ARCADA

A TEACHER PERSPECTIVE ON EDUCATION FOR SUSTAINABLE DEVELOPMENT IN HIGHER EDUCATION[1]

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Rethinking the role of higher education

The world is changing faster than ever and the future seems increasingly uncertain in many aspects of the lives of individuals, societies, economies and nature. Global problems such as the climate crisis and increasing social gaps need to be addressed on both an individual and collective level with a holistic, multi-professional and transdisciplinary approach, which has brought completely new challenges for higher education. The role of higher education has changed, and sustainability issues appear to be crucial on a strategic level as part of the core mission, including a responsibility to contribute to creating a better world, a sustainable society and opportunities for a good life and working life for students. Universities all over the world are rethinking their role considering the United Nation's Sustainable Development Agenda 2030. Staff and students need to be prepared for the challenges of tomorrow, including active concern and a focus on well-being.

A necessary condition for higher education to be able to meet these expectations and requirements, not only on a strategic but also an operative level, includes the development of study programs and curricula. A sustainability curriculum design is rooted in a stated set of values, and constitutes a social space for critical and ecological engagement both in a disciplinary and a broader societal context, including learning objectives for the development of both broad and deep competence in sustainable development for students.

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1   The study has been conducted in the KESTO-network. The network is a collaboration between three universities and two universities of applied sciences (UAS) with the aim of strengthening ethical sustainability expertise in higher education and working life, and advancing pedagogical and responsible business solutions. https://www.haaga-helia.fi/fi/ajankohtaista/hankkeet/kesto-eettinen-kestavyys-osaaminen-tyoelama-ja-korkeakoulukontekstissa

According to Unesco, the United Nations Educational, Scientific and Cultural Organization, Education for Sustainable Development (ESD) can empower all learners with knowledge, skills, values and attitudes to address the global challenges we are facing, including climate change, environmental degradation, loss of biodiversity, poverty and inequality (Unesco, 2019). Learning can and should prepare students and learners to find solutions to the challenges of both today and the future. Education should be transformative and allow us to make informed decisions and take individual and collective action to change our societies and care for the planet. The need to solve the common global challenges at a systemic level in a collaborative, equitable and culturally sensitive way naturally connects ESD and Internationalization of the Curriculum (IoC) (Gregersen-Hermans, 2021).

Sustainability in higher education is, however, not a novel theme. It has been effectively implemented in various forms for decades in higher education (see e.g. Tilbury, 2011; Glavic, 2020; Unesco, 2017). An ethical approach to sustainability in higher education on the other hand has been less explored. Addressing ethics, the process of thinking and reflecting on one's own actions is relevant within sustainability education, since human decision-making operates on levels of emotions, beliefs and values. By using a systems perspective, it is possible to derive a set of ethical principles for sustainability, Dahl (2015) argues.

In this article, it is assumed that embedding the ethical component into sustainability education and competence development enhances a more profound understanding of the complexity of sustainability, which is crucial for future decision-makers (Biedenweg et al., 2013; Unesco, 2017). It is highly relevant for both students and teachers in higher education to be aware of and reflect on their own thinking and actions in relation to sustainable development. The four pillars of sustainable development are economic, social, environmental and cultural (Unesco, 2022). Ethical reflections are made according to all four pillars. Educational practice is social and thus aims for social sustainability. Through socially sustainable education, we can contribute to economic, ecological and cultural sustainability.

As ESD is discussed in the context of higher education, transformative learning is often presented as a suitable pedagogical approach (Michel et al., 2020; Wolff & Ehrström, 2020). Transformative learning means the type of

Sustainability issues appear to be crucial on a strategic level as part of the core mission.

Figure 1. Ethics in relation to sustainable development education where the four pillars (social, economic, ecological and cultural) sustainability is recognized.

impact that teaching has upon students (Michel et al., 2020). Rooted in adult education, transformative learning seeks to prepare for social action. In the context of which competencies are need in the future, Rieckmann (2018) describes learning as transforming the world as key competencies in ESD.

Dimensions and elements of ESD

Michel (2020) describes three dimensions of ESD; *education about sustainability, education in sustainability and education for sustainability.* Education about sustainability focuses the knowledge and information that students need to cover. Education in sustainability on the other hand emphasizes the real-world aspects and can, for example, relate to sustainability in a specific profession´s work processes. Education for sustainability relates to the transformation described above. The ultimate aim is a change in behavior built on developed knowledge and attitudes, which support sustainability.

Wolff and Ehrström (2020) asked whether it is possible to achieve a socially sustainable and transformative practice through education. They state that it might be a utopia and, even if it is not, it will take a long time before we reach

such a goal. A total reconstruction of educational practices is needed. For that to happen, the ethical role of educational institutions must be recognized.

Wolff and Ehrström (2020) describe elements that facilitate social sustainability in ESD. As basic elements, they mention an authentic learning environment, good infrastructure, a framework and economical resources. Personal elements identified both in literature and in their own case studies are collaboration in planning and realization among teachers, but also with stakeholders outside the university. Students' and teachers' diverse backgrounds also facilitate social sustainability. The need for students to be involved in the planning and evaluation of their course is also emphasized. Educational elements that facilitate social sustainability are, first of all, an interdisciplinary or transdisciplinary approach. Secondly a student-centered and participatory approach is suggested. The teacher's role is however crucial when continuous discussions and formative evaluations are to be facilitated. Thirdly, a theoretical and practical view of a topic must be found. Finally, it is emphasized that the topic needs to be most relevant for the students´ own lives. When reshaping education towards the inclusion of social sustainability, ethics are at the core (Figure 2).
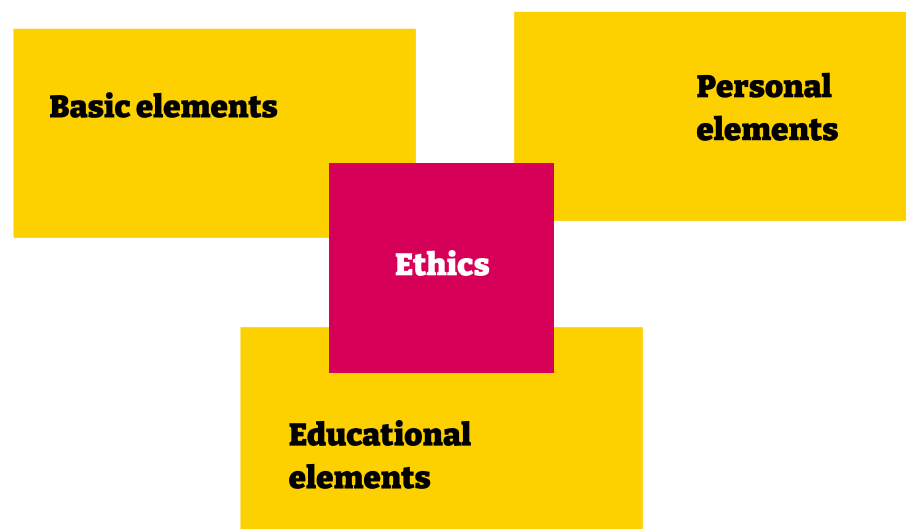

Figure 2. Ethics as the core of elements that facilitate social sustainability in ESD (modified based on Wolff and Ehrström 2020).

Teachers' reflections on an ethical approach to sustainability in the context of working life and higher education

We turned to experienced teachers to let them reflect on possibilities and obstacles in curricula work and teaching in order to explore how ethics can be embedded in sustainability education. As much as the students need to be aware of the need to think and reflect over their own actions, it is relevant for teachers working within higher education to reflect on their work. We challenged five teachers at the Haaga-Helia and Arcada Universities of Applied Sciences (UAS) to a written reflection on the topic.

When reflecting on *education about sustainable development,* our colleagues say that more information or knowledge about sustainable development in general is needed. The UAS's general goals such as green office and UNs goals for sustainable development are mentioned. Their experiences are that many of the students are already aware and engaged in sustainable development issues. This is something we have to keep in mind as a resource for further learning. It is discussed whether and how the students have a source-critical approach and how this can be supported in professional higher education. On the other hand, a content-focused mindset is obvious in some teachers' reflection about a very overfilled curriculum and concern about how even one more topic can be accommodated.

The teachers emphasize how important it is that the competences of sustainability are carefully formulated in the curriculum, because a deep understanding of all aspects of sustainability is mentioned as crucial for the students. How sustainable development could be more integrated in the curriculum is expressed, for example, as follows: *"Sustainability could be a theme that lives on throughout education as an integrated part, and not as a detached part."* Sustainability is discussed according to different professions in different ways and the need to take into consideration the three pillars; social, economic and ecological sustainability is pointed out. Even if a certain profession has social sustainability in focus, it is important to also reflect on how choices made in the certain practice have effects according to economic and ecological sustainability. Teachers within the field of health and welfare also stress the urgency of encouraging the students to reflect on their own health and wellbeing during their education. As they see it, this is a sustainable way of approaching demanding working life.

Sustainable development in higher education is seen as a challenging issue, which includes a global responsibility for human rights, fellow human beings and their living environment. The ecological dimension is most clearly seen in

the profile of different educational programs. As sustainability is a shared global issue and sustainability problems are complex, students also need competencies and practice in working in multidisciplinary and multicultural teams and contexts. Yet another key competency for students is to learn how to handle uncertainty and mistakes. Sustainable development is riddled with trial and error – students and teachers need to be able to accept this and learn from mistakes. In hands-on project contexts, we often experience challenges in this respect.

The teachers also reflect on *education in sustainability* and refer to change in behavior and how the students themselves in their work can make active choices that promote sustainability in different ways. Students' active reflection on their work is thereby emphasized. They like to see this freedom of choice as a possibility, but they also point out that it is everyone's responsibility. Another teacher gives an example of a project. *"The projects on CSR (Corporate Social Responsibility) have always been very successful, as they engage students on a very personal level."*

In a teaching situation, one teacher acknowledges that the situation at times can be demanding when students in their dialogs might react strongly to each other's value-based opinions on sustainability. On the other hand, another teacher emphasizes how important it is that these kinds of dialogs become personal. In other words, how every student can feel engaged and committed and realize that their own choices matter. One teacher expresses herself as follows:

"I believe our students must develop a double vision of sustainability. On the one hand, they must maintain idealism dream of a much better world, pushing the envelope and demanding the businesses and governments to lead the change. On the other hand, our students also must approach sustainability as a business case and be able to run feasibility studies for sustainability initiatives."

In facilitating sustainability, a good infrastructure and framework are needed. This is expressed, for example, when the teachers refer to the curriculum. An authentic learning environment is also desirable. One teacher describes this aspect as follows: "

My teaching is specifically focused on the ethics of interaction in differing professional contexts. Engaging in university-industry collaboration in national and international settings is a good way of making sure that students approach real-life sustainability challenges in a comprehensive manner, from economic,

social, ecological, and cultural perspectives according to the respective needs of the authentic project challenges." The above quotation also refers to collaboration with stakeholders in planning outside the university. This can be seen as a personal element of facilitating sustainability. Students' engagement in planning the teaching and teachers' and students´ diverse backgrounds are, on the other hand, not mentioned in the reflections among our colleges.

The central elements of *Education for sustainability* as well-being, equity and democracy were not much reflected upon. An interdisciplinary or transdisciplinary approach was not mentioned by our teachers either. A student-centered and participatory approach is emphasized when activities that support collaborative learning are suggested. When the teachers referred to how they implement a sustainability perspective on the professional field, a theoretical and practical view of a topic can be found. Another educational element to facilitating sustainability emerges in the reflection on how the topic must become personal, in other words relevant for the students' own lives.

Conclusions

ESD is a multi-faceted concept that needs to be clarified and implemented in higher education at both strategic and operational levels. The concept must also be anchored in universities' values. When reshaping and rethinking higher education towards ESD, both institutional and educational changes are needed (Wolff & Ehrström, 2020). A multi-professional, transdisciplinary and collaborative approach concerning both internal and external stakeholders is the key.

Our dialog with a limited number of teachers at two universities of applied sciences shows a strong awareness of and commitment to sustainability, both in terms of students' knowledge and competence ("education about sustainability") and in action in working life ("education for sustainability"). However, the more value-based, multi-professional and interdisciplinary issues ("education in sustainability") did not receive the same attention, even though issues such as citizens' safety and security, human rights, equal access to education and global responsibility for everyone's living environment were mentioned.

The transformative view of learning, which includes the students' ability for social action (Michel et al., 2020) and learning to transform the world as key competencies in ESD (Rieckmann, 2018), was found in the empirical data. Students' competence to act in real-life environments and the importance of contributing to solving big societal and global problems were emphasized.

Asking teachers about ESD spotlights one dimension of teaching and education that might not be in focus in everyday work. An arena to reflect on ESD and one's own work seems to be important, which, on the other hand, can become a source to transform one's work. This insight leads us to the conclusion that further studies on the topic could make use of focus group interviews with teachers, researchers, students and experts in working life, where deeper reflections with peers could take place.

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