

MAPPING THE SDGS AT DUKE

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Background

In 2015, the United Nations created 17 interconnected goals as a call to action "to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030" (UN 2015). These Sustainable Development Goals (SDGs) can be used as a set of guiding principles for institutions to analyze their economic, social, and environmental impact and identify areas of improvement. While Duke University already has several ongoing sustainability efforts, the institution would like to explicitly survey and document how its existing goals fall under the SDGs. This team's goal is to help map the university's ongoing initiatives and organizations to the SDGs, research other institutions' policies concerning the SDGs, and provide recommendations that could help Duke implement the SDGs in its operations in the future as effectively as possible. This will enable the institution to consider its impacts on sustainability issues and to increase transparency about its challenges and opportunities. By doing so, the institution can improve its sustainable development impact and support the ongoing movement along with other universities and companies that have taken on the SDGs.

Research Questions

1. How do Duke's activities and programs map to the UN Sustainable Development Goals? Where are Duke's strengths and areas of improvement with regards to the SDGs?
2. How are the SDGs being put into practice around the world at different universities?
3. How can Duke increase awareness and knowledge of the SDGs on the Duke campus and encourage individual action?



Figure 1. The United Nation's 17 Sustainable Development Goals

Approach

Mapping the SDGs: To determine Duke's progress in integrating the SDGs, the team created a spreadsheet that matches Duke organizations and initiatives to the SDGs. These organizations and initiatives were found on various Duke-affiliated websites. The team performed research on each Duke-affiliated initiative's goals and achievements to map them to the correct SDGs.

Sustainability Report Analysis: To prepare recommendations to help Duke implement the SDGs into its future initiatives and operations, the team analyzed various institutions' sustainability reports. The team used this data to better understand how other universities are implementing the SDGs within their institutions, and how they are using the SDGs to support their sustainability goals.

Interviews: To better understand different universities' current ideas on implementing the SDGs within their campuses, the team conducted two staff interviews at two campuses (Table 1).

Exploratory Student Survey: To gauge campus awareness on the SDGs, the team conducted an exploratory Qualtrics survey made up of an opportunistic sample of Duke students with 8 specific questions. This was to gain preliminary, exploratory data on the team's peers' awareness of the SDGs, their interest in adopting lifestyle changes that align with the SDGs, and their perception of social media's role in supporting sustainability initiatives.

Table 1. Interviews conducted

Name	Affiliation/Occupation	Subject	Date
Melissa Maigler	Stanford Sustainability Coordinator	SDG Action Manager	March 30, 2021
David Hawley	NC State Manager of Global Programming	SDG Week	April 15, 2021

Data Analysis:

1. Conducted individual and team thematic coding for sustainability reports for other universities and useful articles, which resulted in 4 themes:
 - Institutional methods that Duke can implement
 - Ways to inform and engage individuals
 - Important statistics/data
 - Steps Duke took to accomplish the change
2. Analyzed interviews conducted in Table 1 to inform recommendations stated below including the SDG Action Manager, SDG Week, Stanford's use of STARS templates, and Bow Valley's icons in its sustainability report



Components of Sustainability

The SDGs were designed to integrate all 3 components of sustainability: economic, environmental, and social sustainability. By mapping Duke initiatives and organizations to the SDGs, Duke can address all three components of sustainability. For example, Loyd Ray Farms and Duke's Carbon Offsets Initiative addresses both economic and environmental sustainability and contributes to SDGs 7, 9, 11, 12, and 13. Additionally, the Duke Farmer's Market promotes all three aspects of sustainability equally, while also contributing to SDGs 2, 8, 11, and 12.

Figure 2. Loyd Ray Farms, a Carbon Offsets Initiative part of Duke's Climate Action Plan

"As an academic institution it was really important that we help, not just our own operations, but also the staff and students and the wider community to understand the connections that both the University's operations but also their own behaviors have on the global frame."

- Melissa Maigler on why Stanford chose to implement SDGs in their campus operations and their importance

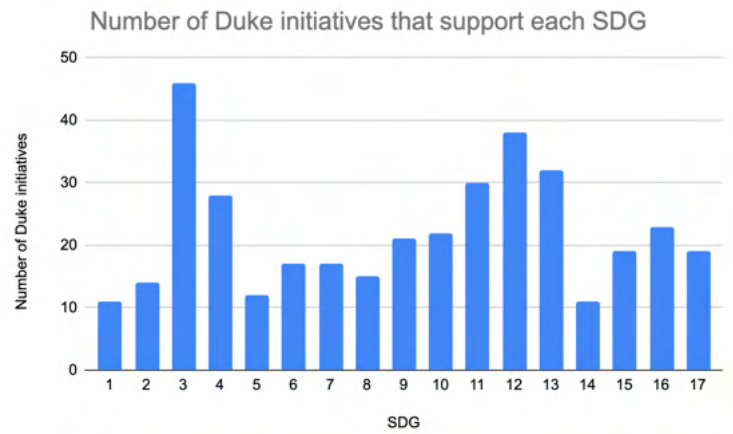


Figure 3. Initiatives/Groups in support of each SDG at Duke

Key Findings

RQ1: Spreadsheet mapping Duke's current initiatives and organizations to the SDGs (Figure 3)

Duke has initiatives that address all the SDGs, but some SDGs are more frequently represented than others.

- Most represented: SDG 3 (Good Health and Well-Being), SDG 12 (Responsible Consumption & Production), SDG 13 (Climate Change)
- Least represented: SDG 1 (No Poverty), SDG 5 (Gender Equality), and SDG 14 (Life Below Water)

RQ2: How the SDGs are being put into practice at different universities

- using service learning as a method to engage students with the SDGs (Albareda-Tiana, 2018)
- investigating curricula, departmental websites, and research for connections to the goals (Goodall, 2020)
- sustainability faculty give guest lectures on the SDGs to increase sustainability literacy and suggest how individuals could better align their actions with the SDGs (BVC Sustainability Report, 2020)
- adding icons to the annual sustainability report to clearly show which SDGs are being addressed (BVC Sustainability Report, 2020)
- following an Objectives and Key Results system, designing a scoring system, and using stakeholder inputs to develop a methodology for all sustainability-related decisions (Villanova Sustainability Leadership Council, 2020)
- invest in quantitative measurement and evaluation of social media efforts helps improve sustainable development outcomes and reaching strategic goals (Carpenter, et. al, 2016)
- Stanford created the SDG Action Manager to set specific SDG-informed targets for campus organizations and track progress
 - prioritized the SDG Action Manager but also considered GRI, CDP, and STARS framework
- NC State is a member of the University Global Coalition, a platform where universities and higher education organizations work with the UN and other relevant organizations to support the adoption of SDGs (Duke is not currently a member of this coalition)
- Times Higher Education's Impact Ranking: universities submit SDG implementation progress (Duke is not currently ranked)
- NC State found that publicizing events (SDG Week) on social media was not as effective at encouraging student attendance as utilizing connections with honors/scholars programs and faculty

RQ3: How can Duke increase awareness and knowledge of the SDGs, and encourage individual action?*

- 72% of respondents indicated that they do not know what the UN Sustainable Development Goals are.
- 43% of respondents did not have an opinion and 21% had a negative opinion about Duke's progress in addressing the SDGs.
- 76% of respondents interact with instagram stories the most.
- 66% of respondents said they would be willing to make small lifestyle changes to become more sustainable.

Survey Results*

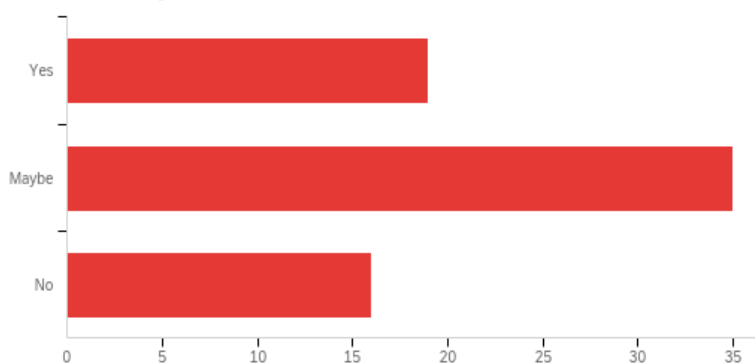


Figure 4. Survey Question 4 - Would social media posts influence you to make small changes in your life related to the SDGs?

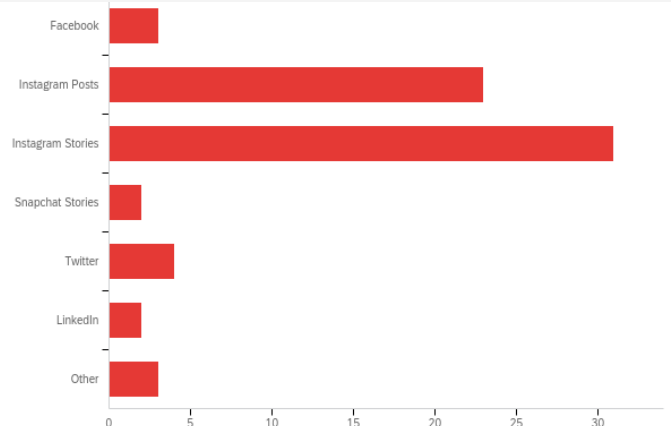


Figure 5. Survey Question 5 - Which social media platforms do you engage with the most?

*Note: All 72 respondents are the team's Duke friends and colleagues. This is not a representative sample of Duke's entire student population.

Conclusion

Making progress on the Sustainable Development Goals is important to ensure that universities are headed in the right direction in their social, environmental, and economic action plans. Overall, the research collected and analyzed by the team makes it clear that Duke's existing initiatives and organizations already map to the SDGs very well. Based on reviewing several official university documents and club mission statements, some SDGs like SDG 1 (No Poverty), 5 (Gender Equality), and 14 (Life Below Water) do not have as much representation in clubs and initiatives. If Duke wishes to be more well-rounded in its approach to the SDGs, Duke may want to promote more initiatives in these areas. But ultimately, Duke is still committed to all 17 SDG-related issues since Duke can be committed to an issue without a large number of organizations in support of that cause. From the survey results, respondents may be interested in supporting the SDGs and willing to make changes to do so, but awareness for what they are is still very low. Also, social media might be an effective mechanism to provide learning resources, but partnering with on-campus organizations and professors might be better for publicizing events.

Recommendations

RQ1: Mapping Duke to the SDGs

- Conduct a stakeholder analysis to determine which SDGs Duke can make the largest impact in or want to prioritize, similar to what other universities have done.
- Create a free account with SDG Action Manager in order to conduct a baseline assessment, set specific targets, track progress and identify opportunities.
- Focus attention on assessed areas of improvement by working with pre-existing organizations to promote more events in support of the SDGs.
- Add icons corresponding to each SDG within its annual sustainability report and website to better communicate which SDGs are being addressed in each section of its sustainability plan.
- Join the University Global Coalition and submitting its SDG progress to the Times Impact Ranking.

RQ3: Education Towards Awareness and Behavior Change

- When advertising for SDG-related events, Sustainable Duke can present the event to campus partners and faculty to encourage students to attend. Reaching out to undergraduate (especially underclassmen and larger classrooms) classes would likely be the most effective.
- Sustainable Duke can begin to post SDG-related content using the SDG icons on Instagram stories with its current Instagram account to encourage individual action towards the SDGs. See Figure 7.



Figure 6. Interview with David Hawley

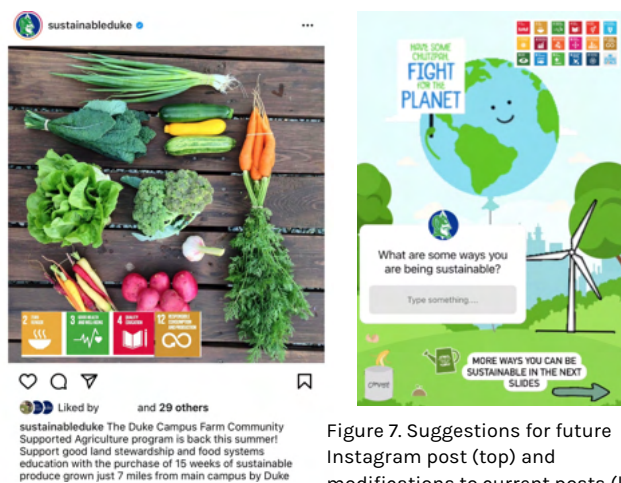


Figure 7. Suggestions for future Instagram post (top) and modifications to current posts (left)

Special Thanks to

Jason Elliott, Client and Assistant Director of Sustainable Duke

Melissa Maigler and Moira Zbella, Sustainability Coordinators at Stanford University

David Hawley, Sustainability Coordinator at North Carolina State University

Charlotte Clark, Tavey Capps, Alexandra Bennett, ENV 245 Teaching Staff



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