

## Introduction to the thematic collection

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### INTRODUCTION

Over a year ago, a call for contributions to this thematic collection was submitted. At the time of writing it, the global school strikes initiated by Greta Thunberg and engaging millions of people globally were the most visible and clear demonstrations of calls for a future not ravaged by climate chaos. Calls were made to declare a global climate emergency – something that countries, jurisdictions, and local governments all over the world have also done. Today, around 820 million people around the world therefore live in areas where a climate emergency has been declared and where politicians have opted for leading towards the more sustainable future which is sorely needed. As we write this introduction to the thematic collection, the world is clearly in a state of emergency. Not only are we experiencing both the societal and economic fallout of the global Covid-19 pandemic, but California and the Amazon are literally on fire, experiencing the highest temperatures ever registered and wildfires that even surpass the dreadful 2019 season. Hence, our current predicament demonstrates the need for transformative actions based on global collaboration and societal resilience more than at any time before. However, Covid-19 has also shown that given people's general awareness of a global crisis, changes are certainly possible to the way we live, travel and work. How we learn from this situation in the coming years will be crucial in determining whether our global civilization can have a sustainable future. Institutions for education and research are as important as ever in bringing different perspectives to bear on the global crises that we will have to face as resolutely as we have responded to the current one. In the current thematic collection of *Högre Utbildning*, we are therefore proud to present eight contributions on how to change higher education in ways which will enable students to contribute to a sustainable future, including three invited papers on the systematic transformation of higher education necessary to address our existential societal challenges.

Except for the article written by Nathan Hensley, the contributions included in this collection are grounded in experiences from higher education in the Nordic countries, but we believe that the experiences and findings reported are valuable for teachers in higher education elsewhere. The contributions relate to both strategic concerns and long-term trends for the entire sector of higher education, as well as pedagogical approaches, practices, and experiences in courses. Moreover, they relate to the education of both students and teachers. Taken together, they offer insights and lessons learned that will help us in the societal transition that higher education must help us achieve.

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### PEDAGOGICAL PRACTICES FOR TRANSFORMATION

The current state of the world, to a large extent, is the result of actions undertaken by well-educated people. Many are those who have pointed out that education is not necessarily good in and of itself (e.g., Orr, 2018; Jickling and Sterling, 2017) and hence, that there are tensions between traditional approaches to teaching and learning in higher education and sustainability (e.g., Vare and Scott, 2007). In changing education, environmental education, ecological education, and concepts related to the term sustainability have been used in succession for the past 40 years, without necessarily causing major changes to the way education is organized or conducted (Jickling and Sterling, 2017). The pathways we have been on that have taken us in all the wrong directions seem to imply that fundamental approaches are inadequate. One of the fundamental issues in higher education tends to be that theoretical learning has primacy over personal experiences and contextual knowledge.

Nathan Hensley, in the article “Re-storying the landscape: The humanities and higher education for sustainable development,” promotes environmental humanities as one way of re-connecting body and mind and lived experience with knowledge while building on earlier traditions of environmental education and outdoor pedagogics. Hensley’s article highlights the importance of students gaining a personal experience from nearby ecosystems and understanding how those experiences shape how we reason about, and act in response to, changes such as a changing climate or loss of species. Personal experience, together with a place-based narrative that connects relationships and interdependencies, and hence facilitates an understanding of “the scale and history of human impact on the environment” (p. 26), is important in fostering engagement and a willingness to act, according to Hensley. Building on the principles described above, Hensley led the Black Swamp project at the Bowling Green State University, US, where faculty from different disciplines were trained in order to be able to integrate environmental humanities, place-based narratives and experiential learning into their own curricula. In this way, the project nurtured the ability to formulate new modes of cross-disciplinary inquiry, and hence the access to more perspectives and holistic views, as well as the ability to embrace uncertain futures and make use of the ecosystem for excursions and as cases for experiential learning.

Although excursions and the lived experience they engender can offer practical and immersive case studies for students, they do not always constitute a possible approach to teaching in higher education. Instead, case studies often tend to be restricted to reading case descriptions and conducting classroom activities around those. While many such cases are disconnected from the students’ experiences and their local context and have been criticized for their inability to foster holistic and critical thinking, Taro Lennerfors, Fors and Woodward, in the article “Case hacks: Four hacks for promoting critical thinking in case-based management education for sustainable development,” show that this must not always be the case. Taro Lennerfors et al. explore four options for stimulating critical thinking when using descriptions of authentic but simplified cases in teaching: (1) Exploring synergies and conflicts, (2) Expanding empirical knowledge, (3) Shifting perspective, and (4) Creating spaces for dialogue. By instructing students to extend the focus beyond synergies and the case description at hand, identify perspectives of additional stakeholders and collaborate with others, the original case becomes only *one* part of an extended narrative. Hence, case hacks, when successful, enable more perspectives to inform the original case and provide the students with a more holistic view of a complex and dynamic reality. Case hacks, as demonstrated by Taro Lennerfors et al., can also enable students to better incorporate other and others’ norms, values and ethics, and in this way, cases can become better apt for teaching for sustainable development.

To bring different perspectives to bear on problems is crucial both for sustainable development and in successful research, but hard to reconcile with normal standards and practices in higher education, where boundaries between different disciplines tend to be strong and hence prevent systems thinking and holistic views. However, exceptions exist. In their article “Sustainable development and cross-disciplinary research education: Challenges and opportunities for learning”, Mobjörk, Berglund, Granberg and Johansson describe four different environments in which supervisors and doctoral students find themselves in cross-disciplinary contexts and discuss how best to make use of such cross-disciplinarity for sustainable development. Cross-disciplinarity needs to be nurtured, explicitly taught and awarded to be successful. Otherwise, there are clear risks that students see cross-disciplinarity as secondary to their core work and discipline.

As already demonstrated, not least in Hensley’s article, teaching for sustainable development and the type of new pedagogical activities which it engenders requires teachers to train and meet with other faculty who have different perspectives on global issues and experiences from other approaches to, and ways of, teaching. Two of the contributions report on the experiences from teacher training courses taught at two different Swedish HEIs: “Fem år med kursen Lärande för hållbar utveckling – erfarenheter och lärdomar” (“Five years with the course Learning for Sustainable Development – experiences and lessons learned”) by Carleklev, Älvgren, Idlinge and Tomsmark and “Undervisning för hållbar utveckling: att stödja högskolelärares arbete med Agenda 2030” (“Teaching for sustainable development: Supporting university teachers’ work with Agenda 2030”) by Persson, Melén and Einarsson. Both texts offer insights into the value the courses bring in helping teachers discuss issues with those from other disciplines and suggest that the courses have also offered a point of departure to further discuss the wider role of HEIs in contributing to a more sustainable future. In both cases, however, it is also recognized that organizing courses for students in a similar way is considered to be more difficult. Hence, many students will not get the opportunity to develop the competencies needed to be able to act for a more sustainable world (see, e.g., Wiek et al. 2011) which come with interdisciplinary collaboration. Additional challenges as reported by Carleklev et al. and Persson et al. consist of obtaining enough teachers to attend the courses and support from management.

#### LEADERSHIP FOR TRANSFORMATION OF HIGHER EDUCATION

Marginal adjustments of existing societal structures and systems are not enough to come to terms with the sustainability challenges that we are facing, nor are marginal adjustments of the way in which we organize for learning in higher education and manage HEI enough, if they are to contribute to sustainable development. For example, this became clear from an analysis of how well Swedish HEIs integrated ESD into their curricula conducted by the Swedish Higher Education Authority in 2017. Their analysis suggested that only 25% had a well-functioning strategy and support for working with sustainability in courses and degree programmes. Brorström and Pålsson were invited to contribute to this thematic collection, as they had followed up on what characterizes those HEIs which came out well in the Swedish Higher Education Authority’s analysis (Brorström and Pålsson, 2019). In their invited paper “Det hållbara lärosätet – innebörd och hinder på vägen” (“The sustainable HEI – what it means and barriers to achieve it”), they discuss further the various approaches to ESD exhibited by these HEIs.

Taking as a point of departure, different perspectives on, and organizational investments in, sustainable development at the different HEIs, Brorström and Pålsson identify six different approaches to integrate ESD in the curricula. While all the approaches come with strengths and

opportunities, they also entail specific weaknesses and threats – hence, there are tensions and dilemmas related to e.g. cause and origin of change (bottom-up or top-down), the crowded curriculum, the establishment of trust between students, teachers and management and the integration of various perspectives across the curriculum, to be managed within all the approaches. Brorström and Pålsson argue the case for more systematic approaches along with better progression and interdisciplinarity in transforming HEIs and stress the importance of consistency in the range of actions undertaken to this effect. The authors further argue that an important issue for HEIs is to better understand their own current situation, including their culture and history, in order to play out their strengths and enact transformation.

Holmberg, who was invited to contribute to this thematic collection by virtue of his long experience of working with ESD – he holds Sweden’s first UNESCO chair in ESD – takes the argument one step further in his contribution “Ledarskap för hållbar omställning i högre utbildning” (“Leadership for sustainable transformation of higher education”). Holmberg suggests that it might be necessary to reframe the overall mission of higher education to promote a sustainable development. Changing the overall mission requires a change in leadership. Building on ideas about the ambidextrous organization and his own experiences from Chalmers University of Technology, Holmberg suggests that the leaders of HEIs must manage two different but mutually dependent logics simultaneously – that of cruising in well-charted waters and leading an expedition into unknown terrains. Typically, university leadership seeks to manage and maintain an organization, much like leading a cruise in well-chartered waters, and to the extent that they engage in setting visions and goals, the overall structure of the organization is not called into question. In response to external pressure to change the overall mission of an organization or society at large, however, a different mode of operations is called for, along with different requirements for leadership. That mode would be more akin to an expedition and requires leadership open to exploration and mistakes in order to explore new ways of conducting teaching and research.

In his second contribution to this thematic collection, “Högre utbildning och hållbar omställning – En reflektion över studenternas roll” (“Higher education and sustainable transformation – a reflection on the role of students”), Holmberg discusses students as change agents and the importance of listening to and taking onboard their ideas for change. One way of doing this, which has been explored in the Challenge Lab at Chalmers University of Technology, is to let students direct their attention to societal issues they would like to address themselves. They do this together with multiple stakeholders as part of authentic learning experiences that will help them understand the complexities of real-life problem-solving. By engaging in this kind of learning activity, not only do students span boundaries between stakeholders in society and create a system understanding of the sustainability challenge, but they also contribute to the kind of transformation, integration and universality called for in “Agenda 2030 – Transforming our world”.

#### ABOUT THE AUTHORS

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