

Sustainable Development and Higher Education: Acting with a Purpose

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Higher Education Institutions (HEIs) have a unique role and responsibility for the future and for driving the development of a sustainable society. HEIs are charged with the task of fostering sustainability in the leaders of tomorrow, developing solutions and methods to address a sustainable future, and ensuring that we contribute knowledge to society. HEIs must also ensure that our everyday operations and practices are consistent with a sustainable future and that we work to holistically integrate sustainability into both the mission of a university and our daily tasks.

This Special Issue builds on papers presented during the 2018 International Sustainable Campus Network Conference [1] and also includes other contributions. The articles reflect the many aspects of Sustainability in Higher Education Institutions and illustrate innovation in approach, outcomes, and impact. From a geographical point of view, the papers originate from twelve different countries across four continents. The papers cover a range of perspectives on sustainability both on and around campuses. These include organization and management issues, networking and city partnerships themes, and metrics and indicators related to Sustainable Development Goals. The Special Issue also includes papers on education, student involvement, and gender issues. Select articles include results from surveys and desktop research; others depict approaches on experimentation, living labs, and action research.

The implementation and expansion of sustainability requires an openness to new ways of operating and new ways of partnering. These new ways are conducted on campus, in networks among universities, within relations between the city and the university, and in challenges within cities themselves [2–4]. Bracco et al. [5] write about organising in Living Labs on a campus in Genoa. They describe promising achievements on energy (self-)generation and waste collection as well as recycling. Networking and cross-university learning is important to overcome the numerous, significant challenges. Kahle et al. [6] provide a systematic study of networks, including the open national German Network of Higher Education Institutions for Sustainability (HOCH-N) and the smaller international University Alliance for Sustainability (UAS). Whitycombe Keeler et al. [7] describe a study of city–university partnerships in four countries, developing key contextual factors that may determine the effects of a city–university partnership: interest, individual competences, collective competences, and actions. Fuso Nerini et al. [8] examined how cities can contribute to decarbonising societies and what role research and innovation institutions can play, showing the complicated and large challenges in cities. They emphasize that innovation is required in technology, governance, and on a social level. Leveraging our campuses as living labs is an approach that could tackle these issues simultaneously.

Organizational transformation for sustainability is complex. As demonstrated in this Special Issue, to transform an institution of higher education requires a commitment to consider the role of course offerings, research, and operational impacts. The articles in this Issue capture and relay this challenge via case examples and in-depth analysis of universities around the globe. What emerge from these papers are the common points of entry, challenges, and opportunities, regardless of one's location in the world. Akins et al. [9] seek to understand the barriers examining Kennesaw State University as a case example. Their observations are shaped and grounded in a literature review that seeks to provide a series of lessons learned and categorization that may be shared with institutions in a similar stage of organizational transformation for sustainability. Similarly, Oyama et al. [10] articulate a methodology by which to assess a campus-wide approach to sustainability via an in-depth analysis of sustainability courses, research, campus operational commitments, and land holdings. They also outline overall obstacles and barriers to implementation that mimic those seen in Kennesaw State University; however, the institutional context is quite different. One of the Sustainable Development Goals (SDGs) concerns Gender Equality. Hansman and Schröte [11] describe how mid-career scientists evaluate the impact of gender and age on their career possibilities.

At the case-specific level, Dehghanmangabadi et al. [12] outlines the challenges of transportation demanded management at Eastern Mediterranean University. Their case example is insightful for universities that are seeking to develop comprehensive transportation systems on university campuses in a move away from expanded parking. Another type of travel that universities are seeking to model and develop a more in-depth understanding of is air travel, specifically, its relationship to greenhouse gas emissions. Given the global nature of faculty research and the student body, universities are more readily grappling with these implications. Ciers et al. [13] provide insight into how École Polytechnique Fédérale de Lausanne (EPFL) is measuring and accounting for these Scope 3 emissions. This will provide insight for universities around the world grappling with the same challenge. Hopff et al. [14] bring forth an emergent model for HEIs grounded in the principles of a circular economy. The case looks at Dutch universities and explores how the principles of a circular economy may manifest within a university campus. Uehara and Ynacay-Nye [15] looked into the willingness to pay to use water bottle refill stations at a Japanese university. Hugo et al. [16] used an action research method focussed on community participation to develop their university in Ecuador. The goal was to integrate the main university campus within a framework which guarantees sustainability and allows innovation in the living lab.

Transforming our world, which is the name of the 2030 Agenda for sustainable development, may require also a change in education practises. Troft et al. [17] describe experiences with participatory action research for undergraduates. In many ways, Brugmann et al. [18] is a unique paper because it describes an undergraduate project written mainly by students. It describes inventories of courses and other university activities based on key words. This also addresses the important aspect of monitoring and measuring, which may be necessary for transforming universities. Körfggen et al. [19] have also developed lists of key words for mapping universities research on the global sustainable development goals. This could possibly be integrated into the sustainability assessment tools of higher education institutions reviewed by Findler et al. [20], which concluded that there is a need for further development of these tools. Finally, the essay by Sonetti et al. [21] discusses the context in which universities can collaborate and contribute to triggering sustainability values, attitudes, and behavior within future regenerative societies.

Universities worldwide seek and provide common frameworks for understanding, applying, evaluating, and advancing the principles of sustainable development on campuses today. The papers in this Special Issue provide an overview of many of the aspects that higher education institutions are working with while promoting sustainable development. The value proposition of integrating these principles into institutions of higher education is clear as they will be tied to the educational outcomes of their graduates.

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