Final Report

Education & Awareness

UNIVERSITY OF TORONTO SCARBOROUGH

3 GOOD HEALTH AND WELL-BEING

4 QUALITY EDUCATION

7 AFFORDABLE AND CLEAN ENERGY

11 SUSTAINABLE CITIES AND COMMUNITIES

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EESC34: Sustainability in Practice

Abstract

The purpose of this report is to improve UofT's education and awareness of sustainability by comparing the school with its other campuses and various universities. Data will be used to identify the strengths and weaknesses in the school's sustainability awareness and education. For instance, the report contains some data collected from the university's official website. The report will examine the university from four different SDG perspectives: Good Health and Well-being, Quality Education, Affordable and Clean Energy, Sustainable Cities and Communities. The overall findings suggest that, when compared with other universities, UofT did make significant efforts in SDG 11 Sustainable Cities and Communities and SDG 4 Quality Education, however, there will need to be an improvement overall. All the research data was collected through online resources, therefore, some of the data might be slightly out of date and some results may not reflect the current state of reality.

Keywords

- ➔ **Education:**
  - ◆ The process of receiving or giving systematic instruction, especially at a school or university (Oxford Languages Dictionary).
- ➔ **Mental Health:**
  - ◆ A person's condition with regard to their psychological and emotional well-being. Mental health includes our emotional, psychological, and social well-being (Oxford Languages Dictionary). It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make choices ("What is mental health?" n.d.).
- ➔ **Green Technology:**
  - ◆ Term that describes technology that creates clean energy and uses renewable resources.
- ➔ **Study Space and Housing:**
  - ◆ On-campus dedicated study space and on-campus housing.
- ➔ **Clean Energy**:
  - ◆ Energy that comes from renewable, zero-emission sources that do not pollute the atmosphere when used, as well as, energy saved by energy efficiency measures ("What Is Clean Energy," n.d.).

Introduction

The University of Toronto has made a lot of efforts to improve its education and raise awareness for sustainability. The St. George campus was originally founded on March 15, 1827, originally known as King College, but later renamed. The second campus to be built was the Scarborough campus (UTSC) which was founded in 1964, originally known as Scarborough College, then renamed as a University of Toronto campus. The Mississauga campus (UTM) is the third campus to be built. UTM was founded in 1967 and was originally known as the Erindale campus before being renamed in 1999. The first student enrolled in the main campus in 1859, the first students enrolled in UTSC in 1965, and the first UTM students enrolled in 1967. Since then the school has further progressed into one of the most well-known Canadian universities. Although being at the top, there are still necessary improvements to be made for these four Sustainable Development Goals. Good health and well-being are vital for students to succeed academically. Although the university has provided resources to help students, long wait times for mental health services can be detrimental to students. Quality education is another aspect that is important for students in order for them to become leaders in sustainability. The Scarborough campus, for example, has an overcrowding issue, and the lack of study space results in students leaving campus to study. This causes some students to miss out on school initiatives that occur on campus, thus affecting student's education quality. The university has created a low carbon action plan, aimed at creating affordable and clean energy. There is also an Institute of Sustainable Energy that connects students with experts which gives a chance for students to gain experience. In order to accommodate the increase of students, UofT has been expanding campuses and incorporating green technologies into its buildings. All of this is documented on the university's website and allows students to learn about sustainable cities and communities in practice. By examining the university through these four SDGs, it will allow for a proper analysis of the strengths and weaknesses in the university's education and awareness of sustainability.

Methods

In order to understand issues pertaining to education and awareness and to understand ways in which improvements can be made, individual research was conducted for each Sustainable Development Goal. Each SDG's research revolved mainly around the method of observation of different online sources. According to each goal, different matters were researched to acquire the proper information, but all within the same main objective and observed from a similar style of sources. University official websites were observed and

analyzed to understand the different obstacles faced within each SDG and to understand where improvement was necessary. News articles were analyzed to gather information on public and student opinions to solidify the need for advancement. Pertaining to SDG 3, a few student organization websites were examined and information on mental health services was also obtained. The most important source looked into was official university websites, which were observed and analyzed in order to gather information on different objectives and initiatives conducted at those schools that prove beneficial to be implemented within UofT. Once the data was gathered, further analysis was conducted to gain a better understanding of the project topic as a whole, and recommendations were made to resolve the issues gathered from the analysis of the different sources.

Results and Discussion

SDG 3: Good Health and Well-being

Sustainable Development Goal 3, Good Health and Wellbeing, aims to "Ensure healthy lives and promote well-being for all at all ages" (W.H.O, n.d). Regarding SDG 3 within the University of Toronto campuses, it can be seen that there are minimal efforts in place to aid students or staff with mental health services. Although there are some slight efforts, many criticisms still point out the lack of mental health support. On the UofT and UTSC website, it is difficult to find a list of mental health service links, so the student union has compiled a list of all mental health services in an effort to support students with better mental health services, which the student union itself should not have to be the ones to form that list (Mental Health Directory, utsu). Along with the struggles of obtaining services on the main website, there have been complaints of campus security being seen as overly passive when responding to calls for help, which negatively impacts the student motivation for calling for help. In November of 2020 a young woman, Anushka, who attends UofT's Mississauga campus went to the Health and Counselling Centre "after struggling with feelings of being overwhelmed and anxious about living up to academic demands and grappling with unresolved trauma" (Treleaven, 2020). Once Peel police arrived, Anushka stated how " the police marched her to a police car parked behind the busy central bus stop, and the officers told her they would have to put handcuffs on her before placing her in the car" (Treleaven, 2020). This unnecessary force brings fear and panic to those who are already struggling. Furthermore, students have been known to be usually put on long waitlists to obtain these vital services, and there is very little record as to how many students are placed on these waitlists on a regular basis. The past suicides and the almost yearly occurrences of them show evidence of the lack of mental health support within the campuses and

point out the improvement is required as soon as possible (Campbell, 2020). This adds to the unwillingness that many students feel to reach out to access the help and services they need. The recent rise in the number of students who need these mental health services shows the importance of making improvements to UofT's mental health services (Levine, 2019). Following other school's footsteps and their initiatives could lead to great progress. There have been many initiatives seen from other schools and organizations. For instance, Brock University has been ranked #1 in mental health services as they provide much more aid and support than most universities. They provide initiatives such as;

- A workshop explaining anxiety and providing strategies to fight it (Cavanagh, 2019)
- A panel of undergraduate students and graduate students advising the Student Wellness & Accessibility Centre, allowing for students themselves to help others as they can relate and empathize (Cavanagh, 2019)
- Partnering with agencies such as the Community Addiction Services of Niagara and the CMHA, these partnerships ensure that mental health initiatives are supported by a larger system that extends beyond the campus (Cavanagh, 2019)

York University has also set out a Mental Health Annual report in 2017 and 2018 to improve their services, stating how they intend to; "adopt the framework of an overarching well-being steering committee. This committee would adopt the five-pillars of the well-being definition and create separate working groups/committees for each pillar" (Beagrie, Francis, Killick and Myers, 2017-2018). A few of their set out initiatives for those years included:

- Organized a Wellbeing Summit attended by 75 individuals from all areas of campus, to discuss wellbeing within our community. Summit resulted in a report with recommendations to increase well-being across campus. (all) (Beagrie, Francis, Killick, and Myers, 2017-2018)
- Implemented Psychological Standard elements as part of the Competency Framework. (faculty/staff) (Beagrie, Francis, Killick and Myers, 2017-2018)
- Continue project with Centre for Human Rights, Equity & Inclusion and Health, Safety and Well-Being on mental health language and how to further reduce stigma surrounding mental health issues, disabilities, and accommodations. (all) (Beagrie, Francis, Killick, and Myers, 2017-2018)
- Began work on a mental health awareness opportunity grant open to student groups running events with regards to mental health (funds established, guidelines created). (all) (Beagrie, Francis, Killick, and Myers, 2017-2018)

These extra initiatives seen to be implemented by the 2 schools have proven to help many students and have been seen to truly benefit the students. Taking a bit more extra time and adding workshops or tactics have the ability to further serve the many students who attend UofT more than would be thought. It can be seen here that by looking at these 2 universities, they have much more planning and thought put into supporting their students. Good Health and well-being not only focuses on physical aspects but mental health as well and without many services and the support needed, it will not be a sustainable environment for education and there will be further struggles in accomplishing the heavy workloads seen at the University of Toronto.

SDG 4: Quality Education

When discussing Quality Education in a university setting, the focuses are mainly based on the education activities like better career support, student-oriented course material, and better technology support (Bezpalko et al., 2016). However, there is one problem that is rarely addressed regarding quality education, that is the overcrowding problem in university, namely the resident spaces and study spaces and these two factors heavily contribute to the normal student activities. When study spaces are limited, students may be forced to study outside the campus and therefore limit student's opportunities to engage in campus activities like club activities or group projects. When resident spaces are limited, students may have to choose to live far from school, which increases commute time and increases safety risk. For example, on May 30, 2018, one student was killed near UTSC due to a house fire.

According to UofT official websites, 93,081 students (2020) are currently studying at UofT (UTSG: 62,864, UTSC: 14,230 and UTM: 16,014). In comparison, Mcgill University has 39.736 students (2020) and Waterloo has 42,000 students (2020). In UTSC for example, there are only 844 resident spaces available, which is around 5.9 % of the total student population. UTSG has 6,502 resident spaces, which is around 10% of the total student population. UTM has 1,551 resident spaces, which is around 9.6% of the total student population. Mcgill University has more than 3000 residence spaces, which is around 7.5% - 10% of the total student population. The University of Waterloo has 5,724 resident spaces, which has the highest residence to student ratio at around 14%. This result shows the general housing condition in UofT is on an average level with other universities but there is an urgency for UTSC to increase its residency potential. The good news is that the new UTSC residence center will open by 2023, and 750 residents will be available for students, which adds the total resident space in UTSC to 1,594, which is around 11% of the total student population.

The other overcrowding problem is the lack of library and study space. There are 40 libraries in UTSG, 13 in Mcgill, and 7 libraries at the University of Waterloo. UTM and UTSC only have 1 library each. Many students in UTSC complain on social media (such as on Reddit and Facebook) that they cannot find study spaces around the university and the library is always full. The study space issue is only partly resolved by adding more desks and chairs in public spaces. However this is neither an ideal nor long-term solution because these public areas are not intended to be used for study and students are allowed to do other activities like group projects, dining, and other social activities.

SDG 7: Affordable and Clean Energy

The objective of Sustainable Development Goal 7 is to ensure access to affordable, reliable, sustainable, and modern energy for all. According to the University of Toronto's Institutional Research and Data Governance office, "[the school] was ranked 99th in the world among universities for the volume of scholarly publications related to SDG 7, with 320 publications between 2009 and 2018" ("SDG 7 – Affordable and Clean Energy," n.d.). Aside from research related to SDG 7, the University of Toronto has developed various innovations that advocate for sustainable energy. For instance, Reeddi is a "clean energy start-up founded by University of Toronto alumni [that] sustainably provides clean energy at a price point that individuals and businesses operating in energy poor regions of the world can afford" ("SDG 7 – Affordable and Clean Energy," n.d.). Moreover, when it comes to sustainability education and awareness relevant to SDG 7 at the University of Toronto, there are notable teaching efforts since "there are 94 undergraduate courses [in total across all three campuses]" ("SDG 7 – Affordable and Clean Energy," n.d.). Furthermore, sustainability awareness is prevalent among facilities and operations because "there are 61 faculty at the University of Toronto whose work is closely related to SDG 7" ("SDG 7 – Affordable and Clean Energy," n.d.). Additionally, the University of Toronto developed its Low-Carbon Action Plan from 2019-2024, a proposal that details various clean energy initiatives for the school to achieve. In terms of outreach and partnership. Furthermore, UofT established the Institute of Sustainable Energy (ISE), which is a multidisciplinary centre designed to unite researchers, students, teachers, industry, and government, with the goal of increasing energy efficiency and reducing the environmental impact of energy use. UTSC also has a Clean Energy Lab, which works on various projects with the ultimate objective of expediting the transition to renewable energy.

On the other hand, when compared to different universities, the University of Toronto will need to further improve education and awareness related to SDG 7, especially when it comes to outreach and partnership. For instance, within the Morris J. Wosk Centre for Dialogue at Simon Fraser University, there exists Clean Energy Canada, which is a climate and clean energy program. Clean Energy Canada "[works] to accelerate Canada's clean energy transition by… conducting original research, convening influential dialogues, informing policy leadership, and building citizen engagement" ("We are Clean Energy Canada", 2020). Aside from the ISE and Clean Energy Lab, it is evident that there are not enough outreach or partnership initiatives relevant to SDG 7 that would further improve sustainability education and awareness at the University of Toronto. Moreover, the University of Toronto should take action and divest from fossil fuels. The school should sell their stock holdings and redirect these investments, this decision takes into account the impact of climate change and preserves a safer climate. The effect of this plan would be quite significant as "fossil fuel divestment will make national news and build momentum for more universities in Canada to divest" ("Divest U of T", n.d.). For example, at Boston College, students are advocating for their school to divest by "taking a new approach, moving its arguments off campus and into the halls of government" (Whitford, 2020). If the University of Toronto re-directs its investments, this initiative would impact a meaningful and influential response, validating the efforts of students across campuses in North America.

SDG 11: Sustainable Cities and Communities

When looking at the university through the lens of sustainable development goal 11, UofT has done fairly well in educating the public on what is being done to make campuses sustainable. With many of the new buildings, UofT is doing its part to create sustainable cities and communities. The environmental science and chemistry building in the Scarborough campus was constructed in 2015 and it uses an assortment of green technologies and was awarded the LEED Gold designation (Environmental, n.d.). Education is a significant part of sustainability for people to learn the skills necessary to create sustainable cities and communities. UTSC has compiled a list of courses on its website based on each of the SDGs, making it easily accessible for students to find courses related to sustainability. There are 37 courses offered that specifically focus on sustainable cities and communities.

Another way that the university educates and raises awareness on sustainable cities and communities is through workshops. In February, the Environmental Sustainability Society (ESS) and the Geography and City Studies Student Association (GCSA) hosted a two-day workshop to allow students to learn from professionals in the field. University professors, alumni, Ph.D. students, and experts in the field were brought on as guests to speak with students and provide

experience.

UofT has done a decent job by informing the public on its sustainability goals with its "Energy Conservation and Demand Management Plan." This document, made in 2019, contains information on what the university plans to do for the next five years. The university has compiled data showing how much energy its campus is using and how much greenhouse gases it is producing, as well as how those numbers can change as old buildings are being retrofitted with new green technology (University of Toronto, 2019). The report lists all the green technology that is being used such as geo-exchange heat pumps, solar power stations, exhaust heat recovery systems, and more (University of Toronto, 2019). These technologies are explained, allowing readers to be informed on how these systems work. A lot of the data is shown using graphs, tables, and pictures which lets readers who are not knowledgeable on the topic or not fluent in science easily understand the topic that is being discussed. One problem with this report is that it only focuses on the St. George Campus and there are no other reports that are similar to this one for the Scarborough or Mississauga campuses.

When comparing what the university has done to Ryerson University, UofT is lacking in some areas but also excels in others. Ryerson has an Energy Conservation and Demand Management Plan as well and is very similar to UofT's document. Both of these reports data from 1990 however, Ryerson's future plan is lacking. UofT has set goals to accomplish by 2024 but Ryerson included future plans without a date (Ryerson University, 2019). Ryerson also created a sustainability yearbook that walks through its sustainability projects and initiatives however it was made for 2016-2017 and has not been updated since. The yearbook acts as a quick overview and caters more to the general public because the data included is very generalized. One upside to the yearbook is that it is much easier to read making it more accessible to people outside this field of study. UofT has a strategic plan for 2019-2024 that is similar to the yearbook but it only dedicated one page for sustainability.

Recommendations

Good Health and Wellbeing:

The highest recommended approach regarding health and well-being is to implement more workshops throughout campus for the many students who can benefit from it and be able to learn more knowledge and tips on how to handle their mental health issues. Another strong recommendation is to work with larger associations to provide even more mental health services and any other assistance those associations can provide. This allows for a greater variety of health services which allows for more opportunity for students to get the help that they require. Providing an annual mental health report is also something that would be beneficial to see by the

school as it can be easier to track initiatives and progress made throughout the years. These recommendations for SDG 3 are ones that can provide a more overall sustainable personal environment for students to better learn and retain information.

Quality Education:

UofT in general has a decent amount of study space and residential space. However, one recommendation for UTSC specifically is to have more dedicated study spaces for students and these spaces should not be used as a public area. Compared with UTSG, Mcgill, and Waterloo, UTSC has far fewer libraries (Only 1 library) and the library is usually packed with students. Therefore, a new library is highly recommended. It can provide more accessibility for students and help them to engage in school and could provide many new dedicated study spaces without interference. The housing problem in UTSC will be solved by 2023 with the new resident center, but currently, UTSC has the lowest housing to student ratio (5.9%). There will be still a two-year gap before the issue is solved, therefore, it is recommended for UTSC to have more off-campus housing support and provide reliable housing resources for upcoming fresh year students in September.

Affordable & Clean Energy:

The University of Toronto can improve education and awareness related to SDG 7 simply by taking action. First and foremost, the school will need to accelerate its transition to affordable and sustainable energy systems. This progress can be achieved by investing in renewable energy, prioritizing energy efficiency practices among campuses, and adopting clean energy technology and infrastructure. UofT should commit to sourcing facility electricity needs from renewable sources. Also, based on its experience transitioning to online education due to the pandemic, UofT can further improve e-learning initiatives to decrease the need for students to commute. Furthermore, on-campus efforts can be established for students to reduce their carbon emissions, such as carpool or bike share.

Sustainable Cities & Communities:

The university can improve awareness of sustainable cities and communities by hosting more in campus events. It is unlikely that most students will actively research this topic so it is important to try to educate and raise awareness while students are on campus. UofT should also create an "Energy Conservation and Demand Management Plan" for its Scarborough and Mississauga campuses so that people who are interested in this topic can learn what the university plans to do

with its other campus.

Conclusion

The University of Toronto has both strengths and shortcomings in regard to all four SDG goals. With the introduction of the "Energy Conservation and Demand Management Plan" in 2019, UofT places itself at the forefront of sustainable university development. Nevertheless, the school will need to continue to strive towards accomplishing relevant SDG goals to proliferate sustainability education and awareness among students and faculty members. UofT must urgently take action and improve on supporting students' health and well-being by providing better mental health services. Also, although the school has courses designated towards further understanding each of the SDG goals, more facilities and study spaces need to be developed to provide quality education for all students. In terms of contributing to building sustainable cities and using affordable and clean energy, UofT is on the right track towards accomplishing these sustainable objectives. Taking each recommendation and implementing them throughout the three campuses can achieve great improvement within each SDG and overall improvement to a sustainable education and learning environment.

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