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# Towards Learning Environmental and Social Sustainability – Changing Paradigms of Teaching

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## Abstract

*Management education should keep up with the growing awareness of the global challenges like climate change, income inequality and biodiversity lost. Thus our task in higher education is to be able to develop practices and educational platforms that ensure the growth of responsible business leaders. In management education, there are differences between universities how the Corporate Social Responsibility (CSR) has been taken into their curriculum. Based on our experiences of teaching Corporate Social Responsibility for eight years, we have come to a conclusion that students coming to study business at a university of applied sciences, are not well aware of sustainability issues, neither globally nor concerning their own field of industry. Since we have noticed some major changes in the attitudes among several students, we wanted to elaborate more deeply the impacts of the course. Would it be possible to say that the course brought out even some kind of transformation [1]? To find out we carried out a research among our students. The CSR course (five credits) belongs in two Master's Degree Programmes at JAMK University of Applied Sciences. Multiple methods of teaching have been used: e.g. cooperative, collaborative, experiential and virtual learning, lecturing, visiting lecturers, company excursions, etc. Expected learning outcomes of the course are connected to the various elements of CSR and sustainable development including responsibility from the viewpoint of different stakeholders.*

**Keywords:** *Corporate Social Responsibility (CSR), Sustainability, Transformative Learning, Higher Education.*

## 1. Introduction

'We must change and time is running out' – that is the message we hear among academics in the interdisciplinary field of sustainability [e.g. 2]. To stop the increasing global rates of human-caused environmental and social degradation a paradigm shift is needed. Is it possible and how, to include the dialogue and actions necessary to create this kind of change in education, and is it transformative learning that plays a role in creating a more sustainable future? (ibid.) Leigh and Sunley (2016, pg. 8) [3] point out that our teaching philosophies incorporate many dimensions that include our deeply held ideas about who we are (ontology), what we know (epistemology), what we value (axiology) and we should be aware of this both in relation with ourselves as teachers and with the role of students.

According to Cranton (1994) [4] transformative learning theory leads us to view learning as a process of becoming aware of one's assumptions and revising these assumptions. For change to happen, basic assumptions need to be challenged. Concerning CSR, the basic assumptions that should be challenged concern e.g. the sufficiency and renewability of natural resources and ethical issues concerning human and animal treatment. The transformation may include three types of change [5]: change in assumptions, change in perspective and change in behaviour. The role and potential of transformative learning, when dealing issues concerning sustainability, may be considered particularly significant in university education [2]. Butcher (2007) [6] and AtKisson (1999)

[7] have studied the pedagogy that will challenge students thinking and discovery. They point out that 'responsibility' and 'sustainability' will never arise from 'ready-made solutions', rather to gain these it requires the teacher to activate students to be creative [7]. Teacher's role should be more like a stimulator of interdisciplinary thinking and problem solving [8]. Also experiential learning has often been considered to be effective especially in connection with real-life cases and holistic thinking [8, 9].

There are alternative models for teaching and learning that can contribute to social and environmental change, e.g. cooperative learning, collaborative learning and transformative learning [10]. Within these different pedagogies e.g. the role of the teacher and the understanding how knowledge is produced differs. In *cooperative learning* learners work together in structured processes on a given task, share information, and encourage and support each other. Educators are in a position of power, they are considered experts and they control the outcome of the learning experience. The focus is more on the issues and subjects versus the interpersonal processes. Mostly there is a goal to be achieved, and the conversation focuses on achieving that goal. (ibid.)

In *collaborative learning* model teaching and learning shifts from knowledge transfer and discussion toward all participants sharing the construction of their knowledge (ibid.). "Collaborative learning assumes instead that knowledge is a consensus among members of a community of knowledgeable peers – something people construct by talking together and reaching agreement" [11, 2]. The role of the educator has changed to a participant or a colearner. He/she is not considered the expert or facilitator, questioning, negotiating, and creating a shared understanding of alternative ways of knowing is emphasised [10]. Thus, collaborative learning model challenges our customary teaching practices in higher education. The ideal conditions for discourse require e.g. that participants are allowed full access to information, they are free from coercion, allowed equal opportunity to assume various roles of the discourse, encouraged to become critically reflective of assumptions, empathic and open to other perspectives, willing to listen and to search for common ground of a synthesis of different points of view. Therefore, as Moore [2] has pointed out, one can question: '*Is collaborative learning possible in the current state of higher education – a place that is rife with competition, time pressures, and external pressure to train the leaders of tomorrow?*' Collaborative learning can only be developed in higher education, if the influence of the systems and structures influencing classroom dynamics are taken into account. And we think that one more interesting question arises when contemplating the possibilities of collaborative learning to happen. We are increasingly faced with the pressure to increase virtual learning settings as they are believed to boost the economic efficiency of teaching. Does it serve collaborative learning and transformation?

*Transformative learning* model goes even further from collaborative learning, including both the individual and social construction of meaning perspectives and it calls for critical reflection on biases and assumptions, which will enable us to process our understandings and worldviews. According to Mezirow (1997) [1] transformative learning as a process of effecting change in a *frame of reference*. Throughout our lives, we develop concepts, values, feelings, responses, and associations that make up our life experience. These frames of reference help us to understand our experiences in this world. They consist of two dimensions – *habits of mind* and *points of view*. Our habits of mind are broad and habitual and can be articulated through points of view. Points of view are generally more accessible than habits of mind, which are considered to be more permanent and harder to change. '*Transformative learning is about altering frames of reference through critical reflection of both habits of mind and points of view*' [2]. For example, in our data one student wrote that due to participating the course she noticed how bitter a person she had been, and she realized that she should completely change her attitude. She is a mother of a disabled child and she wrote that she decided that disability should no longer characterize neither her attitude towards her child as a person nor her own motherhood. Another student wrote that "... *after having the opportunity to learn more about things [concerning CSR and sustainability] during the course, I now believe a little bit more in the goodness of people*".

As the above mentioned example from our data implicates, transformative learning may have effects in different spheres of life, and these effects cannot be controlled. The educator in these situations is responsible for creating an environment that is supportive and open to self-reflection. The ultimate goal of transformative learning is to empower individuals to change their perspectives, but it remains unclear how individuals actually will transform. Thus, as Moore [2] points out, '*we are left with the idealism of empowerment and little sense of what students are transforming into*'. Therefore, we cannot know where a process of transformative learning is going to lead us. . "*I started to understand how huge the consequences concerning environmental risks could be, and that they are of the kind that one cannot even think and imagine about* ", as one student in our text data wrote.

Furthermore, transformative learning is complex, uncomfortable and time consuming in nature, which makes it challenging in educational contexts. Shifting perspectives often involves embarrassment and discomfort. People tend not to think about problems that are disconcerting, thus they avoid transformation of perspectives and aim at feeling safe and secure. We are unlikely to undergo transformative changes in our understanding, if learning is too comfortable like Mezirow (1991) [1] have pointed out. Besides, not many learners (including both students and teachers) have the skills and maturity to ask the inventive and creative questions or think critically about problem framing, that transformative learning would require. [4]

## 2. Methodology

Our research is qualitative in nature using content analysis. We based our analysis on the data consisting of students' self-reflection reports concerning their learning experiences. In total 143 students, who have participated the course during the past three years, have written self-reflection on their learning (n=103). In addition, three groups of students wrote a short reflective essay (n=40). Table 1 contains description of the data. The data was collected between spring 2015 and autumn 2017.

In self-reflection report, students were asked to 'Reflect on this course and on the goals given in the course description and on your own learning goals: 1) what did you find most interesting?; and 2) How did the different assignments contribute to your learning?. In a short reflective essay, students were asked to 'write shortly under the heading: Observations and Thoughts about the Changes in my Thinking, Attitudes and Behaviour During and After the Course'.

Table 1. Description of the data.

<i>Data</i>	<i>N</i>	<i>Timing of course</i>	<i>Type of course</i>
<i>Self-reflection report (n = 103)</i>	20	Spring 2015 *)	Contact lessons and independent work
	26	Autumn 2015 <sup>1)</sup>	Web-based course
	23	Spring 2016	Web-based course
	22	Spring 2017	Contact lessons and independent work
	12	Autumn 2017	Contact lessons and independent work
<i>Reflective essay (n = 40)</i>	6	Spring 2016	Contact lessons and independent work
	22	Spring 2017	Contact lessons and independent work
	12	Autumn 2017	Contact lessons and independent work
<i>Total number of data collected</i>	<b>143</b>		

In this study we used qualitative content analysis and thematic analysis [for example 12, 13] analysing the data. This is an early draft. Our research is continuing.

## 3. Results

When scanning through the data mostly the texts told about the accumulation of information concerning sustainability and CSR, but we also we came across statements indicating implications that could be interpreted as changes in different levels: in assumptions, in perspective and in behaviour. Presumably changes have happened in students' thinking, attitudes, and behaviour both in the public and private spheres of life. However, plenty of comments were indicating increase in 'knowledge' rather than any kind of deeper change in thinking patterns, as the following extracts show: '*I thought that I already knew about the issue, but now I'm aware that actually I knew nothing about the big picture*' and '*I'm going to give a presentation of this subject to the executive group based on the course literature*'. Students reported that they learned widely about the concept of

responsibility and its different aspects. *'Lectures opened the concepts of responsibility, which were earlier unfamiliar for me' or 'I don't believe that my actions or my attitudes have changes during the course. However, my knowledge has increased significantly and I have learnt new concepts concerning corporate social responsibility.'* Some students were surprised how such a short course could give impulse to changes in thinking and clear things in mind.

Students wrote about changes in assumptions. Participating the course changed their attitudes and behaviour more critical towards the corporate responsibility. As one participant described *'My thinking and attitudes have totally changed during the course, because now I consider responsibility in my everyday life and actions. I also notice the newspaper articles concerning responsibility and also my behaviour in shops and cafés have changed more responsible.'* In the self-reflective essays some students reported changes in their behaviour, like this for example: *'My behaviour has changed after learning about the global problems. I will take better into account energy and water saving, recycling, waste sorting, decreasing meat-eating, consumption and consuming fair trade products.'* Students wrote that they had learnt how to analyse corporate social responsibility: *'I learnt more criticism and I learnt how to analyse the responsibility of companies and organisations.'* The following extract reflects changes in awareness: *'Since participating the course I've found myself talking constantly about the values of our company'*.

Potential changes in behavior may be assumed when reading the following extracts: *'The 'responsibility-analysis -learning assignment' has been beneficial for my work.'* Overall the self-reflection reports told that the responsibility analysis -learning assignment contributed substantially to students' working life, as one writer put it: *'By carrying out the responsibility analysis in my workplace, I noticed that really I am able to influence the practices to be more ethical and responsible. My behaviour and the information that I share play an important role as I work as a boss at grass root level.'* Students concluded that course widened their scope of reflection starting from their own working context towards more societal level. *'The course made me think and follow different aspects of CSR in society and in my organisation.'*

Many students described diverse changes in their behaviour concerning their private life: *" ... I find myself discussing these things with my friends and my family as well"*. Changes have evolved concerning the ability to reflect and discuss social, ethical and environmental matters wider and from different perspectives in general. Students report that they value this ability as a significant skill both in their personal and working life. They also point out how important is to learn to search information concerning corporate responsibility. Moreover, the development to be more open-minded and open-eyed has been reported by few students. Students report that after the course they follow more carefully the media and the news concerning responsibility issues. Some of the students say that after the course their attitude towards the newspapers have changed to be more critical. Also possibilities to influence, increase peoples' awareness or develop responsibility both in working and private spheres of life were mentioned in many essays and self-reflective reports. In addition, many students wrote about changes in their behaviour as a consumer. One student told that *'After the course I have started to pay attention to the responsibility in clothes manufacturing. I have started to favour more expensive clothes made in Finland, because I trust that Finnish companies have not used forced or child labour, and moreover this will support domestic business.'* Many students mentioned that they learned a lot from discussions with visiting entrepreneurs who had integrated responsibility in their business ideology. One student described that *'I learnt a lot when we had a visitor, an entrepreneur of an organic coffee roastery. I learnt how much resources are used to make one single cup of coffee and how I could affect with my own behaviour to other peoples' social and economic wellbeing and also to the environment.'*

Some students reported changes in their attitudes towards civic and environmental activity. This together with changes in self-knowledgement and self-awareness can be interpreted as indicating a change deeper in nature - maybe even a transformational change. The previously brought up example of the mother of a disabled child becoming more aware of the social and cultural frames of reference in our society belongs to this category of changes. Another example of a change deeper in nature comes from a student working in a big technology company. He understands that in theory it is the top management who determine the values and the strategies of the company *'...but the real values arise from the values of our staff in their work and in their private life. How can we interfere in and support that?'*

## 4. Conclusion

The challenges we face with "the super wicked problems" [eg. 14] are huge and thus, accordingly, they require major changes on the 'different levels of knowing, being and doing' [15]. The ways in which we execute higher education should be open to new approaches and frames of thought. According to our experiences of teaching CSR courses for eight years at a university of applied sciences, some students experience changes in their learning processes that may even be considered as transformational in nature, as we have tried to show in this paper. However, if we aimed at changes on a wider level enabling more students to gain deeper understanding in sustainability and responsibility issues, we should create new pedagogic approaches in our curricula.

When thinking of the possibilities of transformational learning in the context of teaching corporate responsibility and sustainability, form and teaching practices become as important as the content of the education, as our brief overview to the literature tries to show. Sustainability education is a process creating a space for inquiry, dialogue, reflection, and action about the concept and goals of sustainability as Moore (2005) [2] have pointed out. We have used different kinds of methods, e.g. cooperative, collaborative, experiential and virtual learning, lecturing, visiting lecturers, company excursions, etc., in the corporate responsibility course that we have focused on here. However, in this short paper of ours, we have not dealt properly with the pedagogics that we have employed. To do so, and to draw some ideas and conclusions from those in relation to the reflection reports of our students, would be an interesting task in the future.

According to our tentative results, and the results of e.g. de la Harpe and Thomas (2009) [16], changes in curriculum related to responsibility are needed if we wish to contribute to social and environmental sustainability. '*Sustainability is about the terms and conditions of human survival, and yet we still educate at all levels as if no such crisis existed*' [17]. But if we turned our teaching activities highly crisis orientated, we were prone to confront the question of how stressful a classroom might become when educating with a thought of a crisis looming? As teachers and academics, do we want to contribute to our culture of fear? Is it possible to raise awareness without creating more anxiety, and how are we able to support our students after exposing them to disturbing ideas? As Moore (2005, 79) [2] asks: '*... theories for transformative learning exist, is higher education prepared for transformative learning in practice?*'

Sterling and Thomas (2006) [18] have presented a model of the development of sustainable education. In this model they elaborate on how changes in education could affect changes in sustainability. Strong impacts have been achieved through implementations, in which the whole education was planned in line with corporate social responsibility and sustainable development. However, it seems more realistic that separate courses concerning corporate responsibility and sustainability are developed in view of enabling transformational learning. If we are to influence students' awareness of corporate social responsibility, this requires influencing students' attitudes and values. Already in many higher education institutions development of knowledge and consciousness about responsibility or sustainability issues is designed to change students' values and attitudes [19]. Radical shifts in education are necessary though, if we are going to create change agents who can put an end to the current ecological crisis. If we want to make changes in education, these changes should be visible, for example in the curricula [eg. 20]. To quote Moore (2005, 79) [2] once more '*Will we educate for the global marketplace, or will we educate for peace, social justice, diversity and integral development?*' To implement sustainability education at the university level, we need to consider process as well as content. Sustainable future challenges responsible education to invest in capacity building and critical thinking. Wals (2011) [21] has pointed out the importance of constructing the knowledge socially. He has also presented the concept of 'transformational social learning', which sounds brilliant when educating responsible leaders for future. Moreover boundaries in our teaching ideologies and practices could be widened to include "knowing-being-doing, engaging head, heart and hands" (Sipos et al., 2008) 9-11 [22].

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