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# **The effect of funding and its relation to the disconnect of knowledge applicability through sustainability activities at the University of Toronto Scarborough (UTSC)**

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## **Abstract**

The dissociation of applicability and knowledge provided by conferences, talks, and workshops is a deterrent in sustainability. As learning through hands-on methods and other avenues is not overtly accessible, it makes it difficult to enforce such practices towards a more eco-conscious society at the University of Toronto Scarborough (UTSC), however, understanding this disconnect can further improve the effectiveness and efficiency of sustainability education. One theory is that funding might be a factor in this applicability. Therefore, in order to address the qualitative nature of experience, surveys and questionnaires were given to a variety of different UTSC students, university organizations, clubs, and participants of IDC. Further, quantitative data in the accumulation of funding figures from sources such as student unions across the three campuses and a variety of other universities such as Carleton, York, Queen's, Wilfrid Laurier, and Ottawa, either through direct correspondence with their sustainability office or from their website, was found. To combine these two aspects, the feedback received from subjective opinions was grouped into general sentiments to see if these were aspects that could be improved by funding. In the research conducted, it was found that the major criticisms of conferences and workshops were their irrelevant information and lack of networking opportunities. However, there were limitations to the research. As little information was available for sustainability conferences in particular at UTSC, conferences and workshops in general were considered. Further, the ability to reach sustainability offices at other universities was dependent on reply rates.

**Keywords** : Conferences, Education, Sustainability, Universities, Workshops

## **Introduction**

Implementing sustainable practices given the current climate can be difficult. Disagreements that can occur from municipalities to governments due to differing ideals and goals limits the ability to make strides in environmental regulations and innovations. Despite this, there are various other ways to make an impact, ranging from personal actions to community wide initiatives and enforcements.

Also, as the emergence of environmentally conscious products, energy sources, and agriculture has increased over the recent decades, education has had to encompass and highlight these new movements towards a more eco-friendly future. Academic institutions such as universities can play a large role in the accessibility and understanding of such knowledge. Events such as conferences, talks, and workshops can also be hosted in order to display and educate students and communities on current issues, important information, and other topics of interest, being done outside the lecture hall. Using a variety of methods such as experienced speakers, hands-on activities, and visuals like posters or videos, the conveyance of ideas and messages has many avenues. However, the ability to learn about sustainability through such methods and applying it to everyday scenarios appears to suffer a large disparity as students from a range of disciplines do not seem to be receiving enough guidance on these matters (Watson et al., 2016).

Reinforcing the tie between learning and applicability will push forward these ideologies into subsequent generations and emphasize the importance surrounding sustainability and its practices. As our environmental situation becomes increasingly dire, the more apparent and critical it is to ensure that everyone is knowledgeable and informed about the decisions they make, be it political, economical, and societal in relations to the environment (Biedenweg et al., 2010). This starts with students.

We aim to understand, given the context of a university, the factors influencing such applicability which was investigated at the University of Toronto Scarborough (UTSC) with a focus on the aspect of funding and its influence on the integration of knowledge and its receptibility for students. It has been seen to enhance the quality of various scientific workshops by having access to larger venues and having better resources, enabling more research into applicability and effectiveness of what was learnt (Sufi et al., 2018).

However, as we strive to understand how this potentially affects students in particular, our main research objective was how funding impacts conferences, talks, and workshops. Given the subjective nature of opinions and individual experiences, we addressed this objective both qualitatively and quantitatively with the hopes of closing this application disparity and understanding how to ensure that sustainability does not remain in the hands of people of science, but is accessible to all disciplines and beyond.

## **Methodology**

The data acquired covered both quantitative, funding numbers across various universities, clubs, and organizations, and qualitative information, based on students' individual experience and feedback. Combining the two aided in addressing the large-scale question of whether funding has a significant effect on conferences, workshops, and talks.

### *Quantitative Methodology*

The quantitative data looked into funding information allocated towards sustainability-related workshops and conferences. The Scarborough Campus Student Union (SCSU), the University of Toronto Mississauga Student Union (UTMSU), the University of Toronto St. George Student Union (UTSU), UTSC student clubs, the University of Toronto Environmental Resource Network (UTERN), and other Ontario universities were the research sources. The methodology used to collect information from SCSU, UTMSU, and UTSU was through documents and records; specifically, through tuition invoices across the three campuses to verify how much is allocated to student clubs. This was done by contacting various currently attending students and multiplying the invoice amount by the recorded number of students for 2018-2019, as listed on the University of Toronto (UofT) website. Further, funding sources were collected for UTSC clubs through interviews and records, as well. For example, a variety of Departmental Student Associations (DSAs) can be branched under sustainability, such as the International Development Studies Students Association (IDSSA) and the Political Science Students Association (PSSA). Although sustainability is not their main focus, they do address topics under sustainability because environment and development fit under IDSSA and environmental politics coincides with PSSA. For some DSAs such as IDSSA, PSSA, and Environmental and Physical Sciences Association (EPSA), and student clubs such as the Chem Society, interview methods were used to conduct the research on funding sources and amount. Furthermore, for a general sense of club funding, the documents under the Department of Student Life's (DSL) official website were analyzed to give an overall sense for how funding can be obtained.

Next, data from UofT's Environmental Resource Network (UTERN) was gathered through an interview with the UTSC representative, Raymond Dang. UTERN focuses on allocating resources to different environmental initiatives across the three UofT campuses. Therefore, during the interview we asked specifically which events at UTSC did UTERN support, in order to understand funding allocation.

Lastly, the methodology used to collect funding data of other Ontario universities was through official documents and records found on their sustainability office pages which reported the university's sustainability fundings. In addition, if the websites did not list the funding source, emails were sent to the sustainability offices at the various universities to gather the information through correspondence. The criteria of selection on which Ontario universities to accumulate the data from was based on geography and the availability of information. The goal of this data set is to have a range of Ontario universities in various different locations, so the amount of universities analyzed was not the main concern. Preliminary research would be required to allocate where certain universities were so a scattered range could be achieved to see if geography played a role in funding (i.e. larger cities accumulating more funds). Furthermore, if a university did not provide needed information on their websites or did not respond to emails, it was removed from comparison. This did not affect the overall objective, which was largely to achieve a sense of funding amounts from other Ontario universities in different regions. The following quantitative data was collected from March 8 - March 18, via interviews at UTSC and through online resources.

### *Qualitative Methodology*

The qualitative data looked into sources such as the International Development Conference (IDC), the UTSC student body, the University of Toronto St. George (UTSG) Sustainability Office, and other Ontario universities for information regarding how sustainability-related workshops and conferences were received by their participants. For UTSC clubs and the IDC, the data was collected through interviewing the attendants and gathering their feedback regarding how their events were. Examples of the questions asked during the interview were what the types of sustainability events were hosted by their club and how they were able to apply what was learned through the IDC workshop or talk. Next, the data from the UTSC student body was collected using a questionnaire, with a sample shown in Figure 1, to understand how workshops and conferences were received by their participants. Personal questions were asked in the beginning to keep record of whether there was an underrepresented group (i.e. input from second year students). In addition, specific questions such as ranking the quality of conferences and workshops at UTSC followed by explaining their likes and areas of improvements were asked as the core source of information.

The goal for this data collection was not to have a specific quantity of responses, but rather to have a diverse group of students from a variety of majors provide feedback. As sustainability covers a diverse range of topics, from environmental to social, the questionnaire was aimed to reach out to students from multiple different disciplines to gather an overall scope on their feedback for conferences and workshops. Lastly, the data on the UTSG Sustainability Office and other Ontario universities were collected through records and documents found on their official website. For the Ontario universities, they would allocate specific sustainability hyperlinks within the official website which led to the main sustainability office/organization page in which all the past events and collaborations were listed. Overall these methods allowed for a better understanding of conferences and workshops, both sustainability-related and in general at UTSC. The following qualitative data collection was acquired from March 8th - March 18th, via online or through interviews conducted at UTSC.

## UTSC Conference/ Workshop Feedback

We would love to hear your thoughts or feedback on previous conferences/ workshops/ activities on campus!!

What year are you in? \*

First year

Second year

Third year

Fourth year

Fifth year+

Master or PhD

Rank how much the workshop/ conference inspired you:

1    2    3    4    5

Not inspired at all                        Very inspired

Have you ever been to a workshop or conference? \*

Yes

No

Other: \_\_\_\_\_

Would you attend more workshops/ conferences like the one you're reflecting on?

No

Less likely

Uncertain

Very likely

Yes

Was this workshop or conference related to your interests/ studies/ career goals?

Yes

No

Briefly explain the reasoning for previous answer (i.e. needs more hands-on activities or visuals, needs to be more engaged with audience, should provide an networking opportunity, great information, etc.)

Your answer \_\_\_\_\_

Figure 1. Sample of the UTSC conference and workshop questionnaire sent out to the UTSC student body to assess their feedback regarding previous workshops and conferences.

## Results

### *Quantitative Reports*

The results for the quantitative data reports for the UTSC clubs are shown in Figure 2. The IDSSA 2019-2020 President, Raisa Masud, stated during her interview that the department chair decides how much the DSA will get from them annually and how much to spend on each event. Therefore, in general, it is understood that department chairs decide the amount provided to the department club. Overall, “Department of Student Life” (n.d.) illustrates how the DSL lists funding opportunities for clubs, as shown in Figure 3. Funding for the Sustainability Office is shown to be provided by Facilities and Services at UTM and UTSG, however, at UTSC it is not operational (“Facilities & Services”, n.d). Furthermore, the interview with Raymond Dang, UTSC Representative at UTERN, stated that UTERN collects around 30-50 cents through tuition but that not UTSC clubs applied for funding and the two who planned to were cancelled due to Covid-19. Another record found was the funding generated for clubs via student unions per semester, across the three different campuses, as shown in Figure 4. The funding collected by SCSU was \$2.69 per semester, UTMSU was \$4.21 per semester, and UTSU was \$2.23, as seen in the invoices for the Fall semester, then these amounts were multiplied by the number of attending students for 2018-2019 (UTSC = 14, 050, UTM = 15, 546, and UTSG = 61, 960); the aggregate funding is compared in Figure 4 (“Quick facts”, 2019). Lastly, information on the other Ontario universities’ fundings for sustainability activities are illustrated in Figure 5, demonstrating the source of funding or the exact amount allocated to sustainability initiatives and activities.

<b>Student Club / Department Club</b>	<b>Sources of funding for events</b>
IDSSA	Department chairs will allocate a specific amount of funding to cover special events (i.e. networking night) and fundraising is done to cover costs as well.
EPSA	Funding for workshops and conferences are collected through tickets that are charged and from membership fees (\$10.00).
PSSA	Funding is obtained by the DSA Director (student representative), they received \$500 this year.
UTSC Chem Society	Fundraising (i.e. liquid nitrogen ice-cream sales) and applying for SCSU reimbursements.

Figure 2. Different funding methods for a variety of clubs

<b>Funding Opportunities listed under DSL</b>	
Membership Fees	Charges rarely exceed \$10.00, this is to cover costs without charging them the same as non-members for events.
Fundraising	Admission fees for selling food and clothing.
Sponsorship	Campus groups can contact external organizations asking for a sponsored collaboration.
The Council on Student Services (CSS) Enhancement Fund	CCS provides \$55,000 per year to different groups and projects that aid student life on campus.
SCSU Clubs Funding	About \$50,000 annually is allocated to events and activities for groups
Hart House Good Idea Fund	Supports student-led programming and prioritizes activities under student life.

Figure 3. Funding opportunities listed by DSL for general clubs on campus, as seen from the list, clubs such as UTSC Chem Society utilize one or more of the methods (fundraising and SCSU funds) (“Department of Student Life”, n.d.).

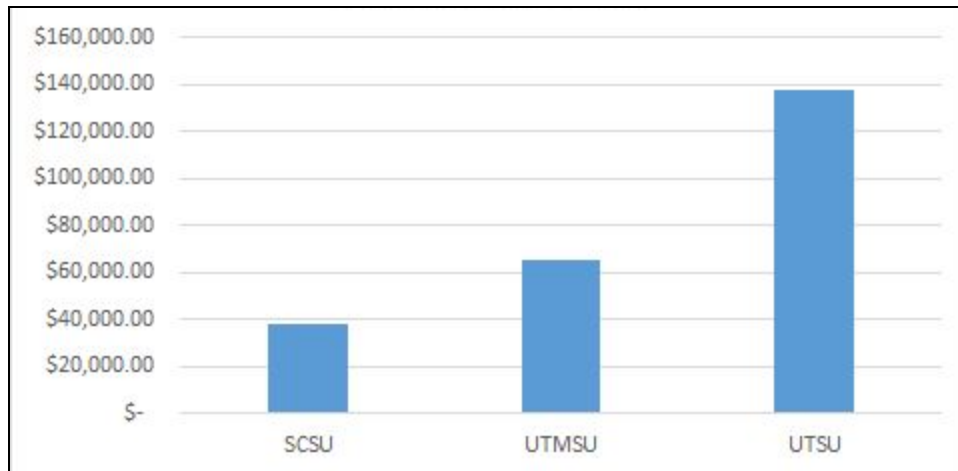


Figure 4. Aggregate amount of funding collected by student unions via tuition, across the different UofT campuses per semester.

<b>Ontario Universities:</b>	Ottawa University	Wilfrid Laurier University	Queen's University	Carleton University	York university
<b>Funding amount (\$)/ source:</b>	500-15,000 for projects	Sustainable Hawk Fund	Sustainability Budget and Waste Budget	Green Revolving Fund and Green Engagement Fund	Regenesis at York and Sustainability Innovation Fund

Figure 5. Funding allocation of various Ontario universities for sustainability activities (“A Strategic Plan for Embedding Sustainability”, 2013; “Sustainable Hawk Fund”, 2020).

### *Qualitative Reports*

The results for the qualitative reports regarding the feedback information on previous sustainability-related conferences and workshops are shown in Figure 6 which illustrate the responses by IDC attendants based on talks. Furthermore, the attendants additionally stated that the networking portion of IDC provided career advice and a sense of direction for where their degree can take them, thus making it a desirable event. Next, Figure 7 illustrates the general feedback of the UTSC student body regarding events on campus, mostly reflecting the various ways in which events are positively received and what could be added to improve them. Furthermore, the UTM, UTSC, and UTSG Sustainability Office qualitative data on sustainability activities illustrate that UTM and UTSG’s Sustainability Office have consistent events such as Green Gala at UTSG or the UTM Sustainability week (Facilities & Services, n.d.). In comparison, the UTSC’s Sustainability Office which had events that were inconsistent, has stopped operations. Lastly, Figure 8 showcases the different sustainability-related events hosted by other Ontario universities.

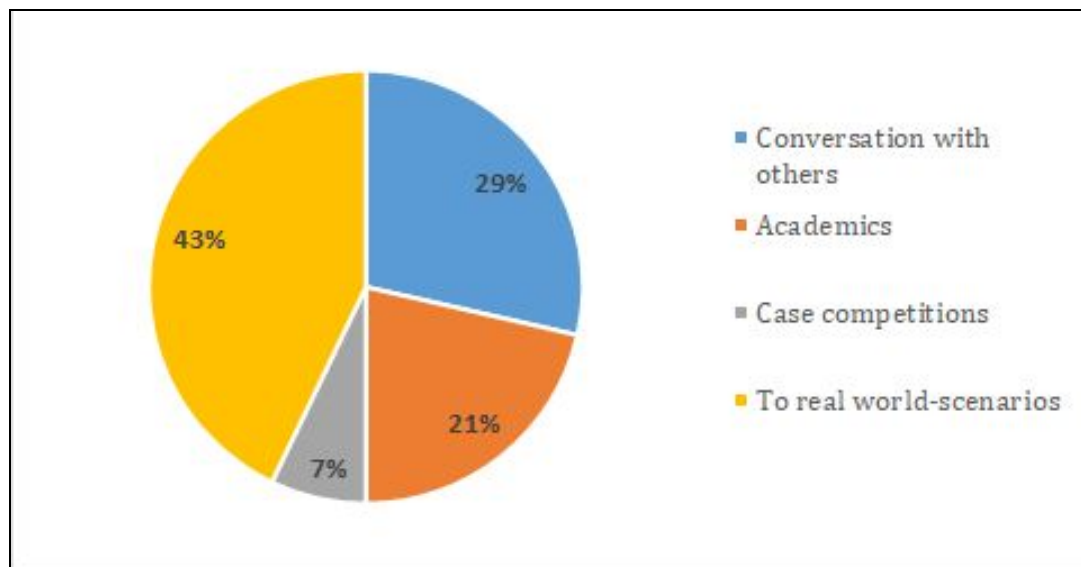


Figure 6. Methods of knowledge applicability most effective for IDC attendants

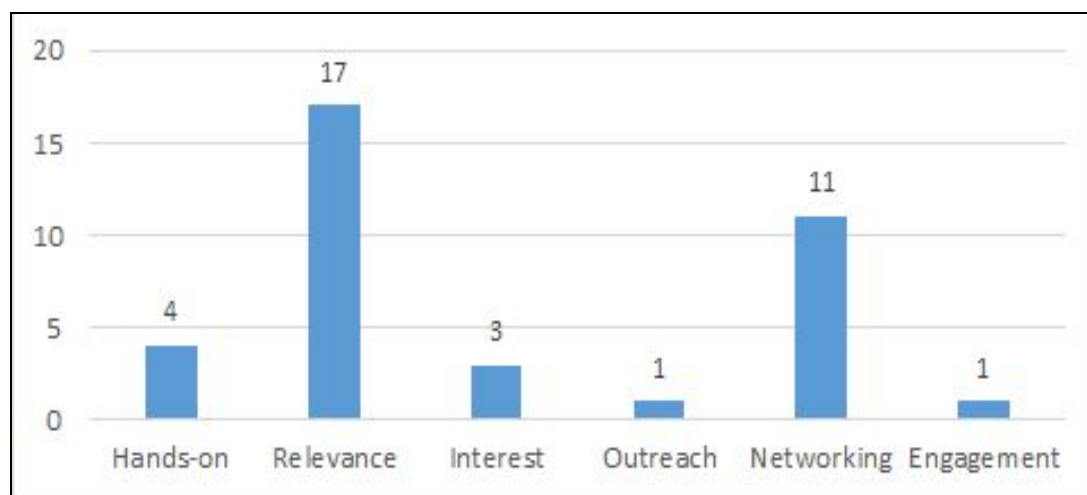


Figure 7. Feedback from the UTSC student body of what to include in workshops and conferences

Ontario Universities:	Ottawa University	Wilfrid Laurier University	Queen's University	Carleton University	York university
Some sustainability-related conference and workshop	Freestore, Muggy Mondays, Community service engagement programs	Eco-cosmetics workshop, collaborations with companies (i.e. DivaCup), urban agriculture, etc	Conservation Queen's, food banks	Carbon 613 partnership, minimum two events with different focuses (i.e. energy agriculture, etc)	Student markets, sustainability seminars

Figure 8. Different sustainability-related activities hosted and organized by other Ontario universities (“Events Calendar”, 2020; “Sustainable Hawk Fund”, 2020)



## Discussion

### *Quantitative Results*

UTM and UTSG sustainability offices are departments of Facilities & Services, and in consequence are supported by operating budgets that are funded by the university. Alternatively, the devolution of UTSC's sustainability office has significantly restricted the administrative and financial resources for sustainable initiatives at the Scarborough campus. In consequence, all conference-based sustainability learning opportunities are the sole responsibility of student clubs and unions supported by significantly less funding, either through academic departmental budgets, fundraising, or membership fees. Larger departmental student groups, such as the Environmental and Physical Sciences Students' Association (EPSA), have laid a strong foundation at the university. Sponsorships from the Association of Professional Geoscientists of Ontario (APGO) and Prep 101 equip EPSA with the tools to develop events and academic resources centred around the "hard sciences", as opposed to the Sustainable Development Goals (SDGs). Although other academic departments, such as IDSSA and PSSA, touch base with the SDGs during events, equity independently dominates the narrative. When the sustainability office was operational, students had equal opportunity for theoretical and empirical learning about the environment; however, new sustainability student groups at UTSC lack this similar foundation to support comprehensive event planning and, in consequence, are easily dismissed or overlooked by larger academic department student groups. Without the support of institutional funding, sustainability initiatives become entirely reliant on local resources that are limited to smaller scale opportunities for the student body (Chalker-Scott and Tinnemore, 2009). Therefore, environmentalism and sustainability are easily dismissed as irrelevant to the strategic objectives of the university (Atkins II et al, 2019).

Student union budgets are funded by relatively equal tuition contributions across campuses, with UTSG's budget appearing larger because significantly more students are contributing the same percentage of tuition for student services. Interestingly, the UTM and UTSC student populations differ by approximately 1.5 thousand students; however, UTM students contribute almost double for club funding. Merging a broader club budget with a departmentally-operating sustainability office, UTM has significantly more opportunity to contribute to sustainable learning and awareness on campus. Alternatively, although the budget departmentally allotted for student-run initiatives at UTSC provides a solid resource pool, it pales in comparison to the million-dollar "revolving funds" supporting sustainable development at the downtown and Mississauga campuses. Similarly, the funding resources available at the University of Ottawa, Queen's University, Carleton University, and York University, as demonstrated by Figure 5, move beyond club funding to integrate sustainability into the groundwork of the university. Sustainability Innovation Funds, Green Revolving Funds, and Sustainable Hawk Funds encompass the institutional engagement that is absent in UTSC's sustainability initiatives. Evidently, limited funding and managerial experience pose the largest barriers to implementations of sustainability on university campuses (Gomez and Yin Yin, 2019).

However, there are alternative funding resources made available to students that are unfortunately not taken advantage of, perhaps due to the weak culture of sustainability at UTSC. For example, not a single UTSC club applied for funding from UTERN. As mentioned earlier, the majority of student-run sustainability organizations are still in the process of developing a foundation at the university without administrative support. In consequence, these organizations may either be unaware of the resources they

have available, or lack the experience to develop the large-scale events that require expansive funding to begin with.

### *Qualitative Results*

General survey results highlighted workshop and conference elements that are critical in enhancing the applicability of conference-based learning. Survey responses in Figure 6 reported 41% of surveyors voted for relevance and networking opportunities as the most important elements of a workshop or conference, indicating career development opportunities within specific academic fields as critical for ensuring consistent involvement from the student body. Building events centred around the interests of students is vital in ensuring both positive and applicable outcomes. Accordingly, students feel more rewarded when workshops and conferences engage hands-on, experiential learning opportunities to encourage personal growth and development (Verbeke, 2015). In the case for UTSC, students highly value networking opportunities that encourage connections with professionals and leaders in relevant academic fields. Without these opportunities, attendance drops. Student-run organizations at UTSC relying on the “free labour” of volunteers lack consistency, which would otherwise be provided through institutional support, required to create rewarding workshop opportunities for participants (Chalker-Scott and Tinnemore, 2009).

The devolution of UTSC’s Sustainability Office increases the burden on student-run clubs and associations to develop these networking opportunities in the field of sustainability. Volunteer-based organizations result in weak outreach, limited opportunity for practical application, and inconsistency (Chalker-Scott and Tinnemore, 2009). The limited number of small, student-run environmental organizations at UTSC lack the resources to independently develop comprehensive networking events for careers in sustainability. Alternatively, the sustainability offices at UTM and UTSG operate as a Facilities and Services department, and in consequence have access to the administrative resources to bring together diverse professionals involved in sustainable work. Therefore, institutional funding provides expansive budgets that open opportunities for broader scale workshop development, consequently limiting the burden on local resources (Chalker-Scott and Tinnemore, 2009). The St. George campus, located in the urban core of Toronto, has stronger ties to leaders in sustainable innovation. The sustainability office at UTSG uses these resources to their advantage, creating the expansive networking opportunities for their students that UTSC may not have the capacity to replicate. Sustainability is a broad field of study, and requires the cooperation of operation managers, faculty, academic directors, and students for holistic program development (Atkins II et al, 2019). As a suburban-based campus, resources at UTSC are limited in comparison to densely populated urban areas (Kubatova and Pederson, 2013).

### *Challenges and Solutions*

The current circumstances complicated communication with other universities. Province-wide closures of post-secondary institutions impeded direct communication with administrative resources either over the phone or through email correspondence during the quantitative data collection process. However, the delayed response times encouraged further investigation through official university websites and financial statements to independently gather the required information. Fortunately, the data was accessible, since universities were relatively transparent about departmental funding opportunities

and tuition spending breakdowns. Given that sustainability-related initiatives are limited at UTSC, it was challenging to acquire students' perspectives and input about sustainable initiatives on campus through survey responses. In consequence, the research scope of the survey was expanded to identify general workshop and conference elements that encourage stronger skill transfer and adaptive learning. However, it was challenging to survey a diverse demographic of students from a variety of majors and academic backgrounds. To limit restrictions to fourth year students, the survey was posted on UTSC Facebook groups, such as the "Accepted Graduating 2023" page, as well as Instagram pages.

## **Conclusion**

UTSC seeks to become a sustainable campus, but seems to have fallen short of their goal as our research presents the preliminary aspects in which the campus is struggling. In particular, lack of awareness, weak culture of sustainability across the masses, and poor management. All of these appear to stem from the absence of adequate funding and knowledge of available means of financing sustainability related events. It is important to create awareness and provide proper financial backing for these events on campus in order to foster a stronger connection between applicable skills and sustainable knowledge. The focus is limited only to departments and courses that pertain directly to environmental matters, rather than being diversified throughout all of them. The use of workshops and conferences that are properly funded can provide access and quality information to everyone, regardless of major. The research, education, and the community involvement that universities provide, can be a fundamental role in producing societal change and environmental effects (Larrán, 2015).

## **Recommendations**

Moving forward, it is important to realize and understand the value that each aspect of awareness, management, and culture of sustainability provides. It is then vital to do a few things in order to move towards a more sustainable UTSC. The first step requires providing more general awareness of these environmental initiatives and resources available to students. This can be done through more announcements, newsletters, and events around campus. Furthermore, it is vital to increase participation in crafting an eco-aware campus by including the community, faculty and students in order to cover a wide variety of educational expertise. This could then inspire and foster more leaders who could push movements and ideas forward. But without this prior adjacency, few will realize their potential interest in the subject.

Secondly, for the purposes of facilitation, there is a need for better management and leadership. UTSC currently lacks any governing body in the sustainability office or any passionate individuals to organize change and guide others through progressive movements in regards to eco-events. This may be difficult for a variety of reasons such as the geography of the campus. It is very isolated and with it being a commuter school, people are not usually on campus for long periods of time. Potential leaders and students are likely to live far away, making it troublesome to host and attend events at UTSC. Further, the lack of proper funding and leadership required to appropriately facilitate the transition towards better eco awareness, as seen in the research, also proves to be a stagnating factor.

Lastly, if these recommendations are taken in stride, they could help work towards developing a stronger sense of a sustainable culture, a connectedness to the campus, and improve environmental

initiatives by increasing their quality, broadening their reach to non-science students, and highlighting the importance of sustainability. Knowledge of what systemic changes are needed is there, however these steps are not easy as they require long term and widespread organizational change in order to bestow sustainable values and behaviours into faculty and students (Kezar, 2017).

While funding is a key aspect in developing and growing environmental movements, the ultimate objective is in improving the learning and daily integration process of sustainability. By combining these multiple aspects, UTSC can foster a more environmentally minded community that will push for change and implement greener initiatives not only among science students, but across the campus. It is pertinent that this starts now.

In conclusion, it is important to understand the vital aspect that funding plays in developing education and information about sustainability not only at UTSC, but across all universities. With this in mind, funding is a key foundation for successful workshops and conferences, alongside the aspects of management, awareness, and creating a more environmentally minded student body. Through this holistic approach, UTSC can vastly improve its delivered content in relation to sustainability.

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