Developing a Matrix Mapping Yale’s Teaching and Research Connections to the UN Sustainable Development Goals
Yale University
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Introduction
Following the adoption of the United Nations Sustainable Development Goals (SDGs) by 193 countries in 2015, the Yale Office of Sustainability began a project aimed at understanding how Yale teaching and research connects to the SDGs. The aims of this work were to identify the expertise Yale University might lend to helping achieve the SDGs, to identify pathways for transdisciplinary collaboration, and to provide a rationale for thinking about sustainability in higher education beyond campus initiatives. At the heart of this work is a commitment to highlighting the role of higher education institutions – the knowledge sector – in addressing global challenges.

Over the course of two years, a team of Yale student research assistants reviewed the department websites and publications for all faculty and researchers in the University to collect information about their specialties and interest, and how their research and teaching relates to the SDGs. To streamline the process and ensure consistency between team members, the team used an online form to enter and organize the data. This methodology produced a database with over 100,000 data points reflecting the teaching, research, and writing of 4,415 Yale faculty members.
Objectives
Yale University is a global leader in teaching and research and has a strong reputation for its commitment to sustainability. Yale’s mission statement pledges it to “improving the world today and for future generations through outstanding research and scholarship, education, preservation, and practice.” President Peter Salovey states that the University is dedicated to providing essential research and innovation for local and global positive change and fostering the next generation of leaders. In 2016, Yale launched its Sustainability Plan 2025, which supports the ambitions of the SDGs and the Paris Climate Agreement. With these serving as the foundation, the SDG project had three purposes:

1. Identify the expertise Yale might lend to the process of achieving the SDGs
2. Provide a rationale for thinking of higher education sustainability beyond operational commitments and student campaigns
3. Start to identify pathways for collaboration between disciplines

Challenges & Successes
Based on this investigation, results show that every academic department or school at Yale has at least one faculty member whose scholarship relates to the SDGs, and the University has ample coverage for each SDG. Overall, key strengths of Yale are SDG 3 (Good Health and Well-Being), SDG 4 (Quality Education), SDG 10 (Reduce Inequality), and SDG 16 (Peace and Justice). While these results indicate that Yale is particularly strong on SDG 3 (Good Health and Well-Being), it is important to note that roughly half of the faculty members reviewed for this study have primary appointments in Medicine, Public Health, or Nursing. In addition, faculty members in Yale’s 11 Professional Schools, including those three schools, are often active practitioners who teach part-time.

The matrix, stored as a CSV file is being used to create multidisciplinary lists of faculty members with shared interests in key topics such as urbanization or climate change and health – generally at the request of Yale faculty and staff. Reports and charts have also been generated for interested Yale departments and Professional Schools. A comprehensive report on the SDG matrix was released in September 2018, in addition to a variety of presentations and other visibility tactics.

A key challenge to this work has been confirming data accuracy. All data collected is from publicly available information (e.g. faculty biographies, publications, news articles); however, this data is sometimes out of date and does
not provide a comprehensive overview of all work. While efforts were made to craft an interdisciplinary and well-versed in the SDGs research team, ultimately reviewing biographies and linking faculty work to the SDGs was a subjective exercise, and therefore it is important to note that this data is imperfect and requires additional validation by departments.

Next Steps
As the next steps for the project, the Office of Sustainability is developing a methodology for updating the data and confirming accuracy. As the matrix was finished in 2018, recently the task, and challenge, of keeping the data up to date has emerged. Faculty members come and go each semester and department websites and faculty information are inconsistently updated, so the team is assessing strategies for updating the data in subsequent years and possible additional analysis. The Office of Sustainability plans to continue to explore opportunities to share the data within the Yale community and to convene and participate in interdisciplinary, global dialogues about the role of universities in helping to achieve the SDGs.

Based on the SDG review, the Office of Sustainability suggested several opportunities to use the data to support existing and proposed efforts at Yale. These opportunities are:

- Promote Transdisciplinary Collaboration
- Support Efforts for Pan-university Teaching
- Encourage Students’ Passions
- Increase Knowledge of Sustainability and the SDGs
- Connect to Global Challenges

The Office is working to implement these strategies and explore its role as a local and global sustainability partner.

Learn more about the project and keep up to date on developments at the [Yale University Office of Sustainability website](#).

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