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The United Nations Sustainable Development Goals (SDGs), which include providing inclusive and quality education (G4), promoting health and well-being (G3), achieving gender equality (G5) and climate action (G13) were adopted by the United Nations in 2015 and provide an important framework and pathway towards a sustainable and just future. Increasingly, institutions of higher education are looking to these 17 goals as a way to measure their relevance and impact on society – and some are doing this through community-engaged research and learning. This article shares insights from an institutional impact assessment linked to the UN SDGs from the University of Victoria (UVic), located on Coast Salish and Straits Salish territories of the Lekwungen and WSÁNEĆ Peoples, on the west coast of Canada. The case study provides an overview of the methodology, highlights some of the various ways impact is being measured and speaks to some of the opportunities both for UVic and other universities wishing to pursue a similar process. The results point to a wide range and diversity of impact to society in almost all the UN goals, also documented at various levels (i.e. *individual, community, systems*). This work has helped inform guidelines for recognizing community-engaged scholarship in faculty evaluation.

Keywords: Community-Engaged Research, Community-Engaged Learning, Impact Evaluation, UN Sustainable Development Goals.

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1. Introduction. Knowledge co-creation for a sustainable future

There is a renewed revival of what it means to be a *Civic University*, in pursuing public good by aligning university interests with societal interests and working collaboratively with community partners towards a collectivized impact. There is a clear link between community-engaged research and learning and the ability and capacity to address societal challenges (Hall and Tandon 2017). Universities in Canada, and around the world, are investing in community-engaged research and learning directed to enhance societal impact and applied learning. A survey published by Universities in Canada in 2019 (Universities Canada 2019) affirms this growing commitment with key findings showing that Canadian universities are deeply committed to their local impact with ninety-two percent (92%) of respondents indicating that social impact is explicitly referenced in their institutions mission, vision and/or values and also in their strategic plan. In addition, over half of the respondents (52%) have a specific plan focused on maximising the university's impact in the local community, while 78% have identified social impact as one of the top five priorities for their university.

The trend towards civic engagement in higher education around the world has led to a strong emphasis on better understanding the impact of these activities, particularly as it relates to the mutual benefit of communities and the university. Developing impact measurement frameworks therefore is currently of interest for many universities and research councils in Canada and globally. This article describes an institutional impact assessment of Community-engaged Research (CER and Community-engaged Learning (CEL) at the University of Victoria, located on traditional Coast and Straits Salish territory on southern Vancouver Island, Canada. The assessment included a 92-unit scan of «occurrences of impact» aligned to the UN SDGs, and 12 impact case studies from across disciplines showing a vast diversity of impact resulting from community engaged research. This paper also draws on separate data collected from community engaged learning activities across the campus also aligned to the UN SDGs.

Community-engaged Research (CER) is a «research approach that involves active participation of stakeholders, those whose lives are affected by the issue being studied, in all phases of research for the purpose of producing useful results to make positive changes» (Nelson *et al.* 1998, 12). Community-engaged research strives to be community-driven, participatory and action-oriented. This approach involves questions and goals that originate with the community's needs and are geared toward addressing social issues. Research is done with a community partner, as opposed to research about a community partner. Similarly, Community-engaged learning (CEL) can be described as a «partnership between community and academic institutions that actively engages students with concepts and practices and has benefit to all participants. It is experiential, community-engaged, reciprocal, and involves real-life application of concepts learned» (Nagel 2017). Community-engaged learning opportunities have also been expanding at universities and colleges and there has been some evidence on the outcomes of these efforts on partner communities and students' de-

velopment (Mitchel and Soria 2017). Students are a valuable, talented and savvy asset to communities that can be harnessed through engaged learning opportunities such as co-operative education, Work Integrated Learning (WIL), and service learning courses, among others. Community-engaged learning provides an experience in and/or with community and facilitates reflection whereby experience enhances understanding [and] understanding leads to more effective action.

The United Nations Sustainable Development Goals (SDGs), which include providing inclusive and quality education (G4), promoting health and well-being (G3), achieving gender equality (G5) and climate action (G13) were adopted by the United Nations in 2015 and provide an important framework and pathway towards a sustainable and just future. The aim of these universal goals is to meet the urgent environmental, social and economic challenges facing our world today. The release of the SDGs coincided with other historic agreements also reached in 2015 at the COP21 Paris Climate Conference and the Sendai Framework for Disaster Risk Reduction, signed in Japan in March 2015. Together, these agreements provide a set of common standards and measurable targets for a sustainable future. Increasingly, institutions of higher education are looking to these 17 goals as a way to advance their relevance and impact on society – and some are doing this through community-engaged research (CER) and learning (CEL). «Education is a key piece of the 2030 Agenda for Sustainable Development and calls for a rethinking of education and knowledge as global common goods. To enhance and sustain the dignity and capacity of the human person in relation to others and to nature» (UNESCO 2015),

The UNESCO Chair in Community-based Research and Social Responsibility in Higher Education has written extensively on the role and responsibility of higher education in advancing the UN SDGs, and of community-based research in particular to generate and mobilize socially relevant knowledge that values diversity of forms, systems and modes of knowledge and knowledge production. This, they argue, requires valuing indigenous, practical, experiential knowledge, in addition to theoretical and experimental (Tandon 2017). Among several capacity deficits, Hall and Tandon (2017) point to the knowledge deficit as the most critical confronting the achievement of the SDGs. «The higher education sector's efforts to prepare to respond to the post-2015 agenda require new thinking in terms of scale and modality. As national institutions addressing global challenges, universities need to be able to incorporate diverse demands and diverse stakeholders into their own agendas» (Hall and Tandon 2017, 5). They offer three practical ways to engage in socially responsible research for achieving the UN SDGs: 1) frame locally usable research, 2) build knowledge in partnership, and 3) learn new competencies. This approach calls for an epistemic diversity of stakeholders to encourage, promote and advocate the case for CBR as a critical tool for sustainable development.

The SDGs provide a timely lens to think through the dynamic spatio-temporalities that are brought into community campus arrangements. This global framing helps to connect local efforts and struggles to a global conversation, and collective movement that together create social change.

This means bringing people together across traditional practices, knowledge systems and sectors to achieve these goals. A recent report published by the Global University Network for Innovation (GUNI 2019) points a spotlight on the critical role of higher education in the 2030 Agenda, and calls for a commitment and responsibility towards collective action.

At GUNI we firmly believe that (1) awareness raising, (2) more and stronger partnerships, (3) lobbying for an improved policy environment and (4) support for transdisciplinary work at HEIs [Higher Education Institutes], and also between HEIs and other institutions and organizations, will be of key importance in the quest towards implementing the goals set for 2030 (GUNI 2019, 12).

GUNI, and several other international networks (i.e. UNESCO Chair in Community-engaged Research, Living Knowledge Network, Talloires network) are calling for a *knowledge democracy* – an appreciation for an ecology of knowledges – and an epistemological revolution and dramatic shift in our understanding of who creates knowledge, how knowledge emerges, whose knowledge counts, and the role of co-creation of knowledge between communities and academia. Universities no longer hold a monopoly of knowledge production, and indeed it is the marrying of many forms of knowledges that are being generated outside of academia that are leading to positive social change. In addition to the philosophical case made above there are clear instrumental reasons such as an expanded and broadened knowledge base that is urgently needed to tackle grand challenges.

Canada's policy and funding landscape continues to advance a strong eco-system for community-engaged research and learning. In 2017, the Canada Research Coordinating Committee (CRCC) was created to improve the coordination efforts of Canada's granting agencies: the Social Sciences and Humanities Research Council of Canada (SSHRC), the Natural Sciences and Engineering Research Council of Canada (NSERC), the Canadian Institutes of Health Research (CIHR), and the Canada Foundation for Innovation. SSHRC's flagship Connections and Partnership Grants have been incredibly successful at bridging capacity and knowledge exchange between campus and community across the social sciences and humanities for over two decades (Hall and Tremblay 2012; Tremblay and Hall 2014). The CRCC and other philanthropic foundations such as the Vancouver Foundation, Mental Health Commission of Canada and the Canadian Housing Corporation are now requiring community-driven, participatory research in several of their granting programs. Community-based Research Canada (CBR Canada), the country's leading network for community-based research, recently incorporated into a legal non-profit organization and is a strong advocate and convener of communities and academic researchers through the C²UExpo¹ conference every two years².

¹ CBRC: <https://communityresearchcanada.ca>.

² C²UExPO: <https://c2uexpo2020.ca>.

2. Measuring impact of community engaged research and learning

The literature points to a diversity of approaches and several sets of indicators and frameworks for measuring impact of community-engaged research and learning. The literature review, conducted between 2017-18, used key words including «impact assessment», «impact framework», and «impact indicators/rubric» with «community-engaged research», and «community-engaged learning» from Web of Science and university/organization websites. While there has been progress in developing benchmarks for engagement (NCCPE 2009; Pearce *et al.* 2008) and community-engaged research (Campus Engage 2017; Wiebe and Taylor 2014), the inclusion of community participation in audit and impact evaluation is almost entirely absent across the higher education sector. Some institutions have made efforts in consulting community partners in framework development (e.g. University of Bradford REAP tool, see Pearce *et al.* 2008) but there have been few attempts at producing evaluation tools that have been useful in understanding the dynamics of community university engagement from the perspective of community. There are to date limited examples of tools that engage community partners to reflect on and evaluate the impact of research and learning partnerships.

In the context of higher education, the term impact is most often associated with measuring the influence of academic research on funding and tenure (Association of Commonwealth Universities 2012; Federation for HSS 2014). A report produced by the Canadian Federation for the Humanities and Social Sciences (2014) acknowledges the difficulty of identifying and defining what research impact actually is. This report, serving as a platform for assessing the impact of humanities and social science research, claims the difficulty of defining impact because there is no one definition of research itself; impact varies as the context of the research varies and as a result, the frameworks for measuring this impact will to vary. The Federation refers to research impact here as being:

The influence scholarly and creative enquiry has upon wider society, intended as well as unintended, immediate as well as protracted. It includes the influence such research has upon future researchers within the discipline as well as in other disciplines and on public policy, quality of life, social cohesion, business innovation, the environment, artistic and creative practices, commercial and economic activity, administration and institutional development, and political and cultural understanding (2014, 6-7).

There are as many definitions of research impact as there are types of research. Canada's International Development Research Centre (IDRC) points out that there «is no universal definition for research impacts». In a 2014 report on «research excellence», Idrc draws upon a cross-disciplinary study of research impact models, which differentiates between research that «brings about changes in levels of understanding, knowledge and attitude» and research that «results in changes in practice and policy making». These distinctions suggest multiple varieties of research impact, including «the generation of new knowledge, new insights, changes in attitudes, be-

liefs, and behaviors, references to and citations in research, increased access to research, more research and the extension of research beyond disciplinary boundaries».

In November 2019, Canada's Tri-Council funding agencies signed the San Francisco Declaration on Research Assessment (DORA), joining several other leaders around the world who are working to strengthen research excellence by ensuring equitable and impactful measures of research assessment. DORA is a global initiative that is supporting the development and promotion of best practice in assessment of scholarly research. There is now strong recognition that the quality and impact of research cannot be measured through journal publications alone, and that research outcomes are multifaceted reflecting multiple types of knowledge and ways of knowing that must be assessed on their own merit. Recognizing the value and societal impact of research, beyond the journal article, will have profound implications for how research is funded and the way in which researchers are assessed.

A study by Lall (2015) highlights that impact assessment and measurement outside of the context of Community University Research Partnership (CURP) are usually heavily dependent on quantitative methods such as using formulae to calculate social and economic impact in terms of cost equivalents. Within the context of community engagement, CURPs and their support structures however, «impact assessment and measurement is a qualitative-dependent endeavor with some quantitative contributions. This is evidenced through a review of the literature, where impact assessment and measurement methods, tools and approaches are emergent but clearly being explicated mainly through qualitative research methods and an ongoing reflection-action cycle».

In regard to community-engaged learning (CEL), the literature points to limited consideration of impact. Where it is addressed, there is little synergy between the literature which makes the task of choosing and maintaining a course for CEL impact assessment rather daunting. While most literature on CEL impact focuses on a particular interest group (such as students), students, community, faculty and the academic institution can be considered in CEL impact assessment (see, for example, Chadwick and Pawlowski 2007). In *Assessing Service-Learning and Civic Engagement: Principles and Techniques*, Gelmon *et al.* (2018) highlight the need for assessment and sharing of impacts that are consistent and provide benchmarks for other institutions. The University of Alberta's Faculty of Arts (Faculty of Arts, University of Alberta 2019) has contributed in this way by documenting Community-Service Learning outcomes and impacts since 2005. The blend of perspectives (community, student, instructor, institution), temporal scales, and quantitative and qualitative data stand out in their work.

The literature provides insight into a number of potential reasons for the general incoherence in CEL impact assessment. 1) Impact assessments can seem too onerous for discrete CEL activities (Zimmerman *et al.* 2019). While instructors are interested in the impact of their CEL initiatives, they are hindered by the burden of time (both to themselves and

community partners) to implement impact assessment, particularly if the CEL initiative is small in scope – and many are. 2) Impact assessments should recognize a process towards change as much as practical outcomes (Clarke 2003). This is relevant for all CEL experiences. However, as stated above, there are many small-in-scope CEL initiatives wherein process towards change impacts are particularly relevant. 3) Impact assessments need to be tied to goals and have clear indicators and implementation strategies that show how outcomes contribute to the desired impact (Clarke 2003). Each instructor has slightly, or significantly, different goals for CEL impact assessment. While personalized impact assessment can provide valuable and in-depth evaluation of a CEL experience, it is then difficult to compare across experiences and to demonstrate the impact of the sum of all CEL parts. The SDGs can be applied as a coherent framework to highlight the relevance and impact of CEL; they can support students, community, instructors and institutions in recognizing how the contributions of their work and learning address pressing issues of our times.

3. Case study: University of Victoria

The University of Victoria (UVic) is a research-intensive university located on Coast Salish and Straits Salish Territories of the Lekwungen and WSÁNEĆ Peoples, on the west coast of Canada. UVic is well known locally, nationally and internationally as an institutional leader in Community-engaged research and learning with a vision to «integrate outstanding scholarship, engaged learning and real-life involvement to contribute to a better future for people and the planet» (UVic 2018). The university's Strategic Framework (2018, 23) highlights its commitment to excellence in community-engaged research and innovation to advance human knowledge, improve and enrich lives, tackle global challenges and promote the sustainability of the planet. Partnerships and community engagement are integral to this work and are woven into all six priorities of the Strategic Framework. There are faculty members, students and staff in every corner at the University of Victoria who identify their research, learning and other scholarly work as being community-engaged.

UVic has a long history of institutional leadership in engaged research and learning. The Office of Community-based Research (OCBR) was significant and unique in the Canadian landscape of community-campus collaborations, and was recognized nationally and internationally as a model structure for CBR. The community co-governed structure and participatory process of the OCBR was the only such structure internationally at the time (Hall and Tandon 2017). The Institute for the Studies & Innovation in Community University Engagement (ISICUE) was then created in 2013, continuing to advance engaged research and innovation shortly after the closure of OCBR. Changes in administration and faculty leadership led to these structural changes, although the community co-governed council remained intact and active. ISICUE, supported by the Faculties of Social Science and Human & Social Development, built on the strong leg-

acy of the OCBR in its commitment to community partnerships based on mutually beneficial and reciprocal relationships. ISICUE was also secretariat to a number of local and national networks such as the Vancouver Island Community Research Alliance (VICRA), Pacific Housing Research Network (PHRN), Vancouver Island Social Innovation Zone and Community-based Research Canada (CBRC). The Institute also had strong international partnerships including the UNESCO Chair in Community-based Research and Social Responsibility in Higher Education, and the National Coordinating Centre for Public Engagement (NCCPE) in the UK. In 2017, a more centralized structure Community Engagement and Partnerships Executive Committee (Cepec) was created with leadership across the executive administration (i.e. Vice Presidents and Provost) to advance the Strategic Framework commitments with respect to community-university engagement, while continuing to support existing and future partnerships. Cepec's diverse representation and leadership from executive Research, External Affairs as well as Faculty brings cross-portfolio collaboration and representation from members with a wide range of experience and background.

3.1. *Methodology and results*

This section describes an impact assessment of Community-engaged research (CER) that was conducted at UVic in 2016³. The assessment was based on several consultations and research (case studies and document analysis) that took place between July-December 2016 with former Directors and Research Affiliates from the Office of Community-based Research (OCBR) and the Institute for the Studies and Innovation in Community University Engagement (ISICUE). The main objective was to assess impact of CER across the campus between 2009-2015 aligned to the UN SDGs. Based on a number of key considerations from the literature, the following criteria were included in the methodology:

- measurement at various levels of impact including micro (*individual*), meso (*community*) and macro (*systems*);
- capture community perspectives in assessing impact; and
- capture quantitative data as well as qualitative narratives.

The levels helped to distinguish the breadth of impact at individual level including «changes to individuals» skills, behavior, attitudes, knowledge or understanding; community level «changes to a larger project and encourages new collaborations or ideas»; and systems level «changes to policies, structures and government agendas». Rather than establishing benchmark indicators of impact, data was curated from: 1) case study participants identification of changes as an outcome of their CER project, and 2) self-reported impact at the academic unit level from the Enhanced Planning Tool (EPT) (2014-15) documents. The EPT, developed

³ UVic CER Impact Assessment: <https://www.uvic.ca/cue/research/>

in 2014, is a set of tools that allow decision-makers to assess the quality, cost and contributions of programs and activities applied across the campus. In addition to the more qualitative anecdotes presented in the CER case studies, several quantitative indicators of outputs directly from the OCBR and ISICUE were collected, including funding, number of publications, events, workshops, policy meetings and other knowledge mobilization products.

For the purpose of the assessment, impact was defined as the effect of a project at a higher or broader level, in the longer term, after a range of outcomes has been achieved. This included changed thinking (i.e. *meaning, values* and *interpretations*) or behavior. Usually there is no one-to-one relationship between cause-and-effect links, but reflected in a variety of connections involving influence, contributions, and benefits – new policies deemed relevant, economic performance, competitiveness, public service effectiveness, new products and services, employment, enhanced learning skills, quality of life, community cohesion and social inclusion. Ultimately defining impact in this context is about making a difference and identifying what changes have resulted from new partnerships and collaborations. Being aware that impact is often measured over a long-term period (e.g. ideally 8 or more years), the findings from this evaluation point to some substantial outcomes in the short term (e.g. 1-2 years).

A systematic harvesting of the 2014-15 Enhanced Planning Tool (EPT) «contributions to community» and «measure of quality/impact» sections from the 92 academic units at UVic was conducted for this assessment (Figure 1). The data was aligned to UVic pillars of engagement (below) and the UN Sustainable Development Goals including the location of the activity (*where applicable*) and if there was an Indigenous focus. The results indicate impact, in both scope and significance, to society in each of the pillars of engagement in almost all academic units. A total of 168 «occurrences of impact» were identified and matched to the pillars of engagement using a method of inclusion with specific mention to the following criteria:

- *Community-engaged Research*: an explicit mention of a research partnership (i.e. MoU, partnership agreement);
- *Community-engaged Learning*: an ongoing program for student community engaged learning (i.e. field school, internship, placement);
- *Knowledge Mobilization*: An active and ongoing program that engages broader community and mobilizes knowledge (i.e. open house, presentation, speakers' bureau);
- *Good Neighbor*: initiatives that support the Good Neighbor pillar (i.e. council memberships, service to local community);
- *Institutional supports*: Department or unit rewards or recognition of CER (i.e. awards, training, promotion).

The term «community» in the scan included non-profit and for-profit organizations, industry, First Nations and governments. Some academic units included a short description of the number of collaborations and partnerships that did not explicitly include a description of a formal MoU and therefore were not included. Several units indicated community part-

nerships that were «too numerous to count» and therefore were not included in this assessment (i.e. Astronomy, Biochemistry, Centre for Advanced Materials and Related Technology, Electrical and Computer Engineering). This sample therefore is significantly underrepresented of community engagement activities at the university. A complete list and description of academic units' mention of partnerships that were too numerous to count or not enough information to include were listed as an appendix in the full report. The report also includes illustrative examples of impact in each pillar of engagement linked to the UN SDGs.

The level of impact, as indicated in the figure below, is equivalent to one-unit «occurrence of impact» by community engaged project, partnership, program, event, or community engaged learning opportunity. In some cases, an impact occurrence would fit in multiple community engagement pillar (i.e. the project describes a community-engaged research component as well as knowledge mobilization) and more than one UN Sustainable Development Goal at varying levels (i.e. the initiative could support G4 «quality education» at the individual level, as well as G9 «industry, innovation and infrastructure» at the community or systems level). In these instances, the impact was determined based on the above-mentioned criteria and at the researcher's discretion.

The results indicate impact at the individual, community and systems level in almost all the UN Sustainable Development Goals, and most prominently in the following:

- *Goal 3*: Ensure healthy lives and promote well-being for all at all ages;
- *Goal 4*: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all;
- *Goal 9*: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation;
- *Goal 13*: Take urgent action to combat climate change & its impacts;
- *Goal 14*: Conserve and sustainably use the oceans, seas and marine resources for sustainable development; and
- *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.

The twelve impact case studies, co-authored with academics and community partners, provides strong narratives of the impact of community-engaged research – for students, communities and the university. Impact case studies included an impact summary, a description of the project and partnership, extent of participation and knowledge co-creation, student role, key findings, key outputs and outcomes.

There is a wide range and diversity of research outputs indicated from the case studies. Both refereed and non-refereed publications represent the most significant output, as well as other areas including multi-media products, invited presentations, press coverage and social media buzz. The employment of students was one of the most significant outcomes as a result of the CER projects. Students played key roles in various research activities (e.g. conducting interviews, transcribing, data collection, ethi-

ALIGNMENT OF UVIC INSTANCES OF IMPACT WITH UN SUSTAINABLE DEVELOPMENT GOALS


















UN GOALS	INDIVIDUAL	COMMUNITY	SYSTEMS	UN GOALS	INDIVIDUAL	COMMUNITY	SYSTEMS
1 NO POVERTY 	-	-	-	10 REDUCED INEQUALITIES 	16	23	1
2 ZERO HUNGER 	1	1	-	11 SUSTAINABLE CITIES AND COMMUNITIES 	8	2	1
3 GOOD HEALTH AND WELL-BEING 	42	41	7	12 RESPONSIBLE CONSUMPTION AND PRODUCTION 	1	-	-
4 QUALITY EDUCATION 	30	35	1	13 CLIMATE ACTION 	5	2	3
5 GENDER EQUALITY 	3	4	-	14 LIFE BELOW WATER 	7	4	5
6 CLEAN WATER AND SANITATION 	3	-	-	15 LIFE ON LAND 	14	6	4
7 AFFORDABLE AND CLEAN ENERGY 	2	-	5	16 PEACE, JUSTICE AND STRONG INSTITUTIONS 	36	34	9
8 DECENT WORK AND ECONOMIC GROWTH 	1	2	-	17 PARTNERSHIPS FOR THE GOALS 	2	2	2
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 	22	12	5	OTHER	7	10	1

Fig. 1. Alignment of UVic occurrences of impact with the UN SDG's.

cal considerations) and knowledge mobilization (e.g. developing and presenting community reports, mapping outputs, guides, event coordination). These opportunities contribute to the academic and professional development of students in various ways.

This work has also helped to inform faculty evaluation policies specific to recognizing engaged scholarship in promotion and tenure at UVic (Tremblay 2017b). Scholars across the disciplines are engaging in various types of community engaged scholarship. These include collaborative, action oriented and participatory processes, which are often interdisciplinary in nature with varying time frames, methods, outputs (i.e. videos, reports, blogs) and support structures (i.e. *honoraria* for community participation, co-teaching). Traditional modes of evaluation for community engaged scholarship are widely viewed as insufficient since: 1) they focus on the product and do not acknowledge the often lengthily collaborative process

involved; 2) they do not provide an easy way to evaluate individual contributions of researchers who work collaboratively; 3) they often require researchers to provide additional types of evidence supporting the merit of the individual effort, creating more burden on the researcher; and 4) they require peer assessments where the criteria for selecting peers may not reflect the expertise needed for making a fair and appropriate assessments of quality (Saltmarsh *et al.* 2009; McDougal and Moore 2012).

In addition to structural supports and incentives for community-engaged scholarship (i.e. awards, grants, support staff for engaged research and learning), UVic's Faculty Evaluation Policy, updated in early 2020, has made several advancements in support of recognizing and valuing engaged scholarship in research, teaching and service. Some examples include specific criteria for assessment, non-traditional forms of knowledge outputs and the development/nurturing of relationships with community partners:

a) specific criteria related to assessment of community-engaged research and scholarly activity where the unit has members engaged in community-engaged research and scholarly activity;

b) evidence of innovative teaching, including research-enriched, Clinical and/or community engaged teaching on behalf of the University including, but not limited to: creative and artistic works, productions and performances, web publishing, including the production of archives and blogs, and use of on-line teaching contexts;

c) documented activities and outputs related to community-engaged scholarship, including the development of long-term relationships with communities; and

d) in cases where committees consider research or creative activities that emphasize community engaged scholarship, committees should make every effort to include at least one committee member with expertise in community engaged scholarship.

3.2. *Community-engaged Learning at UVic*

Approximately 6,500+ students participate in community-engaged learning at UVic each year. CEL enhances the integration of community experience with student learning, on or off campus. Through CEL, students can apply academic knowledge to real-world issues, a process that can benefit both students and the community. This takes many forms at UVic, including practicum placements, internships, study abroad, co-operative education, service learning programs, creative performance and applied research projects. Within each form of CEL, there is a whole spectrum of engagement (see Figure 2).

At the same time as UVic embarked on developing a Community-University Engagement (CUE) impact framework, the UVic Faculty of Social Sciences (SOSC) developed a Strategic Plan for CEL in the Faculty of Social Sciences which identified impact assessment as a key objective (UVic CEL, 2017). In 2018, SOSC piloted a CEL impact framework based

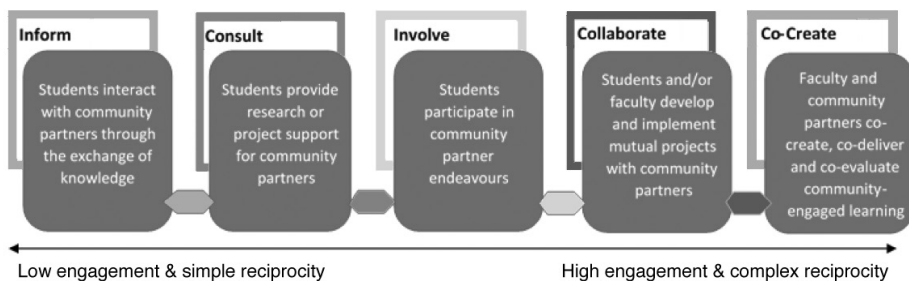


FIG. 2. Cel Spectrum of Engagement.

on 1) the CUE Impact Framework; 2) areas of interest identified by students, instructors and community partners; and 3) evaluations in use by UVic's Cooperative Education and Careers Services. The framework focused on students, community and faculty and the following assessment areas: type of experience; skills and knowledge development; contribution of CEL experience to meeting desired learning outcomes and meeting community expectations; level of preparation for the experience; cost versus benefit of participation; and contribution to any of the UN SDGs (See figure 3 for examples). This framework was shared across other departments at UVic through the CEL Office.

While some of the questions were adopted by instructors (primarily those related to the contribution of CEL experience to meeting desired learning outcomes and meeting community expectations), the framework to date has had very little uptake. The pilot demonstrated that CEL impact assessment gets put to the back burner amid the many responsibilities of each CEL stakeholder, and therefore requires significant administrative support to undertake. The pilot also indicated that many instructors, community partners and students do not see their work and learning in relation to the SDGs.

Given the burden of time that is already felt by CEL instructors (Briggs 2018) and the value in evaluating the breadth and depth of CEL impacts across an institution, significant leadership and coordination is required to conduct CEL impact assessment. In relation to the SDGs, it is easier to measure contributions to SDGs from multiple iterations of student contributions to a particular community initiative and from CEL experiences that are scaffolded to support student learning and growth (Williams *et al.* 2014). UVic's CEL office continues to assess CEL impact, including experiences that contribute to the UN SDGs, and is developing a revised version (including revised implementation plan) of the UVic CEL impact framework in 2020.

UVic geography graduate Patrick Robinson's work term with the Ministry of Forests' mapping division let him to use his studies and passion to address a provincial issue. Using his geographic information systems (GIS) knowledge, he collaborated with his co-op supervisor to develop a mapping tool that provides lifesaving, real-time information about forest fires to firefighters on the ground. Detailed story at <https://www.uvic.ca/news/topics/2019+convo-sosc-gis-firefighting-tool+news>.

Contributing to SDG: G9 Industry, Innovation and Infrastructure; G15 Life on Land.

Kevin Perkins (left), who is Cree and has an adopted family, spent three co-op work terms working as a communications and fundraising strategist with the First Peoples' Cultural Council (FPCC). This led the Indigenous Studies major to a full-time role in grant development with the council—Kevin is currently building a grant that will help communities digitize existing old-format audio and video language recordings that are at risk of being lost. He's also representing the FPCC on an advisory council for Library Archives Canada. Original story about one of co-op work terms can be found at <https://www.uvic.ca/news/topics/2018+coop-milestone-indigenous-kevin-perkins+ring>.

Contributing to SDG: G4 Quality Education; G10 Reduced Inequalities.

Indigenous studies and English student Lisa Schnitzler, who is from the Métis Nation, spent a co-op term at RMIT University, where she conducted research on reconciliation. Lisa participated in UVic's unique Indigenous International Work-Integrated Learning Exchange Program, which connects Indigenous students at UVic with Indigenous-focused work experiences in Australia. Students from the Australian partner institutions take part in UVic's LE_{NONET} student success program and complete a community-engaged learning experience. The program has been recognized by the Canadian Bureau for International Education and the British Columbia Council for International Education. Original story about Lisa and the BCCIE award at <https://www.uvic.ca/news/topics/2019+international-bccie-award-co-op+news>.

Contributing to SDG: G16 Peace, Justice and Strong Institutions.

Biology student Bryn Armstrong spent a work term monitoring large carnivores near Klemtu, the village of the Kitasoo/Xai'xais Nation, as part of her work term with Raincoast Conservation Foundation. Bryn worked alongside Indigenous colleagues and community members and embraced the intercultural knowledge that she gained through her work. Her co-op term was made possible through UVic's Strategic Framework Experiential Learning Fund, which supports students as they gain community-engaged hands-on experience as part of their studies. Original story can be found at <https://www.uvic.ca/coopandcareer/co-op/experiences/stories/pages/bio/bryn-armstrong.php>.

Contributing to SDG: G15 Life on Land

FIG. 3. Examples of Community-engaged Learning linked to the UN SDGs.

4. Key learnings

The ways in which research and learning are assessed and valued in higher education is changing. We see institutions, funding agencies and international networks calling for a centering of societal impact that is holistic, broad and multidimensional. Since the impact assessment at UVic was completed, there have been a number of changes made to assist in further supporting engaged research and learning and accelerating impact in society. A Community-University Engagement (CUE) Plan, to be launched in 2020, will help animate key strategic priorities of the university addressing climate action and reconciliation specifically. There are a number of key learnings from this work, as outlined below, that UVic will build from and might help inform other institutions interested in undertaking a similar process.

1. First, this pilot study is not exhaustive of all community engagement activities at the University of Victoria, but rather is a *sample snapshot of impact in key pillars of community engagement (i.e. engaged research and learning) aligned to the UN SDGs*.

The campus wide study relied upon an existing tool (i.e. EPT) that was not intentionally set up to measure impact aligned to the UN SDGs, although captured «contributions to society». Capturing this data was there for inconsistent and relied upon each units' description of impact from data given faculty members (i.e. not exhaustive, used differing terminology to describe partnerships/impact). Utilizing tools and pre-existing inventories that can be harnessed to extract impact data is a good starting place, but should be complemented with additional data collection methods including impact narratives and longitude studies.

2. The results provide strong evidence of impact to *students* (i.e. skills, employment and professional development), *community partners* (i.e. systems change, improved services, infrastructure) and *research* (i.e. societal relevance, co-creation/expanded knowledge base). Impact is aligned to the Un SDGs broadly, and the specific targets (167 targets in total) where not used in the measurement system.

This study affirms contribution to the local community with over 70% of impact occurrence from the Enhanced Planning Tool (EPT) in the region. Impact is documented at various levels (i.e. policy outcomes, program changes, student impact, client services) in almost all of the UN Sustainable Development Goals. Community-engaged research and learning are well suited to respond to the UN SDGs in a local context, as they require locally contextualized knowledge and adaptable bottom-up solutions that will vary geographically.

3. *Non-traditional forms of knowledge outputs have high impact*. From the case studies specifically, we found evidence of a wide range and diversity of research outputs, specifically beyond the peer-review journal article. This highlights the need to recognize, value and support non-traditional

forms scholarship in faculty assessment, funding applications and project proposals.

Guidelines to support community engaged scholarship in faculty promotion and tenure were developed alongside this impact assessment and distributed to UVic Deans, Chairs and Directors in 2018 (Tremblay 2017a). Since that time, a new collective agreement was launched in early 2020, and although not all changes can be directly attributable to this study, several academic units referenced this work in their updated guidelines.

4. *Community-engaged research and learning are natural partners.* Pedagogy is enhanced as a result of community engaged activities, drawing on connections and the creation of new theory and methodology. UVic students are strongly encouraged to participate in some form of community-engaged learning (CEL) experience during their degree and there has in the last few years been significant supports to enable to vision, including a CEL Office and Coordinator. The employment and professional development of students was one of the most significant outcome of community engaged research projects from the case studies in addition to beneficial outcomes for community partners.

Developing and conducting impact assessments can be timely and challenging. This can be even more complex given the relational and temporal nature of community engaged research and learning activities and partnerships. An impact assessment of community engaged research and learning, despite its challenges and limitations, provides important insight into the institutional assets and resources needed for supporting mutually beneficial relationships working towards common goals. Although not exhaustive, this assessment provides UVic, and possibly other institutions, with some evidence of impact and contribution of community engaged research and learning in addressing the UN SDGs. This evidence is important to push higher education and funding bodies towards a community-engaged approach in the pursuit of knowledge production that generates locally relevant solutions for the SDGs.

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