

**Towards an Assessment Model of the Impact of International Internships on the UN's Sustainable  
Development Goals (SDGs)**

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### **Abstract**

Globally, HEIs are now being measured on their contributions towards advancing the UN's SDGs. Institutionally, there is growing focus on graduating global citizens who can advocate for and operationalize sustainable futures in their professions. In this paper, we propose an impact assessment model to better understand how international internships might be contributing to the SDGs in deeper, more significant ways. The model has been developed in consultation with community and institutional sustainability expert units whose mandate is to advance the SDGs through policy work, facilitating WIL experiences, and research. Each unit independently applied their own assessment approach, designed and developed based on their expertise, to a curated sample of 78 internships from the Environment Faculty (that, we believe, has a more mature sustainability curriculum) held in 12+ countries across the development spectrum; e.g., Netherlands, China, and India. Each internship was assessed from a number of perspectives, including internship job description, specifics of the project assigned, the intern's agency within the internship, relevant application of the SDGs' 169 targets and 232 indicators to current use case, company mandate, company CSRs, etc., and coded into having had an impact on one or more of the 17 SDGs. Of the 78, ~13% were assessed as having made a definite impact on the SDGs. The three approaches applied have been integrated to create one that suits our co-op business case. Future intent is to systematically apply this model to all international internships as a pilot exercise in creating a robust and reliable impact assessment model.

## **Towards an Assessment Model of the Impact of International Internships on the UN's Sustainable Development Goals (SDGs)**

### **Introduction and Needs Assessment**

The United Nations' Sustainable Development Goals (SDGs) were adopted by the United Nations in 2015. The 17 SDGs are an urgent call for action by all countries to partner towards “ending poverty and other deprivations 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” by 2030 (United Nations, n.d.). Higher Education Institutions (HEIs) are exploring how their contributions to the 17 goals can enhance their impact on their local community and society more globally. In fact, reputed ranking organizations, such as Times Higher Education, have now included universities' success in delivering the SDGs as part of their ranking methodology (Times Higher Education, 2019).

These 17 goals have 169 targets covering a spectrum of sustainable development challenges, which are to be measured via 232 indicators. Specifically of interest is indicator 4.7 in Goal 4: “By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development” (United Nations, 2018, pg. 5; UNESCO, 2017).

Waterloo is a comprehensive mid-size university with a unique, world-class co-operative education program. The program facilitates 21,000+ co-op work terms (which we refer to as internships) annually, more than 3,200 of which are completed internationally across 60+ countries. About 1,000 of these internships are taken outside Canada and USA (University of Waterloo, 2019). Co-op internships are a key educational piece in Waterloo's degree programming with 120+ programs that have co-op

streams that require four to six 4-month, paid, supervised and evaluated internships during the degree (University of Waterloo, n.d.). As a way to better understand Waterloo's contributions towards advancing the SDGs, the co-operative education unit decided to explore how internships might be contributing to the SDGs.

### **Scope of Research and Collaboration**

Pre-existing models to assess the impact of international internships on the SDGs were sought. Much research can be found on graduate talent mobility impact (Solimano, 2008), impact of international internships on the individual themselves by area of discipline such as health (Zanchetta, Schwind, Aksenchuk, Gorospe, & Santiago, 2013), social work (Hunter & Hollis, 2013), business (Mandal & Vong, 2016) and teaching (Lupi & Batey, 2009), impact of international development efforts on the local area (Chen, 2018; Georgalakis, Jessani, Oronje, & Ramalingam, 2017), and integrating SDGs in academic curricula (Beynaghi et al., 2016; Brugmann et al., 2019). However, there was practically nothing that could be implemented for assessing the impact of international internships on advancing the SDGs. Hence the need for developing a model for such impact assessment was identified.

The staff in Waterloo's co-op department are not SDGs experts. Also, addressing all 21,000 internships was not feasible. Decisions were made to engage with campus and community experts to develop an impact assessment model that can be applied to Waterloo's internship model, that can also be shared with other HEIs who might have similar internship assessment goals. We also limited the scope to just our international internships. Three expert units were included to explore the problem: Waterloo's Sustainability Office (UWSO), Waterloo Institute of Sustainable Energy (WISE), and Waterloo Global Science Initiatives (WGSI). UWSO is the University's central hub for sustainability information, resources, and services. It also leads the university's Environmental Sustainability Strategy, part of which includes Waterloo's commitment to becoming a leader in sustainability education and research. WISE works closely with private and non-profit sector partners and the government to tackle complex energy

issues. WISE looks to shape public attitudes and inform policy. WGSi's mandate is to catalyze collective action on complex issues with special focus on projects related to Canadian implementation of the SDGs. Collectively, these community and institutional sustainability expert units' mandate is, among other things, to advance the SDGs through policy work, facilitating WIL experiences, and research.

### **Set Up**

To enable UWSO, WISE and WGSi to go deeper rather than broader given limited time and resources, the scope was reduced even further. Each unit was provided with a curated sample of 78 internships from Waterloo's Environment Faculty that, we believe, has a more mature sustainability curriculum. These 78 internships were from 15 countries: Bermuda, China (including Hong Kong), India, Japan, Netherlands, Senegal, Singapore, South Africa, South Korea, Spain, Sweden, Taiwan, Uganda, and United Kingdom. Data included student's academic program, organization name, NAICS code (as classified by co-op staff), intern's job title, city and country of the internship, job description and job responsibilities (provided either by the employer or by the student for self-arranged internships), and skills required to do the job (provided either by the employer or by the student for self-arranged internships).

In all the three terms that were considered, all students headed outside of Canada and USA received some basic introduction to the SDGs. At the beginning of the term, they received a handout focusing specifically on potential skills they can gain from their international experience. This handout mentioned the SDGs. During the term, their assigned student advisor kept the potential for SDG dialog open. And, at the end of the term, the students were invited to fill in a debrief survey, which had a couple of basic questions related to their exposure to the SDGs.

### **Approaches to Impact Assessment and Outcomes**

Each unit independently applied their own assessment approach, designed and developed, based on their expertise, to provide reliable and valid impact measurement.

**UWSO**

UWSO followed a qualitative approach to assessing impact of the internships. Using the SDGs' targets and indicators, they matched the organization, job description, and responsibilities to the indicators. For example, if the job description was related to scaling up of renewable energy projects in developing countries, it contributed to target 7.1. A brief description or justification as to how the organization and the job advances the related SDG was included. The intent was to identify how many jobs contribute to each of the SDGs, where more than one SDG could apply to a job.

**WISE**

WISE followed a quantitative approach. They applied four criteria to each internship with a scale of 0 = *no SDG impact*; 1 = *some impact*; and 2 = *deep SDG impact*. These four criteria are as follows:

Organization / Job-related:

1. Business Model – Core Questions: Is the Organization a Non-Profit or Social Enterprise? Does it engage in local enablement? Does it monitor, evaluate, and/or publicize its SDG impacts?
2. Organizational Mission – Core Question: Is the mission of the organization to address one or more SDG via its mission, vision, values, or highly-visible public statements?
3. Stakeholders/Clients/Beneficiaries – Core Question: Does the organization's work primarily benefit underserved communities or the natural environment?

Student-experience related:

4. Internship Experience – Core Question: Does the co-op student's role involve learning about the SDGs via training/educational resources or direct work contributions?

Each internship, then, could score as low as 0 and as high as 8.

**WGSJ**

WGSJ, too, took a quantitative approach. Based on their deep SDG domain knowledge and engagement with several frameworks (CBRS Transformational Company, n.d.; Ho, Clarke, & Doherty,

2015; Ho & Runnalls, 2018; International Labour Organization, n.d.; Living Wage Canada, 2013;

Possibilian Ventures, n.d.), WGSi came up with seven criteria to apply to each internship:

Organization-related:

1. Sustainable purpose (scale: 0 = *No*; 1 = *Yes*)
2. Sustainability culture & governance (scale from -1 = *Did not consider impact* to 4 = *Verify impact*)
3. Value chain influence (scale from -1 = *Negative* to 2 = *Leader*)
4. Actively trying to do things differently (scale: 0 = *No*; 1 = *Yes*)

Intern-related:

5. Has agency within role (scale: 0 = *No*; 1 = *Yes*)
6. Has influence on decision making (scale: 0 = *No*; 1 = *Yes*)
7. Makes a living wage (scale: 0 = *No*; 1 = *Yes*)

Each internship, then, could score as low as -2 and as high as 11.

### **Outcomes**

The outcomes of the three approaches, shown in Table 1, reveal that a relatively low percentage of internships were coded as having had an impact on one or more of the 17 SDGs.

**Table 1**

*Impact of International Internships on UN's SDGs as Assessed by Three Independent Approaches*

	UWSO	WISE	WGSi
Measurement	By number of internships that impacted an SDG Records flattened to 57 (by organization name)	By cumulative score	By cumulative score Records flattened to 63 (organization name & job title)
Outcome	<ul style="list-style-type: none"> <li>• No impact: 34 internships</li> <li>• Impact on at least 1 SDG: 20 internships</li> <li>• Impact on 2 or more SDGs: 3 internships</li> </ul>	<ul style="list-style-type: none"> <li>• Score 0: 37 internships</li> <li>• Score 1 – 4: 25 internships</li> <li>• Score 5 – 6: 6 internships</li> <li>• Score 7 – 8: 10 internships</li> </ul>	<ul style="list-style-type: none"> <li>• Score -2 – 0: 41 internships</li> <li>• Score 1 – 4: 6 internships</li> <li>• Score 5 – 7: 7 internships</li> </ul>

	Specifically:	<i>(considered as having significant impact)</i>	• Score 8 – 11: 9 <i>(considered as having significant impact)</i>
	<ul style="list-style-type: none"> <li>• SDG 4, 5, 6, 10, 13, 14: 1 count</li> <li>• SDG 15: 2 counts</li> <li>• SDG 9: 3 counts</li> <li>• SDG 8: 4 counts</li> <li>• SDG 7, 11, 12: 5 counts</li> </ul>		
Key Takeaway	Since the records were flattened by organization name, it can be said that 23 of 57 (40%) <i>organizations</i> had impact on at least 1 SDG	10 of 78 (13%) internships had significant impact	9 of 63 (14%) internships had significant impact

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### Learnings

On the average, each approach took about 8-10 hours of one expert's time, split halfway between developing the approach and applying it across the internships. Such an approach, where entire job descriptions are reviewed and organizations are researched, is just not scalable, not to mention that co-op staff are not sustainability experts. Researching company corporate social responsibility and other sustainability indicators is not possible. Resourcing needed to categorize impact in this manner is prohibitive. The other big challenge was that organization names and job titles were a poor indicator of anything SDG related. Some job descriptions were very sparse, and/or had no information that indicated anything sustainability related.

An approach that is more scalable, consistent and sustainable is needed that is low resource and low cost, and may include the following:

- Systematic data gathering of current job perspective, with self-declaration of relevance of the job to a given SDG by the organization, and self-declaration of tie-in of a given SDG to the job experience by the student during consultation with their student advisor

- Enhancement of the internship experience by facilitating a self-directed guided conversation during the term, followed by short surveys about the experience to the organization and the student after the internship
- Facilitate authentic reflection via the post-internship report
- And, perhaps, in the future, some form of student equivalent of employer impact awards (University of Waterloo, 2020) as reward, and badges, microcredentials, and/or SDG-related internship specializations as recognition

## 6.0 Future Work

Experiencing this exercise in collaboration with UWSO, WISE and WGSJ gave rise to some interesting philosophical questions, the approaches to which will all likely accrue towards the institution's leadership and stewardship in impacting the SDGs in deeper, more meaningful ways. For instance, how might one bridge the disconnect students might see with their work and their philosophy? For example, having completed multiple internships in the oil and natural gas industry, they might realize that their field of study might be doing more harm than good. What concerted effort might the institution have to direct towards responsible education, to guide students to be effective influencers for global change within their industries through their curricula and internships?

It is clear for Waterloo's co-operative education business case that the next step is to amplify awareness of the SDGs in some sort of guided manner. Lack of awareness and knowledge is one of the most critical challenges in achieving the SDGs. The Global University Network for Innovation (GUNI, 2019) suggests that raising awareness is key towards implementing the SDGs for 2030. One practical way that Hall and Tandon (2017) suggest overcoming this challenge, is building knowledge in partnership. As such, the immediate plan is to focus on programming that can systematically facilitate a self-directed guided conversation during the term to raise awareness of the SDGs with the students and the organizations, followed by short surveys about the outcomes of this exercise after the internship.

This will be implemented across all international internships as a pilot exercise in creating a robust and reliable awareness and impact assessment model.

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