

UBC Social Ecological Economic Development Studies (SEEDS) Sustainability Program

Student Research Report

Synchronizing Sustainability Education Across Higher Education Community Orientations

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University of British Columbia

FNH 497

Themes: Climate, Community

Date: Aug 31, 2020

Disclaimer: "UBC SEEDS Sustainability Program provides students with the opportunity to share the findings of their studies, as well as their opinions, conclusions and recommendations with the UBC community. The reader should bear in mind that this is a student research project/report and is not an official document of UBC. Furthermore, readers should bear in mind that these reports may not reflect the current status of activities at UBC. We urge you to contact the research persons mentioned in a report or the SEEDS Sustainability Program representative about the current status of the subject matter of a project/report".

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Executive Summary

With sustainability goals and milestones set across multiple strategic and action plans, it is important for The University of British Columbia (UBC) to be prepared to implement new programs to help increase sustainability literacy and behaviours across the UBC community. In order to succeed in reducing UBC's greenhouse gas emissions by 100% of 2007's figures by 2050, UBC must ensure that every member of the UBC community is on board with sustainability. By targeting all incoming students and employees at UBC during orientation, UBC will be able to summarize the urgency of climate action and showcase other sustainable programs to the general population.

This study examined a total of 15 institutions in North America and interviews were conducted with six. Common strategies that were observed included having a booth, touring, targeting students on residence, and giving presentations to promote sustainability to students during orientation. In addition, initiatives for employees include receiving a general overview of sustainability and programs during their orientation. The report also contains a brief overview of what several institutions have decided to do, given the context of the novel coronavirus disease (COVID-19). It is suggested that UBC take the action of implementing a booth and updating their tours and employee orientations, to include sustainability-focused material.

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Synchronizing Sustainability Education Across Higher Education Community Orientations

Sustainability is not a new topic of conversation for The University of British Columbia (UBC). Having signed the Talloires Declaration in 1990, led Canadian universities by being the first to adopt a sustainable development policy in 1997, and opening a devoted campus sustainability office in 1998 (University of British Columbia [UBC], 2019d), sustainability has been an integral part of UBC's history. Ever since the creation of the Impact rankings by Times Higher Education in 2019, UBC has been one of the highest-ranked universities (Times Higher Education, 2020). With UBC prioritizing sustainability in new initiatives and programs, the goal of this directed studies report is to help UBC make informed decisions towards implementing material directly related to sustainability into their orientations for new students, staff, and faculty.

UBC previously set out bold targets on greenhouse gas emission reduction in 2010 based on 2007 emission rates. While UBC has been able to stay relatively on track by achieving a 34% reduction in 2016 (UBC, 2016), in order to reach their ultimate goal of 100% reduction from their 2007 figures by 2050, more action and investment must be made towards sustainable endeavours. With the UBC Board of Governors putting out their Declaration on the Climate Emergency (UBC, 2019a) and the renewal of the Climate Action Plan (CAP) for 2030 (UBC, 2020), this is a prime opportunity to implement new programs. By including sustainability in orientation programs, UBC also works towards its 2018-2028 Strategic Plan and 20-Year Sustainability Strategic Plan by providing a general understanding of sustainable practices to the entire UBC Community (UBC, 2018; UBC, 2014).

The focus of this report is on how other higher education institutions have successfully implemented sustainability into their orientations for incoming students and employees prior to the novel coronavirus disease (COVID-19) affecting on-campus programs (before March 2020). This includes the process for developing and integrating that programming, and parties responsible for ongoing management or coordination. Since these programs are expected to have shifted due to COVID-19, this report will also briefly cover how some institutions have reacted, and what sort of limitations or obstacles were apparent while planning these events.

Literature Review

UBC has defined sustainability as “simultaneous improvements in human and environmental wellbeing” (UBC, 2018, p. 39). While this provides a general overview of what goals relating to sustainability should strive for at UBC, Velazquez et al. (2006, p. 812) define a sustainable university as follows:

A higher educational institution, as a whole or as a part, that addresses, involves and promotes, on a regional or a global level, the minimization of negative environmental, economic, societal, and health effects generated in the use of their resources in order to fulfill its functions of teaching, research, outreach and partnership, and stewardship in ways to help society make the transition to sustainable life-styles.

This stresses that the concept of sustainability that a university should be striving for should factor in economical, societal, and environmental concerns. However, for the scope of this project, the focus will be placed on increasing environmental sustainability literacy across the campus while keeping economical and societal limitations as secondary considerations.

Research on sustainability education through orientations is not a foreign topic to UBC as a similar project was recently conducted by Nicolas Navarre, Steve Farra, and Sunjot S. Hunjan (2020) as part of their APSC 461 course. In their report, they reached out to a total of nine different institutions and managed to confirm three interviews before the end of their research. Consequently, only data gathered from those three institutions were published. To overcome this limitation, other methods of data collection were considered.

The initial step was to determine if there were other reports done outside of UBC on this subject. Sustainability and higher education have been a field of interest for quite some time now, and the main focus has been either on 1) sustainable education through curricula or 2) environmental management and sustainable development (Waas et al., 2010). With the majority of research focused on academia and pushing the envelope of sustainable technology, there were no peer-reviewed articles on how institutions have attempted to increase engagement in sustainable practices through orientation programs found. However, questionnaires and surveys have been made in the past by researchers to try to obtain general information on institutions (Nejati & Nejati, 2013; Ozdemir et al., 2020; Velazquez et al., 2006). These studies tend to focus on broader applications, measuring sustainable development as a whole. Therefore, many briefly investigate orientations and general events to increase sustainability literacy, but it was often only one measurement of the overall analysis.

In the end, the Sustainability Tracking, Assessment & Rating System (STARS) was used to both rank and gather data on top institutions with sustainable orientation programs. With STARS being a program by The Association for the Advancement of Sustainability in Higher Education (AASHE), it served as a wide database for reports done by North American

Institutions (Association for the Advancement of Sustainability in Higher Education [AASHE], n.d.).

Methodology

The process for determining which institutions should be chosen for further research was based on the institution's STARS report or added based on anecdotal suggestions. A total of 15 institutions were thoroughly investigated and contacted via email for supplemental information. Whenever possible, they were also asked for an opportunity to interview. The 15 institutions were: Arizona State University (ASU); British Columbia Institute of Technology (BCIT); Brown University; Carleton University; Colorado State University (CSU); Columbia University; Cornell University; Dartmouth University; Princeton University; Simon Fraser University (SFU); Thompson Rivers University (TRU); University of Calgary (UCalgary); University of Pennsylvania (UPenn); University of California, Irvine (UCI); Warren Wilson College. Each of these institutions were then closely examined to gather as much publicly available data as possible on their orientation programs for incoming students and employees. Data was collected from the institution's respective sustainability webpage, and their student/employee orientation sections of their STARS report when applicable. This step was done to ensure there would be data to report on regardless of the success of setting up an interview. This step also allowed for interviews to be more concise, with the structure of the following questions:

- Prior to COVID-19, who would be present at [specific event] and who would be in charge of planning it?
- Are there any surveys or other measurable ways that have tracked the success of these events?

- Who delivers sustainability information to employees during orientation and is there anything specific to departments?
- With context to COVID-19, how has planning for these programs changed?

These questions were chosen because the general overview of orientation and what sort of sustainability-focused sections exist at an institution should have been determined during the research for that respective institution. Therefore, only questions specific to details surrounding the process of planning and running the program were needed.

13 out of 15 institutions were asked for an interview, and a total of six institutions agreed. The interviewed institutions were: ASU, BCIT, TRU, UCalgary, UCI, Warren Wilson. All interview participants signed an interview consent form allowing for permission to record and retrieve information from the interview. A copy of the consent form is listed in Appendix A.

Results and Discussion

After investigating 15 different institutions, there was a wide range of orientation programs that were common across these institutions for students and employees. They could be generally broken down into having a booth, tours, residence, and presentations for students; and general training, workplace training, and highlighting programs for employees. Unless otherwise stated, all information presented refers to before COVID-19.

Student Orientation

Booths

Having a booth was the most common method of engaging with students during orientation. With the exception of Dartmouth not explicitly stating that they had a booth promoting sustainability, all other institutions clearly stated that they had a booth where

information about the sustainability office and other sustainable initiatives were shared. These booths would be mainly run by student volunteers and facilitated by one or two staff members from the sustainability office. The booth provided an opportunity for students to sign up for ways to get involved and receive swag such as reusable straws and cups. At UCalgary, their booth included interactive trivia where prizes could be won (Anonymous, personal communication, August 27, 2020). While booths seem to be a strong starting point for institutions to relay information to incoming students, ASU and UCalgary stated in their interviews that they stopped handing out flyers due to their environmental impact as well as lack of evidence that they were effective (Anonymous, personal communication, August 21, 2020; Anonymous, personal communication, August 27, 2020). The representative from ASU has also expressed that their booth was “probably more passive than active” (Anonymous, personal communication, August 18, 2020), referring to the fact that it would require the students to choose to engage with the booth first.

Tours

Many institutions also had mandatory or supplemental tours for students. Mandatory tours, such as the ones at ASU, would highlight a few things surrounding sustainability (Davis, 2020), while other institutions such as Warren Wilson, UCalgary, Columbia and Cornell had optional tours that focused on sustainability (Flood, 2020; Meyers, 2018; Schwartz, 2018; Zemanick, 2020). Registration for these tours would often be presented at their booth. These tours allowed the institution to showcase sustainable infrastructures, such as Leadership in Energy and Environmental Design (LEED) certified buildings, the sustainability office, and general practices such as waste management, and land use. In the interview with a representative

from Warren Wilson, they explained that they allowed representatives from any major stop to speak for themselves, to reduce the amount of information the tour guide would personally share (Liechti, personal communication, August 07, 2020). While tours seem to be an interactive way for students to learn about sustainability, UCalgary did mention that there is usually a significant decrease from students that initially sign up and seem interested in the tours, and the number that shows up (Anonymous, personal communication, August 27, 2020).

Residence

The majority of institutions had dedicated programs during orientation for students moving into student residences. Institutions such as Carleton and Princeton also provided a “sustainability tool kit” or “sustainability survival kit” that included detailed information to make their move-in more green (Mansfield, 2017a; Weber, 2018a). Carleton’s sustainability toolkit covers the topics of energy and water conservation, waste and recycling, sustainable food choices, transportation, and how to get involved.¹ The survival kit from Princeton also included a “reusable Princeton ‘Drink Local’ water bottle” alongside its own promotional material (Weber, 2018a). Carleton also had a move-in sale that allowed students to purchase an assortment of products from students that moved out the year before to reduce waste and reuse products in decent shape (Mansfield, 2017a).

Residence Advisors (RAs) would receive specific training on sustainable practices to both lead by example and answer any questions that may come up. An example of this would be UPenn’s sustainability manual for RAs and Graduate Associates.² Alongside RAs, students in residence, in general, receive additional information on topics such as water management and

¹See Carleton University(2016), for the complete Sustainability guide.

using energy-efficient lightbulbs. UPenn would also distribute over 500 LED lightbulbs to students (Schuh, 2018a).

Presentations

Several institutions, such as Warren Wilson, UCalgary, and CSU also offered presentations and seminars that spoke about sustainability, and usually how it related to their respective institution (Flood, 2020; Meyers, 2018; Tedrick, 2019). It served as a platform for students keen on sustainability to learn more about specific programs, as well as the general student to become informed about them.

Other

Several institutions had unique programs that were worth showcasing.

Brown University. Student and staff volunteers would be situated next to compost bins in their dining hall for the first two weeks of classes so they could educate new students on waste sorting (Royal, personal communication, July 31, 2020).

Cornell University. Sustainability Goosechase Scavenger Hunt is a relatively new program at Cornell that has been continued due to its success in the previous year (Kilgore, personal communication, August 19, 2020). The scavenger hunt aims to “nudge sustainable behaviour change and highlight the many amazing resources that exist to progress sustainability on campus” (Zemanick, 2020). Activities were added daily for the first couple weeks of the semester and bi-weekly thereafter.

UCalgary. Any event at UCalgary could become certified sustainable by the Sustainability Office. Being a recognized green event would allow the branding of a Sustainable Event Banner (University of Calgary, n.d.). With many events during orientation being labelled

²See University of Pennsylvania (2020), for the complete sustainability living guide for RAs and GAs

as sustainable, it brings awareness to students attending as well as creates discussions on the matter. The process for getting approved follows a checklist containing detailed questions on venue choice, accommodation, event promotion, food choice, waste, event materials, set up, and exemplary practices (Anonymous, personal communication, August 27, 2020). Afterwards, the event could be given a bronze, silver, or gold ranking.

Table 1

Summary of Student programs During Orientation Discussed at Interviewed Institutions

Institution Name	Booths	Tours	Residence	Presentation
ASU	x	x	x	
BCIT	x			
TRU	x			
UCalgary	x	x	x	x
UCI	x		x	
Warren Wilson	x	x	x	x

Employee Orientation

General Training

With the exception of Warren Wilson, all institutions that mentioned having sustainability education in their orientation for employees were given as part of their one-day onboarding training or general online training. While both ASU, UCI, and UCalgary mentioned that they were working towards having more focused orientation made for specific departments (Anonymous, personal communication, August 21, 2020; Metzgar, personal communication, August 26, 2020; Anonymous, personal communication, August 27, 2020), the overall consensus was that the volume of new employees hired made it difficult for orientations to be tailored for

²See University of Pennsylvania (2020), for the complete sustainability living guide for RAs and GAs

specific departments. In general, information shared briefly covered how employees could get involved with sustainability, learn about what their institution is doing in terms of sustainability, and an overview of sustainable practices.

Workplace Training

Warren Wilson, due to the size of the institution, has been able to provide employees with tailored orientation programs (Liechti, personal communication, August 07, 2020). This allows, for example, employees working in food services to learn about sustainability specific to food waste, and office workers to learn about paper usage. UCalgary mentioned that since they are in the process of updating their training modules, there are plans for the addition of more in-depth sustainability training in their UAdvanced sections while their UBegin remains as general orientation material (Anonymous, personal communication, August 27, 2020).

Highlighted Programs

During orientation for employees, if any sustainable program that employees could join existed, they would be highlighted during orientation. The most common program would be becoming a sustainability ambassador or eco-rep; where employees would be able to spend several hours a month of paid work time, to focus on sustainable initiatives. This would include joining other members for meetings, attending workshops or seminars, and communicating sustainable practices to colleagues. This would become an avenue for employees to learn workplace-specific strategies. However, ASU and TRU acknowledged that these programs have not been successful, with ASU currently trying to update their “Green Devil Network”, their equivalent to a sustainability ambassador, to a broader training program called “Green Devil Certification” with plans to expand into a “Green Devil Ambassador” program (Anonymous,

personal communication, August 18, 2020). The goal of this is to engage with more employees and increase discussion surrounding sustainable matters at ASU. At TRU, the pilot for the sustainability ambassadors was done approximately five years ago. Due to budget restrictions and seemingly lack of appeal, the program has not been run this past year (Gordon, personal communication, August 21, 2020). While other institutions have not commented on the successes or failures of their program, it is worth noting a few statistics from them. As of 2017, Carleton had 95 out of 2855 employees registered as eco-reps (Mansfield, 2017b), and as of 2018, UPenn had about 100 out of 30,127 employees as Staff & Faculty Eco-Reps in 2018 (Schuh, 2018b), 103 out of 6700 employees at Princeton (Weber, 2018b), and 30 out of 5338 at UCalgary (Howard, 2018).

Table 2

Summary of Employee Programs During Orientation at Interviewed Institutions

Institution Name	General	Specific	Sustainability Ambassador Type Program Highlighted
ASU	x		x
BCIT			x
TRU	x		x
UCalgary	x		x
UCI	x		
Warren Wilson		x	

Reports and Results

Of the six interviewed institutions, ASU, UCalgary, and TRU were the only institutions that were able to speak on surveyed data. However, UCI mentioned that over time, they have seen increased student engagement with sustainable events (Metzgar, personal communication,

August 26, 2020). At ASU, they say that based on their survey data, sustainability literacy has increased over time, while measures in behaviours have not seemed to have changed (Anonymous, personal communication, August 18, 2020).^{3,4} UCalgary performs a Sustainability Culture and Literacy survey whenever they renew their STARS report. While unable to access this data, UCalgary shared that students that volunteered with the Sustainability Office were required to do a before and after survey on sustainability literacy, and there were strong general trends of improvement (Anonymous, personal communication, August 27, 2020). At TRU, a sustainability literacy survey was completed in 2015. The data from this survey shows that the majority of participants recognize the World Wildlife Fund, the Sustainability Office, and David Suzuki Foundation, as well as heard of or participated in the 5 campaigns mentioned in their report (Prism Engineering, 2015).⁵ TRU also noted that they have been successfully using social media to engage with their members, as well as measure the overall success of their programs (Gordon, personal communication, August 21, 2020). It was also mentioned by ASU and TRU, that while engagement about sustainability during orientation was great for increasing awareness, it is believed that due to the sheer volume of information exchanged during orientation, specific discussions surrounding sustainability may be easily forgotten (Anonymous, personal communication, August 21, 2020; Gordon, personal communication, August 21, 2020).

COVID-19 Changes

Across all larger institutions, orientations are in the process of being moved online. While Warren Wilson and BCIT both have transitioned a portion of their orientations online, these smaller institutions still rely on partial in-person orientation (Liechti, personal communication, August 07, 2020; Pereira, personal communication, August 05, 2020). However, Warren Wilson

³See Arizona State University (2011), for the complete survey

⁴See Christiansen, et al. (2012), for the complete report done on ASU

⁵See Prism Engineering (2015), for the complete report done on TRU

has still chosen to create a recorded tour of their campus to showcase sustainability virtually and they have hosted several seminars online. Anecdotally, there seems to be an increase in attendance for their seminars since the online formatting has become more accessible to everyone. Other institutions interviewed have been using their respective learning management platform to deliver orientation materials (ex. Canvas). Worth mentioning is that UCalgary has chosen to use Campus Groups to set up their virtual booths, and Volunteer Impact to continue engagement with students (Anonymous, personal communication, August 27, 2020).

Unfortunately, TRU has seen downsizing and budget cuts to their sustainability office due to COVID-19. However, they are still working towards initiatives to educate students and employees on how sustainability at home may be different from on-campus (Gordon, personal communication, August 21, 2020).

Discussion

Limitations

The majority of the information gathered for this report was obtained from either the AASHE STARS reports, which are both self-reported and based in North America, the institution's website, or from speaking to a representative from that institution. Therefore, this study may be heavily influenced by how the respective institutions chose to present their information. All the institutions investigated were also situated in North America and therefore lack perspective from the rest of the world. There was also still a heavy reliance on requiring additional information through interviews. It is also important to note that orientations are often managed by a different portfolio, with the sustainability office contributing several programs towards it. With the majority of interviews being conducted with a member from the

sustainability office, it may neglect other initiatives other departments have been doing at orientation surrounding sustainability. It would be beneficial to attempt contact with departments that would handle student affairs, or human resources for employees, for a more in-depth look in the process of planning orientation programs. With more time or additional personnel spent on this project, all these limitations should be overcomable.

Suggestions

UBC already has the framework for many of these programs, and may only require small changes to implement several strategies. For example, UBC Sustainability runs a year-long commitment, Sustainability Ambassador Program for students that offers engagement with sustainability issues and become role models for sustainability leadership (UBC, 2019b). Similar to other student volunteers at the other institutions, UBC could feasibly set up a booth during Imagine UBC or on AMS Campus Base that showcases sustainability. UBC also frequently hosts campus tours for visitors and has all incoming students tour UBC on Imagine Day. Tour guides and Orientation Leaders may be educated on some Sustainability programs to relay onto tour attendees. Since there is a lack of evidence that optional sustainability-focused tours are helpful, it is suggested that expansion upon existing tours should be a priority over designing a new tour for sustainability.

Following with employee orientations, UBC already seems to have department-specific orientations. The use of orientation time to educate on sustainability at work, as well as promote programs such as the Sustainability Coordinators Program, could increase sustainability literacy and engagement across the board. With UBC currently having over 120 Sustainability Coordinators (UBC, 2019c), UBC has a similar amount of coordinators as other institutions.

With increased advertisement on the program during orientation, the potential of employees getting involved with sustainability increases.

Given the current state of COVID-19, more follow up would have to be done to see the results of these transitions done by other institutions. However, with AMS clubs already using Campus Groups, and faculties providing their orientation through a Canvas course, the addition of a sustainability module should be considered. This also circumvents the concern of overbearing students with too much information during orientation as the modules may be considered a permanent addition.

Conclusion

After reviewing 15 unique institutions, orientations for students revolved around having a booth, tours, residence, and presentations; and general training, workplace training, and highlighting programs for employees. With UBC looking to increase sustainability literacy through orientation programs, these are all examples of what could be integrated into what UBC has. Building upon Imagine Day and highlighting existing programs would be the most easily applicable next steps.

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Appendix A

Interview Consent Form

Synchronizing Sustainability Education Across Higher Education Community Orientations

Stakeholder & Collaborators:	Campus and Community Planning Tawnee Milko, Sustainability Engagement Lead tawnee.milko@ubc.ca SEEDS Sustainability Program Meryn Corkery, Program Coordinator seeds.coordinator@ubc.ca
Faculty Supervisor:	Dr. Andrew Riseman, Associate Professor andrew.riseman@ubc.ca
Student:	Kyle Sum k.sum@alumni.ubc.ca

Purpose:

The University of British Columbia (UBC) put out a [declaration on the climate emergency](#) in December of 2019. While UBC has been on the forefront with sustainability research and climate action planning, UBC wishes to increase its sustainability literacy through orientations for staff, faculty, and students, based on best practices at other institutions. The objective of this project is to conduct an environmental scan of post-secondary institutions to assess how other post-secondary institutions have embedded sustainability education in orientations across campus. This project is done as part of a directed studies course for credit.

Study Procedures:

As a participant, you will be scheduled for a 30 minute online interview conducted via Zoom. Expected topics for discussion are: elaborating on orientation programs at your institution for students, staff and faculty, including barriers faced when implementing programs, measurable benefits after implementation, and delivery methods, explaining the management of your sustainability office including stakeholders, key players (staff or student bodies), and funding, and the process of how new program or policy is implemented.

Project Outcomes:

The goal of this project is to provide best practice recommendations for UBC in the context of a climate emergency to inform the Climate Action Plan process and contribute to UBC's Sustainability policies. All data collected will be stored on the student's (Kyle) personal computer, while the final report will be published on the SEEDS database for public access.

Consent:

Your participation is entirely voluntary and you may refuse to participate or withdraw at any time. During the interview you may refuse to answer specific questions.

The interview will be recorded on Zoom. Please notify ahead of time if you wish for the interview to not be recorded, or performed on a different platform.

Your signature indicates that you consent to participate in this study.

Check this box if you wish to be listed as a contributor
Leave blank to remain anonymous

Printed Name

Date

Signature