Joining forces for sustainability education – Sustainability Education Collective at the University of Bergen

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ABSTRACT: Agenda 2030 and its Sustainable Development Goals (SDGs) have resulted in a heightened focus on sustainability in Norwegian - and global - academia. Sustainability Education requires innovative pedagogy and active, action-oriented learning allowing the learners to think critically and engage in exploring sustainable futures. Sustainability education is inherently interdisciplinary, requiring involvement from more than one academic discipline. However, university incentive structures create obstacles for "sharing" students and courses across units, and for innovating in teaching methods, especially in assessment. In order to coordinate, develop and collaborate on sustainability education at the University of Bergen, in 2020 we established a Sustainability Education Collective (Bærekraftskollegiet). Members are primarily academic staff from all six Faculties at the university, who either already teach courses related to sustainability or have a strong interest in building sustainability education into their discipline. In our first year's monthly meetings, we concentrated on defining the goals and guidelines of the collective, discussed thematic issues and held brainstorming and feedback sessions for sustainability initiatives, courses and study programs at the university. The Collective's structure has been loosely modelled on the Faculty Learning Community, a wellestablished and well-researched approach to engaging academic staff in ongoing activities around a common interest. The Sustainability Education Collective aims to be a transformative learning initiative with a multiplier effect, as courses and programs are developed and revised to foster sustainability learning for students.

1.1 Agenda 2030 and sustainability education

The key role of education for sustainable development has been recognized since the United Nations Conference on the Human Environment (United Nations 1973), and over 1000 higher education institutes have committed themselves to a wide variety of international agreements on education for sustainable development (Tilbury 2011, Lozano et al. 2015). The establishment of Agenda 2030 and its Sustainable Development Goals (SDGs) in 2015 has resulted in a heightened focus on sustainability in Norwegian – and global – academia, though environmental and sustainability education has been a theme in academic discourse for over forty years (Sherren 2008). Whether called Sustainability Education (SE), Education for Sustainable Development (ESD), or Education for Sustainable Development Goals (ESDG), all require innovative pedagogy and active, action-oriented learning that encourage learners to think critically and engage in exploring sustainable futures (UNESCO 2018, SDSN 2020). No single discipline alone can solve sustainability challenges, and therefore SE, ESD and ESDG are all inherently interdisciplinary, requiring involvement from more than one academic discipline (Howlett et al. 2016). In the remaining of this article we will not make a distinction between SE, ESD and ESDG, but use the term *sustainability education* to describe university level teaching and learning on sustainability, sustainable development and the Sustainable Development Goals.

1.2 The challenges

Despite educational institutions' lofty ambitions for sustainability education, there are a number of challenges related to actually realizing sustainability in higher education. Gale et al. (2015) have identified four central challenges:

- 1) Disciplinary differences generate confusion over what 'sustainability' means;
- 2) Institutional fragmentation prevents interdisciplinary dialogue crucial for sustainability;
- 3) Economic globalisation risks transforming higher education into just another market opportunity; and

4) 'Fast and frugal' habits of reasoning steer time-pressed academics towards poorly integrated decisions and unsustainable positions (fast and slow thinking, e.g. Kahneman 2011).

Conceptual confusion (Connelly, 2007; Jacobs, 1999; Sterling, 2010), fragmentation caused by disciplinary divides ("silos"; Pharo et al. 2012, Sherren 2005, 2006, Tilbury 2011) and administration regimes (Bosselmann, 2001; Moore, 2005; Sherren, 2008) have hindered the development of unified approaches to sustainability and sustainable development in higher education. When we in June 2020 asked scholars engaged in sustainability education at the University of Bergen about the barriers they faced, they identified the following main challenges:

- 1) Lack of shared understanding and goals for sustainability education across the campus (nr. 1 and nr. 2 according to Gale et al. 2015);
- 2) University incentive structures create obstacles for "sharing" students, teachers and courses across faculties and departments (nr. 2 in Gale et al. 2015);
- 3) Fear of duplicating efforts resulting in overlapping curricula, owing to the lack of overview of courses related to sustainability education (nr. 2 in Gale et al. 2015);
- 4) Lack of financial and time resources for the development of (particularly) interdisciplinary courses (nr. 4 in Gale et al. 2015).

Though these responses come only from an informal interdisciplinary survey of colleagues, they suggest that the barriers in Norwegian higher education are similar to those identified by Gale and colleagues (2015) in Australian institutions. Of note is that, as Norwegian higher education is funded by the state and free to students, the challenge of education being flattened into a market opportunity is absent among our Norwegian colleagues. However, Norwegian higher education still faces the pressure of demonstrating its "relevance" to the labor market, and in that sense, we would consider a related challenge of sustainability education as a trendy buzzword, fashionable today but just as easily dropped tomorrow. There is a clear need to develop structures that can help overcome all of the above-named obstacles.

1.3 Potential solution: UIB Sustainability Education Collective

2020. we launched the UiB Sustainability Education Collective (www.uib.no/en/sustainabilitycollective) - Bærekraftskollegiet in Norwegian - to better coordinate, develop and collaborate on sustainability education at the University of Bergen. Our aim is to be a transformative learning initiative, growing a community of scholars developing sustainability-related courses and enhancing existing courses to include sustainability across all subjects. This initiative will have a multiplier effect, engaging faculty members directly but reaching generations of students indirectly by fostering sustainability learning through enhancing university educators' knowledge and experience about developing sustainability education, for not only current but also future courses and programs. The Sustainability Education Collective is a bottom-up initiative, that grew out of communication by the authors, scholars in biology and in education, with university leadership and our near and far colleagues that resulted first in a loose and informal conversation with like-minded academics at the university. For example, we organised sessions in the SDG Bergen Conference Day Zero on Sustainability Education in 2019 and 2020¹. Consequently, the idea of a network of educators was first included in the report from the UiB "Education 2030" working group (Eriksen et al. 2019), and then led to the establishment of the Sustainability Education Collective in June 2020. The Collective's structure has been inspired by the Faculty Learning Community (Cox 2004), a well-established and well-researched approach to engaging academic staff in ongoing activities around a common interest. Below we describe the practical organization, activities, and future plans for the collective.

¹SDG Conference Bergen Day Zero 6.2.2019. <u>Using SDGs to focus teaching and learning</u>. SDG Conference Bergen Day Zero 5.2.2020. <u>Using SDGs to focus teaching and learning – together we can!</u>

1.3.1 Practical organization

The members are primarily educators for courses already tightly related to sustainable development coming from all of the Faculties at the University of Bergen: Mathematics and Natural Sciences, Psychology, Social Sciences, Humanities, Law, Fine Art, Music and Design, and Medicine. We targeted particular colleagues to invite based on our knowledge of their engagement with sustainability education through courses they are teaching, but we have since invited new members and those who have asked to join have been welcomed. The Sustainability Education Collective initially was offered support from the university administration in the form of an administrative staffperson to attend and take notes at our meetings, but it continues to be a low-threshold, low-resourced, word-of-mouth initiative. Currently the Sustainability Education Collective has 18 members.

Monthly meetings form the core of our activities. The covid-19 pandemic has naturally affected our ability to meet in person; thus, most of our meetings have been digital on Zoom.

1.3.2 Activities

Our activities began in June 2020, and in our first half-year we have concentrated on defining the goals, guidelines, and a practices for the collective – what is it we want to be and how can we best improve teaching and learning for sustainability at the University of Bergen? Our ambition was also to organize, at least once per semester, more outward-facing meetings to attract a wider audience of educators and learners at the university, but the pandemic has postponed those plans.

The Collective has had three primary types of meetings this first year: (a) defining and shaping the Collective; (b) presentations by members about their courses and initiatives, followed by input and feedback from the group; and (c) topical meetings exploring a theme relevant to sustainability education. In particular, in 2020 we had two sessions exploring the theme of students as partners (Mercer-Mapstone et al. 2017), which we deem critical to sustainability education. One of these meetings was a student-led session, for which members recruited engaged students who worked together (without faculty members) to create a workshop for the faculty members in the collective. This student group contributed to the agenda and activities in the session, and it was facilitated by three of them, giving us a window into the subject of motivating students for sustainability learning from the students' point of view. We followed this up a few months later by inviting an international expert, Sam Lucie Dvorakova, to join our meeting and help us formulate plans for improving our inclusion of students as partners in sustainability education. In addition to reflecting on how we partner with students in our individual courses, we continue to explore the role of students as members in the Sustainability Education Collective as sustainable educational practice. Some of the questions that have arisen include: which students would be involved; how to create continuity when student life is so fluid and by definition being a student is a relatively short-term role; faculty members participate as part of our paid workday, but students would participate as a voluntary activity as the Collective does not have a budget. We continue to grapple with these questions as we develop the Collective's role and identity.

Brainstorming and feedback sessions for diverse sustainability initiatives, courses and study programs at the university have been some of the most important work of the Collective in the first year. The opportunity to gather feedback from engaged colleagues is one of the key elements that keep our members coming back to our meetings. Members have contributed input to the development of a new interdisciplinary master program in sustainability, which will run for the first time starting fall 2021. Subsequently, several participants in the Collective have become members of the program board for the master program, ensuring continuing input in developing the innovative study program. Members of the collective have also learned about and brainstormed around the planning of an international sustainability summer course on board the tall ship Statsraad Lehmkuhl in summer 2022 and have discussed sustainability education within teacher education. This possibility of discussing different sustainability education initiatives has been very rewarding for two reasons: first, improved information flow between the departments and faculties that the members are based at, and secondly, getting feedback from a transdisciplinary team of educators. There are of course also challenges – more time is needed when many terms and established jargon needs to be explained, but the new insights coming

from educators with widely varied disciplinary backgrounds has been very helpful and worth the extra effort.

1.3.3 Future plans

The Sustainability Education Collective is still in its infancy, but has already shown promise in bringing together faculty members engaged with sustainability education. It has been a space for both education, growth, the exchange of ideas, and camaraderie with diverse colleagues holding shared goals. We had hoped to evaluate the first half year of the Collective in January 2021, but have concluded that, in part because our outward-facing activities have been put on hold due to the pandemic, it is still premature to make conclusive evaluations of how successful the initiative has been. In the future, we plan to establish a Faculty Learning Community (Cox, 2004) for sustainability education, which might include current members but will also seek to engage additional faculty members as participants. A Faculty Learning Community involves faculty members meeting regularly over a defined period of time (typically a year) with a concrete goal such as developing or redesigning a course, or establishing structures for cooperation across different courses. In addition, we hope to contribute to developing and offering a university pedagogy course on sustainability education that will become an elective in the University of Bergen's required university pedagogy program for new faculty to develop basic pedagogical competence. The Sustainability Education Collective will also become more extroverted, and engage with a wider set of educators and learners, as exemplified by our session planned for the 2021 SDG Conference Bergen event Embedding sustainability in academic cultures and activities.²

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² SDG Conference Bergen Day Zero 10.2.2021. Embedding sustainability in academic cultures and activities.

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