there were 150 graduates from the program (Education, personal communication, September 17, 2018). Primarily, the VIU Education program is producing K-12 teachers and graduates are currently quite successful at obtaining jobs in the field as there is a current teacher shortage (Education, personal communication, September 17, 2018). |

The following provides a description of why most of the targets and indicators for Goal 4 were not included in the table above.

Targets 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)*, was determined not relevant to VIU as it is a postsecondary institute and does not deal with primary and secondary education.

Target 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)*, was determined not relevant to VIU as a postsecondary institute.
### Appendix H
Compiled data for Goal 5: Gender equality

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>VIU</th>
</tr>
</thead>
<tbody>
<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, but Policy 21.03 simply follows the BC Human Rights Code (VIU, 2018-S). To further address discrimination and/or harassment at VIU, all full-time employees are required to take the Preventing and Addressing Workplace Harassment: Rights and Responsibilities Course (VIU, 2018-DDD). In addition, 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 (VIU, 2018-Y; VIU, 2018-Z), 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 academic year HRRWO presented 51 educational events and 16 events in 2015/16 (VIU, 2014-a; VIU, 2016). Prior to the Know More and Positive Space campaigns, VIU Students’ Union had been hosting workshops in collaboration with 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 of co-editors for the Gender &amp; 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 &amp; History symposium hosted by VIU will take place in 2020 (VIU, 2018-X).</td>
</tr>
<tr>
<td>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</td>
<td>5.2.1 Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months, by form of violence and by age</td>
<td>Projects within the Centre for Community Outreach and Care program bring 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). 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</td>
</tr>
</tbody>
</table>
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 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).

5.5 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 courses that address this indicator, including 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: Leaderships 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 and Humanities, personal communication, September 11, 2018; Sociology, personal communication, September 25, 2018; Political Studies, personal communications, September 18, 2018).

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. Nineteen of the 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 (SOCl 322, SWAG 320 & WOST 100) (VIU, 2018). 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).

Every student at VIU is offered the Health Benefit Plan for $275 per year (Vancouver Island University Students’ Union, 2018). 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). Pamphlets are provided at the Centre and their website provides links to services off-campus and other information (VIU, 2018). In regard to sexual health, female students have access to PAP tests, STI tests, and contraceptives at 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 prescriptions cannot be filled at VIU; students must travel off campus, which may create a barrier for students that live in Residence and cannot easily get themselves to nearby pharmacies. In addition, 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). This is why these services are primarily targeted towards students and are generally not offered to faculty and staff (Health & Wellness Centre, personal communication, August 15, 2018).

The following provides a description of why some of the targets and indicators for Goal 5 were not included in the table above.

**Target 5.3** *(Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation)* was not included in this study as child marriages and genital mutilation are both illegal in Canada.

**Target 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) was not included in this study as its only indicator (5.4.1: Proportion of time spent on unpaid domestic and care work, by sex, age and location) deemed irrelevant to an educational institution.

Target 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) was deemed irrelevant as it is beyond the scope of this study to look into what Canada is doing to achieve this indicator.

Target 5.b (Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women) was not included in this study as its indicator simply looks at the proportion of people that have access to a cellphone. We determined this as irrelevant to Canada as a whole.

Target 5.c (Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels) was not included in this study as its only indicator (5.c.1: Proportion of countries with systems to track and make public allocations for gender equality and women’s empowerment) was deemed irrelevant to an educational institution – it was outside the scope of this project to look into whether or not Canada has these systems in place.

Although the above targets and indicators were deemed irrelevant to an educational institution or beyond the scope of this project, this does not mean that the topic of gender equality itself is not relevant to a university. Simply put, we suggest the rewording of these indicators to better reflect that of an educational institution.
### Appendix I

Compiled data for Goal 6: Clean water and sanitation

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>VIU</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 drinking water services. At VIU’s Nanaimo campus there are a number of 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>
</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 hand-washing 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>
</tr>
<tr>
<td>6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally</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 campus, using permeable materials or diverting streams to make sure run off does not overwhelm Nanaimo’s infrastructure (Facilities Services &amp; Campus Development, personal communication, September 21, 2018).</td>
</tr>
<tr>
<td>6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity</td>
<td>6.4.1 Change in water-use efficiency over time</td>
<td>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 &amp; Campus Development, personal communication, September 21, 2018). VIU has records of its water use, as it is billed from the City of Nanaimo, and has been taking steps to increase its water use efficiency (Facilities Services &amp; Campus Development, personal communication, September 21, 2018).</td>
</tr>
</tbody>
</table>

Courses offered within the Biology, Geology, Fisheries and Aquaculture, and the Resource Management and Protection departments 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.
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 (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).

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, during times of drought VIU follows the water restrictions quite closely (Facilities Services & Campus Development, personal communication, September 21, 2018).

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).

Students within the Biology, Fisheries and Aquaculture, Forestry, Geology, and the Resource Management and Protection departments 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 – Hydrology), and FISH 132 (Aquatic Habitats) (VIU, 2018-j). 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, & Englishman River) and in BIO 320 students have been monitoring lakes for over 10 years (Fisheries & Aquaculture, personal communication, October 2, 2018; Resource Management and Protection, personal communication, September 21, 2018).
Research done by the Coastal Hydrology and Climate Change Research Lab at VIU has monitored watersheds in various areas including 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 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 (Coastal Hydrology and Climate Change Research Lab, personal communication, October 10, 2018).

The following provides a description of why most of the targets and indicators for Goal 6 were not included in the table above.

Target 6.5 (By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate), was determined not relevant to an educational institution and it was beyond the scope of this project to look into water resources management in Canada. Additionally, indicator 6.5.2 is classified at Tier III (United Nations, 2018-h).

Target 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), was determined not relevant to an educational institution. It was beyond the scope of this project to look into Canada’s involvement with supporting developing countries in water and sanitation activities.

Target 6.b (Support and strengthen the participation of local communities in improving water and sanitation management), was determined not relevant to an educational institution.

Although the above targets and indicators were deemed irrelevant to an educational institution or beyond the scope of this project, this does not mean that the topic of availability and sustainable management of water and sanitation is not relevant to a university. Simply put, we suggest the rewording of these indicators to better reflect that of an educational institution.
### Appendix J

Compiled data for Goal 7: Affordable and clean energy

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>VIU</th>
</tr>
</thead>
<tbody>
<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 Building 108 will be LEED certified (Facilities Services &amp; 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, 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’s Nanaimo campus does not use solar energy for any of its buildings, due to financial feasibility. However, VIU does utilize solar streetlights and crosswalks (Facilities Services &amp; 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 (VIU, 2009). Following provincial regulations and VIU’s vision, any new buildings built will be LEED-certified and therefore more sustainable (Facilities Services &amp; 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 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).</td>
</tr>
<tr>
<td>7.3 By 2030, double the global rate of improvement in energy efficiency</td>
<td>7.3.1 Energy intensity measured in terms of primary energy and GDP</td>
<td>VIU has an Energy Management Policy that outlines four goals, which aim to (1) reduce energy consumption, (2) reduce waste and emissions, (3) seek environmentally neutral sources of heating and cooling, and energy, and (4) reduce pollution (VIU, 2018-ff). 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 (VIU, 2018-hh). There are plans to implement the geo-exchange system into more buildings in the future (Facilities Services &amp; 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 nice (i.e. turning of computer monitors, taking the stairs, sorting waste, etc.) (VIU, 20818-ii). Contestants upload their picture on a social media platform for a chance to win a prize (VIU, 2018-ii). The 2018 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 wins a pizza party (VIU, 2018-jj).</td>
</tr>
</tbody>
</table>
The following provides a description of why some of the targets and indicators for Goal 7 were not included in the table above.

Target 7.1 *(By 2030, ensure universal access to affordable, reliable and modern energy services)* was not included in this study as it is beyond our scope to understand how Canada is ensuring that people have access to electricity and 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.

Target 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)*, was determined to be not relevant to VIU as an educational institution.

Target 7.b *(By 2030, expand infrastructure and upgrade technology for supplying modern and unsustainable energy services for all in developing countries, small island developing States and landlocked developing countries, in accordance with their respective programmes of support)* was not included in this study as the indicator was deemed irrelevant to an educational institution.

Although the above targets and indicators were deemed irrelevant to an educational institution or beyond the scope of this project, this does not mean that the topic of affordable and clean energy itself is not relevant to a university. Simply put, we suggest the rewording of these indicators to better reflect that of an educational institution.
### Appendix K
Compiled data for Goal 8: Decent work and economic growth

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>VIU</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10 Year Framework of Programmes on Sustainable Consumption and Production, with developed countries taking the lead</td>
<td>8.4.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP</td>
<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 the North American Free Trade Agreement, The New West Trade Partnership Trade Agreement, the Agreement on Internal Trade, 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 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).</td>
</tr>
</tbody>
</table>

The Campus Store deals with companies in the Workers’ Rights Consortium (WRC), of which VIU is an affiliate (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/or local (Campus Store, personal communication, August 17, 2018). However, 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 in an attempt to increase consumer desire for local products (Campus Store, personal communication, August 17, 2018). |

Similar to the Campus Store, Food Services desires to sell more local food 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 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). |
<table>
<thead>
<tr>
<th>Indicators</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>8.5</strong> 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</td>
<td>8.5.2 Unemployment rate, by sex, age and persons with disabilities</td>
</tr>
<tr>
<td></td>
<td>While VIU itself does not have an unemployment rate, it does have an impact on the local 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 each year (VIU, 2018-cccc).</td>
</tr>
<tr>
<td></td>
<td>VIU offers amenities to students through Career Services that aims to help students 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-ccc).</td>
</tr>
<tr>
<td><strong>8.6</strong> By 2020, substantially reduce the proportion of youth not in employment, education or training</td>
<td>8.6.1 Proportion of youth (aged 15–24 years) not in education, employment or training</td>
</tr>
<tr>
<td></td>
<td>As previously mentioned for indicator 8.5.2, VIU does not record its employment rate, but does provide education and training for youth and aids them in finding employment. In the 2016/17 academic year 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).</td>
</tr>
<tr>
<td></td>
<td>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).</td>
</tr>
<tr>
<td><strong>8.8</strong> 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</td>
<td>8.8.1 Frequency rates of fatal and nonfatal occupational injuries, by sex and migrant status</td>
</tr>
<tr>
<td></td>
<td>Numbers of the rate of fatal and nonfatal occupational injuries at VIU are not accessible on VIU’s website. 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>
</tr>
<tr>
<td><strong>8.9</strong> By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products</td>
<td>8.9.2 Proportion of jobs in sustainable tourism industries out of total tourism jobs</td>
</tr>
<tr>
<td></td>
<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-mm). 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-mm). Diploma students complete two cooperative education work terms and degree students either engage in another coop placement or an internship (VIU, 2018-mm). 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-mm).</td>
</tr>
</tbody>
</table>
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.

The following provides a description of why most of the targets and indicators for Goal 8 were not included in the table above.

**Target 8.1** *(Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries)*, was determined not relevant to an educational institute. It was beyond the scope of this project to look into Canada’s economic growth.

**Target 8.2** *(Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors)*, was determined not relevant to an educational institute as indicator 8.2.1 looks at annual growth rate of GDP per employed person. It was beyond the scope of this study to look into the annual GDP of Canadians.

**Target 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)*, was deemed to be not relevant 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).

**Indicator 8.4.1** *(Material footprint, material footprint per capita, and material footprint per GDP)*, was deemed not relevant by the research team. As it was so similar to 8.4.2 above and since VIU does not keep records of its material footprint, the team determined it as not necessary to look into for the purpose of this project.

**Indicator 8.5.1** *(Average hourly earnings of female and male employees, by occupation, age and persons with disabilities)*, was deemed not relevant as it was beyond the scope of this project since the research did not have access to this information.

**Target 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)*, was determined not relevant to an educational institute or Canada as it was targeted more towards developing countries.

**Indicator 8.8.2** *(Level of national compliance with labour rights (freedom of association and collective bargaining) based on International Labour Organization (ILO) textual sources and national legislation, by sex and migrant status)*, was deemed not relevant to an educational institute and it was beyond the scope of this project to look into Canada’s compliance with labour rights.
Indicator 8.9.1 *(Tourism direct GDP as a proportion of total GDP and in growth rate)*, was determined to be not relevant to an educational institute.

Target 8.10 *(Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all)*, was determined to be not relevant to an educational institute since indicators 8.10.1 and 8.10.2 look at the number of commercial bank branches and proportion of adults with a bank account.

Target 8.a *(Increase Aid for Trade support for developing countries, in particular lease developed countries, including through the Enhanced Integrated Framework for Trade-related Technical Assistance to Least Developed Countries)*, was deemed not relevant to VIU as an educational institute. It was beyond the scope of this project to look into Canada’s support for developing countries.

Although the above targets and indicators were deemed irrelevant to an educational institution or beyond the scope of this project, this does not mean that the topic of sustained, inclusive and sustainable economic growth is not relevant to a university. Simply put, we suggest the rewording of these indicators to better reflect that of an educational institution.
### Appendix L

**Compiled data for Goal 9: Industry, innovation, and infrastructure**

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>VIU</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities</strong></td>
<td>9.4.1 CO₂ emission per unit of value added</td>
<td>VIU annually produces a <em>Carbon Neutral Action Report</em>, which illustrates the University’s emissions each year (VIU, 2017-a). 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 by paying approximately $25 per tonne to the B.C. Government (VIU, 2017-a), a fee that other universities, schools, and hospitals in the province are required to pay (Government of British Columbia, 2018-c). 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 &amp; Campus Development, personal communication, September 21, 2018; VIU, 2018-E). In addition, VIU is making an attempt to replace larger service vehicles with smaller ones that produce less emissions (Facilities Services &amp; Campus Development, personal communication, September 21, 2018). Furthermore, the Geo-Exchange system in building 210 (soon to be added to building 205) will offset VIU’s greenhouse gas emissions (Facilities Services &amp; Campus Development, personal communication, September 21, 2018). With a focus on sustainability, each time VIU needs an upgrade, VIU Facilities tries its best to use efficient and sustainable methods and products to reduce CO₂ and other greenhouse gas emissions (Facilities Services &amp; Campus Development, personal communication, September 21, 2018). VIU has taken on initiatives that aim to increase awareness of energy efficiency as well as reduce the emissions of its students, faculty, and staff, 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; incentives are offered to those that partake in the event, such as free coffee and baked goods throughout the week (VIU, 2018-EE). Energy Naughty or Nice?, increases 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 (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 2016, a student-led group on campus, Awareness of Climate change through Education and Research, hosted a Symposium entitled <em>Climate Change: Policy for a Sustainable Future</em> 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). Regarding departmental focus, students that take Chemistry courses (e.g. CHEM 300: Green Chemistry and Toxicology) learn about chemical toxicology and green chemistry related to real-world problems such as greenhouse gases and the impacts on the environment and people (VIU, 2018-j).</td>
</tr>
<tr>
<td><strong>9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in</strong></td>
<td>9.5.1 Research and development expenditure as a proportion of GDP</td>
<td>Over $1 million of VIU’s budget goes towards the Scholarship, Research and Creative Activity (SCRA) office (VIU, 2018-ve). The SCRA 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 and host a number of events such as Research Week, the Community Partner Series, and Lunch and Learn series (VIU, 2018-ww). Research Week began in 2018 with the purpose of sharing and celebrating student scholarship and research</td>
</tr>
<tr>
<td>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</td>
<td>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 Learn and Learn series provides students and employees with an opportunity to share and learn about various topics that have been explored through research at VIU (VIU, 2018-AA). Approximately $35,000 of SCRA budget goes towards Scholarships and Bursaries directly helping student research (VIU, 2018-vv).</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
</tr>
</tbody>
</table>
| 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 centres and institutes (e.g. 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 conducting 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 (Scholarship, Research and Creative Activity, personal communication, September 6, 2018). Through research assistant work-ops, VIU employs 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 (i.e. these numbers would not be counted in the 35-47 that are employed) (Scholarship, Research and Creative Activity, personal communication, September 6, 2018).

Through the 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 a poster workshop, a publishing workshop, a spoken presentation workshop, or one titled *Etiquette and Tips for Your First Conference* (VIU, 2018-BB). The SCRA Office provides students with a list of 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). |
| 9.c Significantly increase to information and communications technology and strive to provide universal and affordable access to the Internet in at least developed countries by 2020 | 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 mobile networks on its campuses (VIU, 2018-rr).

Addressing the target, the entire VIU population has access to technology through the library computers and other computer labs across campus. Information Technology Services are also available to the VIU community (VIU, 2018-WWW). Employees of VIU are set up with a VIU email account and offices and classrooms have phones (VIU, 2018-WWW). 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). |
The following provides a description of why some of the targets and indicators for Goal 9 were not included in the table above.

Target 9.1 (Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all) was not included in this study as indicator 9.1.1 is classified as Tier III and 9.1.2 speaks to passenger and freight volumes, which is not relevant to an educational institution (United Nations, 2018-h).

Target 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) was not included in this study as its indicators speak to manufacturing, which are not relevant to VIU.

Target 9.3 (Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets) was deemed irrelevant to an educational institution.

Target 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) was not included in this study as it was beyond the scope of this project to determine how much international support Canada is offering regarding this topic.

Target 9.b (Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities) was deemed irrelevant to an educational institution.

Although the above targets and indicators were deemed irrelevant to an educational institution or beyond the scope of this project, this does not mean that the topics of industry, innovation, and infrastructure are not relevant to a university. Simply put, we suggest the rewording of these indicators to better reflect that of an educational institution.
Appendix M
Compiled data for Goal 10: Reduced inequalities

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>VIU</th>
</tr>
</thead>
<tbody>
<tr>
<td>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</td>
<td>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</td>
<td>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-DDD). 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 &amp; Complaint Resolution) address this Goal in more detail (VIU, 2018-S). Both policies state that VIU aims to provide an environment free of harassment and discrimination of all kinds (VIU, 2018-S). 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 that 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 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).</td>
</tr>
</tbody>
</table>

The following provides a description of why some of the targets and indicators for Goal 10 were not included in the table above.

Target 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) was not included in this study as the indicator looks at household expenditures and income, which was deemed irrelevant to an educational institution.

Target 10.2 (By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status) was not included in this study as its only indicator is classified as Tier III (United Nations, 2018-h).

Target 10.4 was not included in this study as its only indicator, 10.4.1 (Labour share of GDP, comprising wages and social protection transfers) was deemed irrelevant to an educational institution.
Target 10.5 (Improve the regulation and monitoring of global financial markets and institutions and strengthen the implementation of such regulations) and 10.7 (Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies) were not included in this study as their only indicators were classified as Tier III.

Target 10.6 (Ensure enhanced representation and voice for developing countries in decision-making in global international economic and financial institutions in order to deliver more effective, credible, accountable and legitimate institutions) was deemed irrelevant to VIU as its indicators speaks to voting rights in developing nations.

Target 10.a (Implement the principle of special and differential treatment for developing countries, in particular least developed countries, in accordance with World Trade Organization agreements) was not included in this study as understanding Canada’s tariff lines (10.a.1) was beyond the scope of this study.

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

Target 10.c (By 2030, reduce to less than 3 per cent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent) was not included in this study for the same reason listed in 10.b above.

Although the above targets and indicators were deemed irrelevant to an educational institution or beyond the scope of this project, this does not mean that the topic of reduced inequalities itself is not relevant to a university. Simply put, we suggest the rewording of these indicators to better reflect that of an educational institution.
### Appendix N
 Compiled data for Goal 11: Sustainable cities and communities

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>VIU</th>
</tr>
</thead>
<tbody>
<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 those in vulnerable situations, women, children, persons with disabilities and older persons</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 with two or more people are able to park in the carpooling spots (Facilities Services &amp; 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, <em>Vancouver Island University TDM Strategy Update</em> (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 &amp; 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 &amp; 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 &amp; Campus Development, personal communication, September 21, 2018). VIU also 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).</td>
</tr>
<tr>
<td>11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries</td>
<td>11.3.2 Proportion of cities with a direct participation structure of civil society in urban planning and management that operate regularly and democratically</td>
<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 its students, VIU has the <em>Canadian University Survey Consortium</em> (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 the 2017/18 academic year with the VIU People Plan (VIU, 2018-QQ). The Plan allowed the VIU</td>
</tr>
</tbody>
</table>
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).

Furthermore, many individual programs such as, Philosophy, Forestry, Creative Writing, and Hairdressing, at VIU undergo their own evaluations (VIU, 2012-a; VIU, 2012-b; VIU, 2010-b; VIU, 2012-c). These evaluations survey the students’ satisfaction of their programs.

<table>
<thead>
<tr>
<th>11.4 Strengthen efforts to protect and safeguard the world’s cultural and natural heritage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>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)</strong></td>
</tr>
</tbody>
</table>
| 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). One of the Policy’s core values 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), which acknowledges smudging as an integral part of Aboriginal culture and indicates guidelines for smudging, and Policy 11.02 (Mission, Vision, and Values), which aims to enhance collaborative relationships with Aboriginal communities (VIU, 2018-e).

There are 1,419 Indigenous students at VIU and 11 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 is located at VIU’s Nanaimo campus: 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 activities are promoted and celebrated (VIU, 2018-WW). 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 student about different cultures. Departments such as English, Anthropology, Criminology, Political Studies and First Nations Studies offer courses on Indigenous and cultural topics (VIU, 2018-j). 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, among others (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).
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, a week-long event that explores and celebrates the
diverse cultures on campus (VIU, 2018-O). Another event, the Cultural
Couch Series, 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).

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

| 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 | 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 want to gather (Facilities Services & Campus Development, personal communication, September 21, 2018). 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 tables. 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). 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 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 for consideration for future development (VIU, 2018-TT; VIU, 2018-UU).

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

As mentioned previously (in Goal 5), VIU’s Human Rights and Respectful Workplace Office (HRRWO) produces an annual report, which showcased a total of just one alleged sexual harassment complaint for the 2016/17 academic year – a decrease from the 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).

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).

| 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, | 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).

11.b.2 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies | 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 |
The following provides a description of why some of the targets and indicators for Goal 11 were not included in the table above.

Targets 11.1 *(By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums)* and 11.3 *(By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries)*, were determined by the research team to be not relevant to VIU as an educational institution.

Target 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 situation)*, was determined to be not relevant to an educational institution. It was beyond the scope of this study to look into the impact of disasters on Canada.

Targets 11.6 *(By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management)* and 11.a *(Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning)* were deemed not relevant to an educational institution.

Indicator 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)*, was classified as a Tier III indicator and therefore not included in this study (United Nations, 2018-h).

Target 11.c *(Support least developed countries, including through financial and technical assistance in building sustainable and resilient buildings utilizing local materials)*, was determined to be not relevant to an educational institution. It was beyond the scope of this project to look into how Canada is supporting least developed countries in building sustainable and resilient buildings.

Although the above targets and indicators were deemed irrelevant to an educational institution or beyond the scope of this project, this does not mean that the topic of inclusive, safe, resilient and sustainable cities is not relevant to a university. Simply put, we suggest the rewording of these indicators to better reflect that of an educational institution.
### Appendix O
Compiled data for Goal 12: Responsible consumption and production

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>VIU</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.2.1 Material footprint, material footprint per capita, and material footprint per GDP</td>
<td>The research team was unable to find records of VIU’s material footprint. However, in regard to paper usage, VIU has reduced its paper use by about 20% from 2010 to 2018 (Sustainable Advisory Committee, personal communication, August 24, 2018). VIU is moving towards a central printing system that will reduce the number of printers on campus, further impacting paper usage on Nanaimo’s campus (Sustainable Advisory Committee, personal communication, August 24, 2018). In July 2018, VIU transitioned from physical, printed parking permits, to a License Plate Recognition 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 iPads and other technology (VIU, 2018-fff; VIU, 2018-ggg).</td>
<td></td>
</tr>
</tbody>
</table>
| 12.2 By 2030, achieve the sustainable management and efficient use of natural resources | 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 the North American Free Trade Agreement, The New West Trade 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 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, 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/or local (Campus Store, personal communication, August 17, 2018). Local products sold in the Campus store 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 December the store highlights local artisans (Campus Store, personal communication, August 17, 2018). |
| 12.3 By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses | 12.3.1 Global Food Loss Index | VIU composes 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 Food Service’s Buffet Day and poutine bar where they sell leftovers from throughout the week rather than tossing them out (Food Services, personal communication, October 2, 2018). |

| 12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment | 12.4.1 Number of parties to international multilateral environmental agreements on hazardous waste, and other chemicals that meet their commitments and obligations in transmitting information as required by each relevant agreement | 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). Work Safe BC requires that all persons that are dealing with hazardous materials must follow the Workplace Hazardous Materials Information System (WHIMIS) (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 by these legislations (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 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 any students that deal with chemicals (Facilities Services & Campus Development, personal communication, September 21, 2018). VIU’s Janitorial Services are managed by a contracted provider (Facilities Services & Campus Development, personal communication, September 21, 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).

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). In addition, VIU must abide by municipal, provincial, and federal regulation regarding hazardous waste.

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). However, there has been a shown desire to have more options, such as a plastic recycling bin (Food Services, personal communication, October 2, 2018).

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

12.6.1 Number of companies publishing sustainability reports

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 and are publically available on the VIU website (VIU, 2018-ccc).

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, the fifth objective outlined in VIU’s Academic Plan, community engagement, states 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) (VIU, 2018-j). Additionally, 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-j). 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
The Masters of Community Planning program teaches on global citizenship – topics taught are globally applicable and about one quarter of their student population is international, and can therefore bring their own experiences into the classroom (Masters of Community Planning, personal communication, September 18, 2018). The topic of sustainability in general, which may include conversations about climate change, is taught throughout the program (Masters of Community Planning, personal communication, September 18, 2018). In fact, the Director of the program believes that sustainable development can be used as a way to structure courses and therefore be a way to teach students to think about the world (Masters of Community Planning, 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 the sharing of different cultural dances and foods (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 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).

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 (VIU, 2018-hha). 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 Kenyan colleges (VIU, 2018-jjj). The main goal of this project is to increase employment and economic development opportunities for Kenyan youth (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 in Tanzania that focuses on sustainable tourism and in-country procurement of products and employment (VIU, 2018-III). Furthermore, in Tanzania, VIU is also working on a compost program within this bigger project, in Kenya VIU helps to deal with workshop waste procedures, and in Vietnam visiting VIU students learn about the toxicity of products (Education Abroad, personal communication, August 29, 2018).

| 12.b Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products | VIU offers students a diploma in tourism studies, a Bachelor in tourism management, a diploma in recreation and sport, and a Masters in sustainable leisure management (VIU, 2018-mmm; VIU, 2018-oo; 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-oo; 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, which focused on reducing poverty through environmental education with key areas looking at health, environment, and ecotourism development (VIU, 2018-mmm). |

The following provides a description of why some of the targets and indicators for Goal 12 were not included in the table above.

**Target 12.1** *(Implement the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries)*, was determined to be not relevant to an education institution. It was beyond the scope of this project to look into Canada’s implementation of the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns.

**Targets 12.7** *(Promote public procurement practices that are sustainable, in accordance with national policies and priorities)* and **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)* were determined to be not relevant to VIU as their only indicators are classified as Tier III (United Nations, 2018-h).

Although the above targets and indicators were deemed irrelevant to an educational institution or beyond the scope of this project, this does not mean that the topic of sustainable consumption and production is not relevant to a university. Simply put, we suggest the rewording of these indicators to better reflect that of an educational institution.
## Appendix P
Compiled data for Goal 13: Climate action

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>VIU</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries</td>
<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 in more detail in Goal 11 (Indicator 11.b.2), VIU follows the British Columbia Emergency Response Management System and the Incident Command System and has internal procedures and plans to deal with emergency events on campus (VIU, 2017-d).</td>
</tr>
<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 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 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). In addition, a symposium open to the public that addressed climate change was held in 2012 (VIU, 2018-ppp). Research conducted by the Coastal Hydrology &amp; 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 &amp; Woodlands and the summit of Mount Arrowsmith (VIU, 2018-bb). Since 2017, data has been collected weekly in the summer and bi-weekly during the spring and fall at Milner Gardens &amp; Woodlands (VIU, 2018-bb). Both sites have weather stations installed in order to compare data to local climate regimes (VI, 2018-bb). Finally, 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.</td>
</tr>
</tbody>
</table>
The following provides a description of why some of the targets and indicators for Goal 13 were not included in the table above.

Target 13.2 *(Integrate climate change measures into national policies, strategies and planning)*, was not included in this study as its indicator, 13.2.1, is classified as Tier III (United Nations, 2018-h).

Indicator 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)*, was deemed not relevant for the purpose of this project as it is classified as Tier III and is similar to indicator 13.3.1 discussed in the table above (United Nations, 2018-h).

Target 13.a *(Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly $100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible)*, was determined to be not relevant to VIU as an educational institution. It was beyond the scope of this project to look into how Canada was meeting this target.

Target 13.b *(Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities)*, was determined to be not relevant to an educational institution or Canada as a whole as it is targeted to developing nations.

Although the above targets and indicators were deemed irrelevant to an educational institution or beyond the scope of this project, this does not mean that the topic of climate change itself is not relevant to a university. Simply put, we suggest the rewording of these indicators to better reflect that of an educational institution.
Compiled data for Goal 14: Life below water

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>VIU</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from landbased activities, including marine debris and nutrient pollution</td>
<td>14.1.1 Index of coastal eutrophication and floating plastic debris density</td>
<td>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 the program has previously included a guest lecture by a Biology faculty member on the topic of marine debris (Fisheries &amp; Aquaculture, personal communication, October 2, 2018).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>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 program conducted research in partnership with the Ocean Legacy Foundation on the topic of marine debris pollution in the 2017/18 academic year (VIU, 2018-r; Bowns &amp; Pastro, 2018). The students provided the Ocean Legacy Foundation with a set of policies regarding single use, disposable plastic products (Bowns &amp; Pastro, 2018). Through presenting their research at two different conferences, these students were able to increase public awareness about marine debris (Bowns &amp; Pastro, 2018). Another research project involved a Fisheries and Aquaculture student researching the impacts of plastic intake levels in oysters (Fisheries &amp; Aquaculture, personal communication, October 2, 2018).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>While Deep Bay Marine Field Station does not conduct research on these topics, it does educate the public on eutrophication and plastic, 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 conducts beach cleanups that helps to reduce marine debris pollution in the Deep Bay area (Deep Bay Marine Field Station, personal communication, August 7, 2018)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>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 regards to beach cleanups and environmentally focused campaigns and events by providing cost-free promotion (Students’ Union, personal communication, August 28, 2018). For example, a former technician in the Fisheries and Aquaculture department would often organize cleanups for Chase River and Deep Bay that got students involved in actively caring for the local environment (Fisheries &amp; Aquaculture, personal communication, October 2, 2018). Furthermore, students in the Fisheries and Aquaculture program are permitted to count beach cleanups as their practicum hours, with many of the students choosing to do so (Fisheries &amp; Aquaculture, personal communication, October 2, 2018).</td>
</tr>
<tr>
<td>14.4 By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and</td>
<td>14.4.1 Proportion of fish stocks within biologically sustainable levels</td>
<td>Education about fish stocks and sustainable fish stock levels occur 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</td>
</tr>
</tbody>
</table>
unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics.

13.8 Resources management and Protection (RMOT) 200 (Fisheries and Management of Salmonids), FISH 321 (Lake and Stream Ecosystems), FISH 322 (Coastal and 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 fisheries 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; 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 and fish quotas; the Field Station has future plans to continue educating the public on sustainable fishing practices (Deep Bay Marine Field Station, personal communication, August 7, 2018).

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

14.5.1 Coverage of protected areas in relation to marine areas

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 (Issues in Natural Resource Management), GEOG 350 (Natural Resource Management), and RMOT 400 (Fisheries Conservation and Management) (VIU, 2018-j).

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

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

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, essentially 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-ss). Although the Field Station is not currently heavily focused on investment in marine technology, it plans 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 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 hydrocarbons 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 visually...
document underwater, up to approximately 300 feet (VIU@Cowichan Innovation Lab, personal communication, September 20, 2018). While the OpenRV may not be considered a marine technology, it could in the future, and 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 & Aquaculture, personal communication, October 2, 2018). Their research focuses on redesigning shellfish traps to reduce bycatch (Fisheries & Aquaculture, personal communication, October 2, 2018).

The following provides a description of why some of the targets and indicators for Goal 14 were not included in the table above.

Both targets 14.2 *(By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans)* and 14.3 *(Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels)* were not included in this study as their only indicators were classified as Tier III (United Nations, 2018-h).

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

Targets 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)* and 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 in paragraph 158 of “The future we want”)* were not included in this study as their only indicators were classified as Tier III (United Nations, 2018-h).

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

Although the above targets and indicators were deemed irrelevant to an educational institution or beyond the scope of this project, this does not mean that the topic of life below water itself is not relevant to a university. 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 R
Compiled data for Goal 15: Life on land

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>VIU</th>
</tr>
</thead>
<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-vvy). 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 hectare) are under the protection of a forest management plan and are intended to continue to be conserved by VIU and Milner Gardens and Woodland (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 (e.g. GEOG 228: Spatial Analysis and RMOT 202: Introduction to Parks and Protected Areas) (VIU, 2018-j).</td>
</tr>
<tr>
<td>15.1.2 Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type</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 (Integrated Resource Management), GEOG 373 (Biogeography), and GEOG 428 (Geoscience Applications), among others (VIU, 2018-j).</td>
<td></td>
</tr>
<tr>
<td>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</td>
<td>15.2.1 Progress towards sustainable forest management</td>
<td>The topic of sustainable forest management is covered in the Forestry, Resource Management and Protection, and Geography departments at VIU (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).</td>
</tr>
<tr>
<td>15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world</td>
<td>15.3.1 Proportion of land that is degraded over total land area</td>
<td>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).</td>
</tr>
</tbody>
</table>
15.4 By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development

15.4.1 Coverage by protected areas of important sites for mountain biodiversity

The Resource Management and Protection program at VIU educates students about protected areas and all levels of ecosystems (VIU, 2018-j; Resource Management & 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.

15.4.2 Mountain Green Cover Index

The Mountain Green Cover Index is designed to “measure changes of the green vegetation in mountain areas (i.e. forest, shrubs and trees)” (Mountain Partnership, 2018, para. 3). As stated above in indicator 15.4.1, VIU’s Resource Management and Protection students learn about ecosystems, however, we cannot say for sure whether this specific topic is covered in courses or researched at VIU.

15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species

15.5.1 Red List Index

Many departments at VIU educate students on species at risk, such as: GEOG 373 (Biogeography), BIO 457 (Biodiversity and Conservation Biology), BIO 202 (Ecology), HORT 115T (Introductory Plant Identification), HORT 116T (Advanced Plant Identification), FRST 132, and FRST 235 (Forest Ecology I & II) (VIU, 2018-j).

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 as 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).

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...
<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>15.7.1 Proportion of traded wildlife that was poached or illicitly trafficked</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).</th>
</tr>
</thead>
<tbody>
<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>15.8.1 Proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species</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 helping to prevent 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). 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 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 &amp; Silvics), and FRST 234 (Forest Ecosystem Assessment &amp; Mapping) (VIU, 2018). 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).</td>
</tr>
<tr>
<td>15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems</td>
<td>15.a.1 Official development assistance and public expenditure on conservation and sustainable use of biodiversity and ecosystems</td>
<td>Departments such as Resource Management and Protection, Geography, and Forestry educate 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), GEOG 356 (Policy, Resources and Sustainability),</td>
</tr>
</tbody>
</table>
Additionally, MABRII 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 of developing standardized observations of alpine biodiversity, vegetation patterns and mountain top temperatures (VIU, 2018-bb).

The following provides a description of why some of the targets and indicators for Goal 15 were not included in the table above.

Target 15.6 (*Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed*) was not included in this study as it was beyond the scope of this study to look into how Canada has adopted the policies outlined in indicator 15.6.1.

Target 15.9 (*By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts*) was not included in this study as its only indicator is classified as Tier III (United Nations, 2018-h).

Target 15.b (*Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation*) was deemed irrelevant to an educational institution as it was beyond the scope of this study to look into how much Canada expends on meeting indicator 15.b.1.

Target 15.c (*Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities*) was deemed irrelevant to VIU as the indicator focuses on poached or trafficked wildlife, which is already discussed in Target 15.7 above.

Although the above targets and indicators were deemed irrelevant to an educational institution or beyond the scope of this project, this does not mean that the topic of life on land itself is not relevant to a university. 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 S
Compiled data for Goal 16: Peace, justice, and strong institutions

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>VIU</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.1.1</td>
<td>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 (VIU, 2018-j; 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. methods other than shoot-to-kill) (Criminology, personal communication, September 28, 2018).</td>
</tr>
<tr>
<td>16.1.3</td>
<td>Proportion of population subjected to (a) physical violence, (b) psychological violence and (c) sexual violence in the previous 12 months</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 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 &amp; 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).</td>
</tr>
<tr>
<td>16.1.4</td>
<td>Proportion of population that feel safe walking alone around the area they live</td>
<td>VIU has taken steps to ensure that students and employees feel safe while on campus. Policy 41.09 (Health &amp; Safety Policy) states that VIU is committed to 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</td>
</tr>
</tbody>
</table>
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 more of a theoretical lens (Criminology, personal communication, September 28, 2018).

### Indicator 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).

### Indicator 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).

### Indicator 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
### Legislative Framework

**16.10 Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and 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).**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
</table>
| 16.3 Promote the rule of law at the national and international levels and ensure equal access to justice for all | **16.3.1 Proportion of victims of violence in the previous 12 months who reported their victimization to competent authorities or other officially recognized conflict resolution mechanisms**  
As mentioned previously (in Goals 5 and 11), VIU’s Human Rights and Respectful Workplace Office (HRRWO) produces an annual report, which showcased a total of just one alleged sexual harassment complaint for the 2016/17 academic year – a decrease from the 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).  
Additionally, VIU – in collaboration 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, 2018; Ending Violence Association of BC, 2018; VIU, 2018-EEE).  
**16.3.2 Un-sentenced detainees as a proportion of overall prison population**  
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). |
| 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, which 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-eee). Since VIU is publicly funded, its budget is transparent and accessible online (VIU, 2018-ee). |
| 16.7 Ensure responsive, inclusive, participatory and representative decision-making at all levels | **16.7.1 Proportions of positions (by sex, age, persons with disabilities and population groups) in public institutions (national and local legislatures, public service, and judiciary) compared to national distributions**  
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 (VIU, 2009). 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 academic 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.  
**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**  
The Criminology program at VIU educates its students on these topics within various courses. Examples of 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-jj). Additionally, Sociology students also learn about these topics in SOCI 382 (Crimes Against Humanity) (VIU, 2018-jj). |
| 16.8 Promote the rule of law and ensure equal access to justice for all |  
**16.8.1 Proportion of individuals in the previous 12 months who reported their victimization to competent authorities or other officially recognized conflict resolution mechanisms**  
As mentioned previously (in Goals 5 and 11), VIU’s Human Rights and Respectful Workplace Office (HRRWO) produces an annual report, which showcased a total of just one alleged sexual harassment complaint for the 2016/17 academic year – a decrease from the 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).  
Additionally, VIU – in collaboration 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, 2018; Ending Violence Association of BC, 2018; VIU, 2018-EEE).  
**16.8.2 Un-sentenced detainees as a proportion of overall prison population**  
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). |
| 16.9 Ensure responsive, inclusive, participatory and representative decision-making at all levels |  
**16.9.1 Proportion of positions (by sex, age, persons with disabilities and population groups) in public institutions (national and local legislatures, public service, and judiciary) compared to national distributions**  
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 (VIU, 2009). 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 academic 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. |
| 16.10 Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and 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). |  
**16.10.1 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**  
The Criminology program at VIU educates its students on these topics within various courses. Examples of 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-jj). Additionally, Sociology students also learn about these topics in SOCI 382 (Crimes Against Humanity) (VIU, 2018-jj). |

---

**Source:** Various VIU sources, including VIU’s Human Rights and Respectful Workplace Office (HRRWO) annual reports and university policies.
the table above.

Indicator 16.1.2 (16.1.2 Conflict-related deaths per 100,000 population, by sex, age and cause) was not included with Target 16.1 above as it was deemed irrelevant 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.

Target 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) was not included in this study as both its indicators (16.4.1 and 16.4.2) are classified as Tier III (United Nations, 2018-h)

Target 16.5 (Substantially reduce corruption and bribery in all their forms) was deemed to be not relevant to an educational institution.

Indicators 16.6.2 (Proportion of population satisfied with their last experience of public services) and 16.7.2 (Proportion of population who believe decision-making is inclusive and responsive, by sex, age, disability and population group) were not included in this study as they were both classified as Tier III (United Nations, 2018-h).

Target 16.8 (Broaden and strengthen the participation of developing countries in the institutions of global governance) was deemed irrelevant to Canada as the indicator involves looking into the involvement of developing countries in the voting rights of international organizations.
Target 16.9 *(By 2030, provide legal identity for all, including birth registration)* was also 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.

Target 16.a *(Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime)* was not included as it was beyond the scope of this study to look into whether or not Canada’s human rights institutions align with the Paris Principles (16.a.1).

Although the above targets and indicators were deemed irrelevant to an educational institution or beyond the scope of this project, this does not mean that the topics of peace, justice, and strong institutions are not relevant to a university. 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 T

Compiled data for Goal 17: Partnerships for the Goals

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicator</th>
<th>VlU</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.6 Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge-sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism</td>
<td>17.6.1 Number of science and/or technology cooperation agreements and programs between countries, by type of cooperation.</td>
<td>Through Education Abroad and International Education, VIU has made partnerships with other international institutions regarding technology (VIU, 2018-hhh; VIU, 2018-iii). For example, an international project in Ukraine trains civil servants 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 to provide the software and servers needed (VIU, 2018-hhh). 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 also offers a number of international internships and exchanges to students in various programs (VIU, 2018-mmm).</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>17.8.1 Proportion of individuals using the Internet</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 (VIU, 2018-rr).</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 through North-South, South-South and triangular cooperation</td>
<td>17.9.1 Dollar value of financial and technical assistance (including through North-South, South-South and triangular cooperation) committed to developing countries</td>
<td>As discussed previously, VIU has various international projects and partnerships through Education Abroad, some of which are aiding developing countries. In Tanzania, VIU’s Education Abroad and Recreation and Tourism programs are trying to help develop a program in hospitality management so locals can hold managerial positions rather than these positions only being available to foreigners (VIU, 2018-III; 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 needs of Trinidad (Education Abroad, 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 Spatial Data Infrastructure (see indicator 17.6.1 above).</td>
</tr>
<tr>
<td>17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnership</td>
<td>17.17.1 Amount of United States dollars committed to (a) public-private partnerships and (b) civil society partnerships</td>
<td>Although it is difficult to quantify 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. In addition, international internships are offered to students in departments such as, 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 particularly on Vancouver Island (VIU, 2018-LLL). For example, the Community Based Applied Interdisciplinary Research program partners student researchers with local organizations to apply their research skills and make</td>
</tr>
</tbody>
</table>
recommendations to address issues and policies (VIU, 2018-r). Students participating in the program in the 2018/19 academic year are partnering with Nanaimo Food Share, Zonta Club of Nanaimo, and Wildwood Ecoforest (Sociology, personal communication, September 25, 2018). In the 2017/18 academic year, 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 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, the Village of Gold River, local indigenous communities, the City of Parksville, and more (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).

The following provides a description of why some of the targets and indicators for Goal 17 were not included in the table above.

Targets 17.1, 17.2, 17.3, 17.4, and 17.5 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.

Indicator 17.6.2 (*Fixed Internet broadband subscriptions per 100 inhabitants, by speed*) was not included with Target 17.6 in the table above as it was deemed irrelevant to an educational institution.

Target 17.7 (*Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed*) was not included in this study as its only indicator (17.7.1) is classified as Tier III (United Nations, 2018-h).

Targets 17.10 (*Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda*), 17.11 (*Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries’ share of global exports by 2020*), and 17.12 (*Realize timely implementation of duty-free and quota-free market access on a lasting basis for all least developed countries, consistent with World Trade Organization decisions, including by ensuring*
that preferential rules of origin applicable to imports from least developed countries are transparent and simple, and contribute to facilitating market access) were deemed irrelevant to educational institutions as they are all focused on international trade.

Targets 17.13 (Enhance global macroeconomic stability, including through policy coordination and policy coherence) and 17.14 (Enhance policy coherence for sustainable development) were both not included in this study as their indicators are classified as Tier III (United Nations, 2018-h).

Target 17.15 (Respect each country’s policy space and leadership to establish and implement policies for poverty eradication and sustainable development) was deemed irrelevant to an educational institution.

Target 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) was deemed irrelevant to educational institutions as it speaks to how countries are meeting the SDGs through the use of multi-stakeholder development.

Targets 17.18 (By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts) and 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) were both deemed irrelevant to an educational institution because they focus on how nations monitor and are accountable for meeting the SDGs.

Although the above targets and indicators were deemed irrelevant to an educational institution or beyond the scope of this project, this does not mean that the idea of creating partnerships to achieve the SDGs is not relevant to a university. Simply put, we suggest the rewording of these indicators, or the development of new ones entirely, to better reflect that of an educational institution.