Ann-Sofie Hermanson*

Education for Sustainable Development: A Case Study of Incorporating Key Elements through Course Design

Abstract. Sustainable development is a challenge worldwide. The nine states located in the Baltic Sea Region, with different political systems, have developed different ways of coping with environmental issues and incorporating them in the national education systems. Early joint efforts to minimize these differences undertaken by the Helsinki Commission (HELCOM) and the Baltic University Programme (BUP) to bridge these differences are impressive. Still, we need to continue learning about environmental history, policy formulation and current state of affairs in order to get ready for future challenges. With respect to contemporary discussions on improving educational processes, the aim of this paper is to present a good practice example of teaching at a BUP member university, in the light of ESD principles. A specific course, Environmental Politics, focusing on capacity-building for national environmental policies, is scrutinized in order to find out how to engage students on this topic. The findings suggest that structured discussions of environmental cases in small seminar groups are conducive to teaching ESD at a BUP member university.

Keywords: Baltic Sea Region, capacity-building, environmental policies and governance, education for sustainable development

1. Introduction

A general guideline in education for sustainable development (ESD) is stressing the value of skills and abilities to apply theoretical knowledge to practical problems. As students are prepared for a fast changing world, knowledge is simply

* Åbo Akademi University, Finland, Faculty of Social Sciences, Business and Economics, Department of Political Science, e-mail: anherman@abo.fi, phone: +35 82 215 46 87.

not enough. Further, in order to be efficient and successful in a professional career, as well as making a difference for the environment and the change towards a more sustainable society, students should stay alert and keep up-to-date with news, innovations and research in their field of study, even after graduating. This is to imply a life-long learning process [Klavins & Zaloksnis 2009]. The ultimate goal of education is behavioral change and as such, the overarching goal of environmental education is to impart knowledge that operationalizes responsible environmental conduct in students from the classroom to wider society.

Teachers are facing these new challenges as well. They should be open for new roles, like coaches and team leaders, at the same time having to revise their knowledge of their subject into a more holistic and systemic setting. Besides, student groups are not as homogeneous as before [Lindroos 2015: 37]. Internationalization in universities also opens up the competition for attracting students and researchers. Hence, new ways of support in study counseling, learning provisions and learning methods are formulated in higher education, with deeper innovation in staff development [UNESCO 2014].

Studying a complicated context of various societal systems and processes, several ESD learning goals are relevant to recall, e.g., the dialectic between tradition and innovation. As can be seen in the Baltic Sea Region (BSR), traditional state-centered governmental processes, including an early international co-operation, have been complemented with governance processes with a joint role of governmental, semi-governmental, non-governmental, and private institutions. Policy-making authority is shared with business, environmental and other non-governmental organizations (NGOs). There is a vast array of activities in shaping and sustaining networks within different territorial bonds, such as a region, state, county, municipality and city. The belief is that a dynamic, polycentric order takes advantage of local specialization and scale and enhances innovation, adaption and learning for sustainable development [Joas, Jahn & Kern 2008]. It is for certain a challenge to study and discuss such a demanding issue as capacity-building for sustainability. The students attending the course serving as the case study, "Environmental Politics," come from different countries, from different learning environments with different main subject. They have one thing in common though, a genuine interest in environmental issues and in discussing sustainable development. The aim of the teachers is to provide them with tools to do so in a comparative manner. This article will in the next sections discuss how capacity for environmental policy is built through the course "Environmental Politics." It will focus on the logic of comparative studies, exemplified with a framework for analyzing environmental capacity-building, and demonstrates how this is assimilated into students' discussions.

2. Education for sustainable development

Education for sustainable development, ESD, identifies skills like creative and critical thinking, communication, diversity, ethics and social responsibility, internationalization, engagement and sustainability [Klavins & Zaloksnis 2009: 283]. Good learning strategies are valuable to inculcating these skills in students, especially considering that course materials and literature gets outdated in a few years, depending on subject. Students need energy and compassion for the mission to create a sustainable future, and there are good examples documented on how these things fall into place. During their studies, students mature and build their capacity to take on a leadership role in a region meeting complex and difficult challenges of our times [Grandin et al. 2010: 283].

However, gaining of knowledge is not enough, ESD learning also include, according to Daniella Tilbury [2011: 8]:
– learning to ask critical questions,
– learning to clarify one's own values,
– learning to envision more positive and sustainable futures,
– learning to think systematically,
– learning to respond through applied learning,
– learning to explore the dialectic between tradition and innovation.

This framework is comprehensive, as it is developed from research on numerous cases and is incorporated as recommendations in a UNESCO report. It is a culmination of experts' review of processes and learning in ESD and as such, this article applies these principles in analysis. It uses the framework to show that the course 'Environmental Politics' is a good practice example of teaching at a Baltic University Program (BUP) University as it incorporates all the above elements in the course design. Several case studies and best practice presentations have already been conducted within the BUP sphere. In fact, *Studia Periegetica* already devoted an entire issue [1(15)/2016] to ESD,[1] which has been of great value evaluating and developing this very course.

3. The case study: environmental politics

The course "Environmental Politics" is taught to graduate students at Abo Akademi University at the master's level. The aim of the course is to expose students to material that present capacity building in environmental politics. The course

---

[1] www.wydawnictwo.wsb.pl/sites/www.wydawnictwo.wsb.pl/files/czasopisma-tresc/Studia%20P_15_net.pdf [access: 16.12.2016].

ultimately aims to build students capacity for environmental problem solving through critical thinking of key material, such as course literature by Jänicke and Weidner. The course is taken by local students as well as exchange students at Åbo Akademi University, and is offered once per year during the autumn term. The pass rate in the course is consistent with other courses. Assessment of the course is usually through the means of in class participation, assignments, project presentation and a final examination. The following sections show how the principles of ESD learning as articulated by Tilbury [2011] are incorporated into the course design.

3.1. Learning to ask critical questions

Certain key processes have been defined for making ESD practices successful, among others processes of collaboration and dialog, and processes of active and participatory learning [Tilbury 2011]. The teaching mode in this specific course is lectures and seminars. In seminars, individual presentations by students are at the core in providing understanding of a certain country and its environmental policy system. However, the discussion following a presentation is the most important part of the whole course. In this way, all students play an active part, and this was carefully planned to facilitate critical thinking through of complex environmental issues such as the role of state and society. Or in other words: "Learning for sustainable development also means that we need to change from being passive recipients into active co-producers of knowledge by taking a more active role in our education" [Grandin et al. 2010: 284].

The stakes are high. In real life, in debates and traditional decision making processes, citizens and politicians are in many ways dependent on expert knowledge which is difficult to grasp and almost impossible to question. This is a general feature of developed societies where a high degree of specialization makes communication between experts, scientists and professionals of different fields problematic. In a globalized world communication between different groups of actors and stakeholders is vital to any solution in the complex problems of e.g. energy and environment. In other words, discussions and communication skills are vital to our students.

So far exchange students have been an important target group for this course. There are ongoing discussions and plans to develop an online version of the course for future students. However, contact online does not beat the social connections and bonds that are made when students meet and interact in the classroom setting. It is difficult to imagine that the same commitment would be achieved online as in a close-knit, highly motivated team of students, working together an academic year. But that remains to be tested.

3.2. Learning to clarify one's own values

In the course presented here, this has been a guiding principle for lectures and seminars where special emphasis is placed on developing confidence in students own working skills, capacity to perform and present their knowledge to fellow students, researchers and members of the public. When students work together in seminar groups for a longer time period, they get the opportunity to test their own assumptions by listening to the views of others. This helps them in clarifying their own values. As a bonus, students can also make contacts for the future, and build up potential networks. These peers from class can be experts in the future who have the potential to provide helpful information.

3.3. Learning to envision more positive and sustainable futures

One way in which this course guides students in learning to envision alternative futures is through institutionalization. Institutionalization refers to the period and the process through which the structures and rules for a specific policy area, in this case environmental policy sector, are established. Criteria of institutionalization were developed and presented by Martin Jänicke (see for example his article 1992) and applied in his later studies [1997; 2002]. These criteria, or steps of institutionalization are listed here below. Several other studies have found this set of criteria useful in comparative research [e.g., Governing the Environment 1996; Hermanson 2006].

Criteria or steps of institutionalization:
– establishment of environmental ministry,
– establishment of national environmental agency,
– framework of environmental legislation,
– environmental concern in constitution,
– publication of first environmental report,
– independent central council for environmental advice.

Students are able to envision more stable and sustainable futures when they work through the steps above, as it forces them to examine the rules that lead to the establishment of specific environmental policies.

It is also through examination of society's capacity for environmental protection and sustainable development that students learn to envision more sustainable futures. Society's capacity for environmental protection and sustainable development refers to society's ability to identify and solve environmental problems. This includes a combined application of several factors, e.g. set of ac-

tors, strategies and structural framework conditions, and case specific contexts [Jänicke & Weidner 1997: 1-24; Weidner & Jänicke 2002: 1-18]. By examining the literature on solving environmental problems, students are able to think through material on this topic and can identify both good and bad examples of environmental protection efforts.

3.4. Learning to think systematically

Comparative studies are used as a tool to enable students to think systematically. With an interest in operating policies, administrative structures and organizational theory, political science is, at least to some extent, involved in comparative research strategies. Students are curious to know what political systems have in common, and in what ways they differ, and perhaps what conditions make for stability or change. The comparative method as such is usually conducted in a stricter sense with few cases and potentially many sets of variables. In a more general way, following a joint outline in country studies, the prerequisites for comparison is granted. This strategy is commonly used in country studies [e.g. Governing the Environment 1996]. The aim of the comparative method is often of understanding and explaining character. We gain a lot of information about a certain political system if we compare it to other political systems, recognizing similarities and differences, and examine the origins of a specific similarity or difference [Joas & Hermanson 1999: 5]. Even macro-comparative politics can take country specific environmental performance indices into account [Jahn 2016].

First of all, we need a clear structure in order to grasp and orientate among different aspects of a complicated and convoluted policy formula of the BSR mentioned in the introduction. In this specific course, a theoretical framework developed by Martin Jänicke is applied to set the concepts needed for a comparison. It enables students to focus on specific topics, step by step, and enabling them to gain a comprehensive understanding through comparative work that they conduct individually (but in close contact with their seminar group). This focused step by step assimilation of the material by students is what enables systematic learning that is necessary for ESD.

3.5. Learning to respond through applied learning

Students are able to apply their knowledge gained in the course through various research activities. For example, the selection of countries and policy areas is made according to students' own choice and preferences, through information gathered on cases through applied research. Then national environmental poli-

cies are dealt with in presentations and seminar discussions. It goes without saying that the teachers should find out whether everyone is confident with the task and feeling comfortable in the seminar group. Diffuse instructions will be time consuming, therefore, the course 'Environmental Politics' start out with introduction lectures on both comparative methods and the theoretical framework.

3.6. Learning to explore the dialectic between tradition and innovation

As part of the course, country studies are conducted, pointing towards a change in processes. However, with a traditional focus on the institutionalization phase, the scope might be too narrow to reveal that. New concepts are then better off in taking new administrative patterns into account. However, ".. although the environmental issue does present society with new challenges, the institutional capacities of the political and administrative system, in combination with prevailing national policy style, may be enough developed to be able to meet the environment challenge, and in so doing basically absorb or coopt this new political concern into 'traditional' politics" [Governing the Environment 1996: 14].

Through the use of the concept of "governance," teachers now want to clarify that politics and the policy-making processes have changed indeed. The main idea is that before, roughly until the 1970s, nation states, through their elected representatives, determined national policies more or less on their own. The leading concept was "government." Nowadays, because of the economic globalization, but also because of the emergence and enlargement of the European Union and the regions strengthening their powers, nation states no longer exercise exclusive power. The set of actors has changed, and we talk about governance instead of traditional government [Joas, Jahn & Kern 2008].

But political governance is also about highlighting that the policy-making process takes place in a different way today. It acknowledges the development of networks, informal coalitions and stakeholder activities. In particular the EU policy-making is shaped by different networks, where representatives of international, national and regional levels, non-profit organizations and companies are involved in the process.

The Baltic Sea Region provides a perfect case for exploring these changes. The Baltic Sea, a rather shallow sea of brackish water, is highly vulnerable to pollution. About 90 million people live in the region, administrated by nine different countries. Furthermore, the governance discussion is right at its edge in this context, because several new forums for sustainable decision-making were introduced, while existing administrative and political structures have shown considerable strength and endurance [Joas, Jahn & Kern 2008: 4].

Since the end of the Cold War the Baltic Sea Region has developed into one of the most dynamic areas in Europe. While only two countries surrounding the Baltic Sea, Denmark and West Germany, were members of the EC/EU before 1990, this situation changed dramatically after the 1995 enlargement (Finland and Sweden) and even more after the 2004 enlargement, when Poland and the three Baltic republics (Estonia, Latvia and Lithuania) became full EU members. Today the Baltic Sea has almost become an internal Sea of the EU, with Russia as the only exception. The European Union Strategy for the Baltic Sea Region (EUSBSR)[2] from 2009, is the first macro-regional strategy in Europe.

As already mentioned, nine different political systems surrounding the Baltic Sea had developed ways to cope with environmental problems in their national contexts. Early joint efforts to protect the environment were also taken in the 1970s, as manifested in, for example, the Baltic Marine Environment Protection Commission – the Helsinki Commission (HELCOM)[3] and the Convention on the Protection of the Marine Environment of the Baltic Sea Area – the Helsinki Convention in 1992.[4] Nevertheless, there were differences in how and when environmental issues had reached the political agenda, and how the traditional, governmental systems responded and acted on these challenges. A new style of working together, in governance processes with a joint role of governmental, semi-governmental, non-governmental, and private institutions, occurred as a parallel development. Of particular note are the Agenda 21 processes with Baltic Agenda 21, and transnational networks, such as Union of the Baltic Cities[5] and Cities for Climate Protection,[6] the latter established in 1990 by the International Union of Local Authorities and the United Nations Environment Programme as part of a large global transnational network, the International Council for Local Environment Initiatives.

The countries in the BSR are very diverse in areas such as democracy, welfare, environmental policy, and human rights. Although intergovernmental cooperation between these unequal neighbors already started in the Cold War period, the end of the Cold War triggered new forms of cooperation and governance. Two trends which appeared are considered characteristic for the development in the BSR: transnationalization and Europeanization [Kern & Löffelsend 2008]. Transnationalization includes the mobilization of both civil society actors and subregional governments. Moreover, the EU has become a major player in the region and governance in the BSR has become embedded in European govern-

---

[2] www.balticsea-region-strategy.eu [access: 16.12.2016].
[3] www.helcom.fi/about-us [access: 16.12.2016].
[4] www.helcom.fi/documents/about%20us/convention%20and%20commitments/helsinki%20 convention/ 1992_convention_1108.pdf [access: 16.12.2016].
[5] www.ubc.net [access: 16.12.2016].
[6] www.iclei.org [access: 16.12.2016].

ance [Joas, Jahn & Kern 2008: 8; Kern & Löffelsend 2008: 137]. These emerging themes allow students to explore the interaction between tradition and innovation.

4. Discussion

In this article, a course Environmental Politics was presented and discussed as being a good practice case on ESD. The skills students need today are somewhat different from the knowledge-based examination. Perhaps university courses could be even more focused on creative and critical thinking, communication and interaction with society, outspoken on ethics and social responsibility, engaged in internationalization and sustainability issues. Several arguments were formulated on why we should continue discussing participation and democracy in order to reach a sustainable society. The main argument for extending democracy and stressing broad participation in environmental activities, especially decision-making, is the perceived role of the citizens for achieving a sustainable development. The Brundtland Report counts clearly on the citizens: "The law alone cannot enforce the common interest. It principally needs community knowledge and support, which entails greater public participation in the decisions that affect the environment" [WCED 1987: 63].

There are also arguments that environmental issues are so complex, that an array of different participants and actors is needed to grasp it all. In other words, the quality in decision-making is also related to broad and multiple participation [WCED 1987]. Today, interdisciplinary education is appreciated among students and universities are incorporating professionals with different backgrounds as guest lecturers.

In education these qualities could also be encouraged in courses and seminars through collaboration and networking. BUP offers conferences, workshops and field trips, all kind of activities aimed at improving skills in collaboration and team-working. It is a tremendous work being done under this umbrella. As a teacher, this support is important for developing the education for sustainable development.

The methods and framework used in the course presented in this article, provide just an example on how to structure a complicated context and involve students as "country experts" when studying national environmental policies. Solid knowledge and proper understanding of background facts are preconditions for any attempt to comprehend the current context, and to interpret the structures of society and the processes going on. When students have done their homework, they will be able to evaluate traditional paths of development, present the cur-

rent state of affairs and even come up with more visionary alternatives that really promote sustainable societies.

5. Conclusion

This article presented the course "Environmental Politics" as an example of good practice in environmental capacity building for a BUP University for education for sustainable development. It uses the Tilbury [2011] framework to show that this is a comprehensive course that covers all the key areas necessary for environmental capacity building in students. It shows that students learn to ask critical questions through discussions and clarify their values through presentations and critical questioning. Through the course, students learn to envision more positive and sustainable futures through grappling with institutionalization theory and they learn to think systematically through case study applications of the materials presented in class. This also leads to applied learning, as students can explore material for the cases and select cases through applied research. Finally, it is through exploring the material on environmental change and innovation in regions such as the Baltic Sea, that students are challenged to explore the dialectic between tradition and innovation.

References

EUSBSR, 2009, *The European Union Strategy for the Baltic Sea Region*, www.balticsea-region-strategy.eu [access: 16.12.2016].

Governing the Environment. Politics, Policy and Organization in the Nordic Countries (Nord, 5), 1996, Copenhagen: Nordic Council of Ministers.

Grandin J., Apine L., Kovbasko O., Zhuk Y., 2010, A Students' Perspective on Sustainable Development: It Is Our Task to Create an Attractive, Sustainable Future!, in M. Klavins, W.L. Filho, J. Zaloksnis (eds), 2010, *Environment and Sustainable Development*, Riga: University of Latvia Press.

Hermanson A.-S., 2006, *Miljövårdens institutionalisering i Finland (The institutionalization of environmental protection in Finland)*. Åbo.

Jahn D., 2016, *The Politics of Environmental Performance. Institutions and Preferences in Industrialized Democracies*. Cambridge: Cambridge University Press.

Jänicke M., 1992, Conditions for Environmental Policy Success: An International Comparison, *The Environmentalist*, 12(1), 47-58.

Jänicke M., Weidner H. (eds), 1997, *National Environmental Policies: A Comparative Study of Capacity-Building*. Berlin: Springer.

Joas M., Hermanson A.-S., (eds), 1999, *The Nordic Environments. Comparing Political, Administrative, and Policy Aspects*. Aldershot: Ashgate.

Joas M., Jahn D., Kern K., 2008, Governance in the Baltic Sea Region: Balancing States, Cities and People, in M. Joas, D. Jahn, K. Kern (eds), *Governing a Common Sea. Environmental Policies in the Baltic Sea Region.* London: Earthscan.

Kern K., Löffelsend T., 2008, Governance beyond the Nation State: Transnationalization and Europeanization of the Baltic Sea Region, in M. Joas, D. Jahn, K. Kern (eds), *Governing a Common Sea. Environmental Policies in the Baltic Sea Region.* London: Earthscan.

Klavins M., Zaloksnis J. (eds), 2009, *Environmental Education at Universities,* Riga: University of Latvia Press.

Lindroos, P., 2015, Introducing education for sustainable development – challenges for students and teachers, in W.L. Filho, A.Úbelis, D. Berzina (eds), *Sustainable Development, Knowledge Society and Smart Future Manufacturing Technologies,* World Sustainability Series. Berlin: Springer.

Studia Periegetica, 2016, 1(15), Sustainable Development in the Baltic Sea Region – Focus on Education, www.wydawnictwo.wsb.pl/sites/www.wydawnictwo.wsb.pl/files/czasopisma-tresc/Studia% 20P_15_net.pdf [access: 16.12.2016].

Suomalainen S., 2016, A European Project for the Education for Sustainable Development in Higher Education. *Studia Periegetica*, 1(15), 159-167.

Tilbury D., 2011, *Education for Sustainable Development: An Expert Review of Processes and Learning,* Paris: UNESCO, http://unesdoc.unesco.org/images/0019/001914/191442e.pdf [access: 16.12.2016].

UNESCO, 2014, *Shaping the Future We Want – UN Decade of Education for Sustainable Development (2005-2014). Final Report,* http://unesdoc.unesco.org/images/0023/002301/230171e.pdf [access: 16.12.2016].

WCED (World Commission on the Environment and Development), 1987, *Our Common Future*. Oxford: Oxford University Press (also known as The Brundtland Report).

Weidner H., Jänicke M. (eds), 2002, *Capacity Building in National Environmental Policy: A Comparative Study of 17 Countries*, Berlin: Springer.

www.helcom.fi/about-us [access: 16.12.2016].

www.helcom.fi/documents/about%20us/convention%20and%20commitments/helsinki%20convention/ 1992_convention_1108.pdf [access: 16.12.2016].

www.iclei.org [access: 16.12.2016].

www.ubc.net [access: 16.12.2016].

Edukacja dla zrównoważonego rozwoju: przykład uwzględnienia kluczowych elementów treści na etapie projektowania programu nauczania

Streszczenie. Zrównoważony rozwój stanowi wyzwanie na całym świecie. Dziewięć krajów o różnych systemach politycznych, położonych w regionie Morza Bałtyckiego, wypracowało różne sposoby radzenia sobie z zagadnieniami środowiskowymi i stworzyło odmienne systemy edukacji w tym zakresie w ramach krajowego systemu kształcenia. Pierwsze wspólne działania w celu

zmniejszenia tych różnic, podejmowane m.in. przez Komisję Helsińską oraz w ramach Programu Uniwersytetu Bałtyckiego (PUB), są imponujące. Mimo to nadal należy poznawać historię środowiska, doskonalić sposoby tworzenia polityki środowiskowej oraz poszerzać wiedzę o obecnym stanie rzeczy, aby przygotować się na wyzwania przyszłości. W związku z dyskusjami na temat poprawy procesów kształcenia celem artykułu jest przedstawienie przykładu dobrych praktyk kształcenia na jednej z uczelni stowarzyszonych w ramach BUP, w świetle zasad EZR. Na przykładzie jednego przedmiotu, polityki środowiskowej, który skupia się na budowaniu potencjału dla potrzeb krajowej polityki środowiskowej, analizie poddano sposoby zainteresowania studentów tematyką przedmiotu. Wyniki wskazują, że analiza konkretnych przypadków problemów środowiskowych w zorganizowanej dyskusji prowadzonej w małych grupach seminaryjnych sprzyja realizacji EZR.

Słowa kluczowe: region Morza Bałtyckiego, budowanie potencjału, polityka środowiskowa i sprawowanie rządów, edukacja dla zrównoważonego rozwoju