No Child in the Norwegian Woods?

A Study on Education for Sustainable Development in Norwegian Primary Schooling

Nadja Kerstin Raabs

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Centre for Development and the Environment

University of Oslo

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"It's education that's meant to takes us into this future we can't grasp"

Sir Ken Robinson

Für Opa,

dem die Bootreise gefallen hätte,

und

Findus.

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Acknowledgement

This thesis has been a challenge and a journey for me. I was privileged enough to choosing to dedicate this thesis to a topic that I am passionate about. I had hoped would make the process easier – it did not. I have never taught at school, and I do not know what it is like to be a teacher, I only know what it is like to be the daughter of one. However, I hope that this thesis can be helpful to those interested in Education for Sustainable Development. Then, my wish for this thesis were fulfilled.

Thanks to my family, who was and is not always happy about the youngest one choosing to live and study in another country. They have still been fully supportive and pushing me all the time. I am immensely thankful for that, and I want them to know that I also did this for them, and that I love them.

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Abbreviations

A21	-	Agenda 21
BC	-	The Belgrade Charter
CC	-	National Core Curriculum
ECB	-	Model of *Environmental Citizenship Behaviour*
ESD	-	Education for Sustainable Development
KD	-	Kunnskapsdepartement (Ministry of Education and Research)
KL06	-	Kunnskapsløftet 2006 (National Curriculum 2006)
LA 21	-	Local Agenda 21
MD	-	Miljøverndepartementet (Ministry of the Environment)
NSDS	-	Norway's Strategy for Sustainable Development
WP	-	White Paper – Report to the Norwegian Parliament (Storting)

Part I – Foundations

1. Introduction

A popular German artist from the 90s had one of his biggest hits with a song called "Let Children Rule"[1]. It is a song about how the world would look if children were to rule it. This world is a better place, and he is expressing his trust in children, and the hope he is putting on them changing the world towards a better future.

We have always considered children as beacons of hope, especially in times of trouble and dismal outlooks. They are considered as innocent, yet "unspoiled" beings, still influenceable during their early years. With regard to sustainable development and climate change, they again are given this role. Children are the citizens of future societies, and these need to be sustainable. *Education for Sustainable Development* – formal and informal - is considered a key in this matter.

I wrote this thesis while the UNESCO's *Decade for Education for Sustainable Development*[2] (UNDESD) is proceeding. Its aim is to foster ESD, and make it a steady and essential component in education on an international and national level. The intention is to aid people in

> "develop[ing] the attitudes, skills and knowledge to make informed decisions for the benefit of themselves and others, now and in the future, and to act upon these decisions"[3].

In the light of this decade, this thesis is going to seek an understanding of how this is approached in Norway, and by taking two different types of

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[1] Herbert Grönemeyer "Kinder an die Macht"

2 2005-2014. This thesis does not provide for a detailed discussion of the term, especially regarding the paradox sustainable – development. However, the definition I am following is in congruence with Connelly & Smith (2003: 5ff.), which among others recognises that "human well-being is constituted by more than economic growth and prosperity alone", as well as a need for the restructuring of institutions and a commitment to equity (see App. I)

3 http://www.unesco.org/en/esd/ accessed 24/09/2010

schools as cases. My research was guided by one main leading research question: what is the status quo of the implementation of ESD on primary school level in Norway? This implied finding out which political, social, and cultural levels are directly connected to ESD's implementation in Norway. I chose to focus on two educational approaches in order to take this broad question apart. The intention was ending up with a manageable chunk of research, which would nevertheless yield results that could be considered as a basis for further investigations on the topic.

A further important aspect in this context is culture. It was my conceptions of Norwegian culture and environmentalism that made me come to this country. I wanted to find out how ESD is being perceived here. Norwegian culture with its powerful tradition of *friluftsliv* (Rønnow 1991) - a very strong focus on spending time in the outdoors, going hiking (Nedrelid 1993), and an attachment to nature - appeared to be predestined for active environmentalism, the emergence of environmental sensitivity, and thus a realization of ESD.

Looking closer though, there seems to be a mismatch between this image and reality. Apparently co-existing with this green image is a tendency towards overconsumption of e.g. energy, travel, clothes, and food in certain social strata. Having recently been nominated the world's most prosperous country, a large part of the population can afford high consumption to a greater extent than the average European.

In the context of my research, it is important to look at contemporary and past Norwegian cultural traits, to find out about "webs of significance" (Geertz) and if / how climate policy and thus ESD has become entangled in them. Culture is a product of communication (Bolten 2000), passed on in a both verbal and non-verbal fashion, while simultaneously being created through communication (cf. Vygotsky later in text). Thus, when calling for behavioural change, we are calling for a change in cultural values. In this respect, it is important to keep this aspect in the back of our heads.

Furthermore, ideology will emerge as an important topic, as ESD itself is value-laden and normative.

By means of observational fieldwork, in-depth interviews and document analysis I sought an understanding of the foundations that shape today's educational reality in Norwegian primary schools[4], and the position that ESD holds within this. I talked to resource persons from different levels of the system, trying to attain a holistic picture. The findings are applicable to my cases, and are not representative of Norway overall. Thus, they can only give us an idea of the general situation, and ideally provide working hypotheses for further research. The following chapter is going to present my research methods, chapter 3 will provide my theoretical approach. Chapter 4 is presenting the general background of this thesis, with an introduction to ESD and the two cases. Finally, chapter 5 is going to provide the analysis of my data.

4 The educational system in Norway is built up in a slightly different way than in for example the US, the UK or Germany. Children attend *grunnskole* from grade 1 – 10. Out of this, grades 1-7 make up *barneskole* and grades 8-10 make up *ungdomsskole*. My study is focusing on barneskole only.

2. A Matter of Methods

This thesis is a study of ESD on Primary School level in Oslo and Akershus, and takes two different cases – 2 State Schools and 2 Steiner Schools – as point of departure. This approach was chosen in order to gain a more practice-oriented insight into the topic. It was motivated by the two pedagogical models these schools stand for and in seeing how they each approach the issue.

The methods chosen for this thesis are exclusively qualitative. Observation in-situ, in-depth interviews and document analysis of relevant official and scientific documents in combination with literature review were considered to be the most suitable approaches. This was because what I was looking for were meanings, patterns, and explanations. I wanted to understand – *verstehen*, as Weber said (Jackson 1995: 9). Hence, my approach is interpretive and explanatory. Observation and in-depth, semi-structured interviews, and document analysis were my way of finding primary and secondary sources.

Observing in-situ was aimed at gaining a first impression of the field, getting an overview over and understanding of the underlying structures in the schools as well as coming into contact with relevant resource persons. After the observation, I conducted interviews in order to get deeper into the issue and to be able to ask the right questions, which ideally would provide answers to impressions I had gained in-situ[5]. Document analysis and literature review were ongoing processes throughout the research.

2.1. Case Study Research

Recent literature (among others Yin 2003; Gomm 2000) on case study research gives the impression that this research tool does not have the highest standing in social research. I nevertheless chose to use it to approach my topic

5 cf. For example Neuman on field interviews (2000: 374ff.).

because it was most suitable concerning the size and given time frame of this study. First, the character of my research and the intentions I had with the former overlapped with the definition of a case study. Yin defines it as a

> ”research strategy where a how- or why-question is being asked about a contemporary set of events over which the investigator has little or no control” (Yin 2003: 9).

This coincided with my objectives of understanding how the standing of ESD is within Norwegian policy and at Norwegian primary schools, illustrated by the different school types. Based on preliminary research (cf. Laumann 2007), I wanted to dig deeper and find out if ESD is being prioritised the way that several international and national agreements and documents (Belgrade Charter, LA 21, Soria Moria I / II, etc.) demand it to be.

In addition to this, case studies generally deal with phenomena in real-life contexts (Yin 2003), whereby cases are being composed on the basis of naturally occurring situations (Gomm 2000). The daily routines in schools are real-life situations, which I as a researcher entered in order to understand, hoping to gain knowledge of ESD as a social phenomenon. Another aspect was the opinion that it is a useful strategy for exploratory research, which corresponded with my interest.

Regarding critique directed towards case study approaches, their most often mentioned disadvantage is the question of generalisability, and connected to this, a supposed lack of rigour (Gomm 2000, Yin 2003). Concerning the latter, due to a lack of a fixed set of research tools commonly used for case studies, verifiability is not easily guaranteed. A situation in which the observed behaviour is beyond the researcher’s control is hard - if not impossible - to recreate in reality. Thus, the findings cannot easily be generalized either, unlike it is for example possible with laboratory experiments or surveys. However, I would want to argue that this might be true for some case study situations, but not for all.

Lincoln & Guba (in Gomm 2000) suggest that even if case studies cannot guarantee generalisability, they can at least provide researchers with working hypothesis, or "theoretical propositions", as Yin calls it(2003: 15). In the context of my research, where the focus was on parts of a system and their interrelations, I think this opinion is relevant and defendable. Generalising the results would be dangerous and inappropriate. Even so, for the results to claim a position within the respective field of research, theoretical propositions pay tribute to the effort and time invested in the study. In addition, they can provide a proper foundation for further research and understanding of the chances and challenges within the field.

2.2. Fieldwork

Observation in-situ is useful for gaining a holistic picture of a phenomenon or social processes, fed by first-hand knowledge (Jackson 1995; Neumann 2000). Unlike participant observation, my observation was rather small-scaled based on the restricted time frame of my study. In addition, unlike with participant observation, I did not become a member of the group I was studying, and I did not have the possibility to constantly be with the groups of my choice.

I was entering the field as a double-outsider. I was a scientific outsider – without pedagogical background – and a cultural outsider. I had lived in Norway for one year by the time I started my research. Things that might make perfect sense for most natives might seem puzzling to the outside researcher, s/he might understand or evaluate them wrong, or draw wrong conclusions based on this lack of knowledge. At the same time, it might provide the researcher with insights that a native researcher might not have gained, as s/he would not question certain aspects because they make sense to them. At the same time, it can provide one with a rather neutral viewpoint, which can be of great advantage.

The motivation for choosing this research tool was the intention to gain a holistic picture of the current situation of ESD in Norwegian primary schooling, since ESD is a phenomenon that is embedded in social structures and culture. It should not only be governmental documents and research literature that feed into my analysis, but also the above-mentioned first-hand information. This required observation and in-depth interviews. Due to this structural embeddedness, often one does not understand *what* and *why* something is happening. It is essential to take a look at what is lying underneath, as this often contains the reasons for what is appearing on the surface. Regulations and aims coming from governmental positions have to be implemented at school level, where they encounter structures and conditions they have to cooperate with.

In addition, it was important to me to be able to compare the theory (i.e. the curricula and governmental documents on ESD) to the practice (what is actually happening on school level and what teachers' opinions are). However, my fieldwork was not limited to observation in schools. Over the course of my research I attended a conference on ESD in Norway, two seminars aimed at providing teachers with more knowledge about climate change, a school garden seminar, and two arrangements about recycling, aimed at kindergarten children and 4th graders respectively[6].

The procedure for obtaining a sample of schools was different for each school type. In general, my research was limited to the Oslo and Akershus region, the latter making up the district around Oslo in Southern Norway. I consider this to a certain degree as a disadvantage, as a more varied sample might have provided more varied and reliable results.

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6 The conference was hosted by UMB Ås in November 2009 in Drøbak, the climate seminar – Klimaklok - was arranged by *Klimaløftet* in April and November 2009 in Oslo, and the recycling events by *Grønn Hverdag* in October 2009 in Larvik and Oslo and the school garden seminar by *Grønn Hverdag* and *Oslo kommunale skolehager* in January 2010 in Oslo.

Regarding Steiner schools, I contacted all of those that were situated within Oslo as well as some in the Akershus region. Eventually I worked together with two schools, one in Western Oslo, another one Bærum in Western Akershus. After consultations with the pedagogical leaders - gatekeepers in my case - I was able to arrange some appointments for observation with three teachers at the school in Bærum. A teacher from the School in Western Oslo, who was working with the school garden lessons, also contacted me, and we arranged some appointments. In total, my fieldwork then stretched from mid-October until early December, thus making up about 2 months. However, I was not able to make enough agreements to observe every day in this period.

Regarding State schools, the situation was different. I encountered more problems here than in the Steiner schools. At one school, located in the North of Oslo and close to the city limits, it took several attempts before I finally was able to observe. After this, I was introduced to teachers of the grades I was intending to observe, and only two teachers agreed to let me in their lessons in 5th grade. This was furthermore restricted both related to duration and subjects I was allowed into. The second school was located in Asker, Western Akershus, where a teacher connected to *Den naturlige skolesekken* (The natural school bag) showed great interest in my project, so I was able to join in some lessons. After this, I was introduced to several other teachers of relevant grades, but most of them seemed reluctant to my intentions, so I was only able to observe in a few more additional lessons.

During all of my observation period, I kept an observation diary, which helped gaining a picture as holistic as possible. My observation thus included everything connected to the actual process, i.e. from the contact with the teachers to the actual in-situ observing in the classroom - the physical setting, utterances and proceedings of teachers and pupils as well as behavioural aspects.

Regarding research ethics, the schools were informed about the nature of my research, and I signed an agreement of secrecy. Regarding my contact with the children, I never approached them or asked questions without the teacher's consent.

Concerning my interviewees, I asked everyone prior to the interview if they agree to the interview being recorded. All interviewees agreed to me using their real names and affiliation, but I eventually decided to give all interviewees fictional names, as to protect their privacy. I kept their affiliation as to put their statements into context.

Defining the Study Area

I started by analysing the curriculum for both school types and tried to base my decision on the competency aims[7] after grade two, four and seven. I took these as my basis, partly with reference to Piaget's theory of development and the stages he defined within that. Piaget's stages of development[8] would correlate with the CA after grade 2 (7 years old) and the CA after grade seven (12 years old). However, after some discussion I found it would be more useful to take the grades prior to the respective competency aim / developmental stage – at least for the first two, as my study did not include grade eight. In addition, at Steiner Schools the teaching does not begin before grade two, as grade one is still part of the kindergarten.

However, after the complications I faced regarding being allowed into the lessons, I gave up my narrow focus on these grades and tried to get as

7 Competency aims are skills and knowledge aims, defining what children should have command of after certain grades.

8 Jean Piaget was a developmental psychologist who developed the model of cognitive-developmental theory. Steiner's life-epoch 1 largely equals the sensorimotor (0-2 yrs) and preoperational stage (2-7 yrs), epoch 2 roughly covers the concrete operational stage (7-11) and finally epoch one spans a similar period as the formal operational stage (11 yrs +) (Berk 2006).

much out of the possibilities I was given. I did thus end up with a rather varied sample of grades.

Strengths and Weaknesses

A positive feature is the aforementioned possibility to observe real-life situations, and thus the chance to get a real-life impression of the happenings and structures. In addition, this allows for a holistic and thus thorough understanding about schools as a system, the perception of ESD there, and experienced there, and how it fits in or collides with the structures.

Furthermore, it offers the opportunity to compare the official goals (set in the curricula and official documents) to the actual happenings in schools. In the case of this thesis, the limited amount of time and problems encountered at the beginning of my fieldwork period did not provide me with as much insight into this as I had expected. Regarding further research though, this method appears very suited to compare theory with practice. Curricula might provide a rather idealised image of reality, not paying enough attention to the structures within which the former are supposed to be implemented.

I mentioned some other aspects earlier, so they are to be kept short here. The problematic of replicability of observation is a long-discussed issue, reflecting back on generalisability. Of course, the research of this study can never be executed identically again, but schools in Norway, both State and Steiner schools have a certain amount of structures that are alike. Thus, the above-mentioned working hypotheses can emerge based on the results.

Furthermore, a lack of a fixed set of techniques can be both a curse and a blessing. A curse because it might leave the researcher unsure about how to approach the field. It may sometimes feel like trying to repair a bike, and even though one has a large toolbox, one does not know which tool to choose. Additionally, it can be difficult to pick what aspects or incidences are worth noting down. It can be a blessing because at the same time the researcher has the opportunity to approach the field with a tabula rasa, without

preconceptions and with open senses. This can be of great advantage, especially when one is seeking an understanding how something is working.

A last aspect I would like to consider is what I would call the issue of subjectivity. Whose viewpoint is reflected in the analysis? I often found myself in situations where I was drawn to one side more than to the other. It is difficult to be objective in this respect, but it essential.

2.3. In-Depth Interviews

In-depth interviews are a suitable tool that (participant) observers often use as a supplement to their research (Jackson 1995). This is appropriate as far as observation often provides the researcher with first insights, impressions of the field s/he is studying, and knowledge of the underlying, and often invisible structures. The interview then provides the opportunity to track hints and / or ideas s/he got while in the field. Thus, the areas that are going to be the main topics in the interview can be set by means of observation. In contrast to surveys, where questions are often standardised, in-depth interviews make it possible for a conversation to evolve. Even though the areas the interview is going to cover are set, questions are not standardised, providing greater flexibility and more freedom during the process of interviewing. Both interviewer and interviewee can lead the conversation into certain directions, enabling the exploration of ideas that may have not been present in advance (Jackson 1995) (Brenner et al. 1985).

I chose in-depth interviews because I wanted to complement the observational data with the views and opinions of people inside schools and ESD-related organisations. Interviews' semi-structured and open-ended nature made them appropriate for my research, as they were supposed to guide the process of further exploration as well as supporting findings from my fieldwork. I considered them appropriate because there were some basic questions that I wanted all interviewees to answer (e.g. how they think their environmental commitment emerged). At the same time, this left the

opportunity to manoeuvre within the broad area of ESD, something especially important regarding the diversity of backgrounds of my interviewees (state schoolteachers, Steiner schoolteachers, informants from NGOs or state projects).

My procedure for arranging the interviews usually followed the same steps. I interviewed some of the teachers I had gotten in contact with during my fieldwork, and they had agreed on a follow-up interview. Out of the nine teachers who had allowed me into their lessons, I was able to talk to four. I usually had to adjust the questions in my interview guide so they would fit the person and situation better. On average, I asked each person about 6-10 questions, and interviews would last from 45 min to 1 ½ hrs, and interviews had more of a conversational character. All interviews were tape-recorded and transcribed after the interview. In addition, I interviewed several people who are connected to ESD and / or sustainable development in Norway. Some of them were connected to *Den naturlige skolesekken*, teacher training, the Ministry of Environment or an organisation working with LA 21. I chose this approach because ESD is present at different social and structural levels. I interviewed 10 persons, eight of them female, two male. The period in which I was carrying out interviews was from early February until late May 2010.

Strengths and Weaknesses

Interviews offer the opportunity of providing the researcher with first-hand information, as ”the best way to find out about people’s activities is to ask them” (Brenner et al. 1985:1). Especially because my observation in-situ did not yield the results I had expected, I had to rely on interviews to provide me with information. Interviewing enables the researcher to collect extensive data, which I experienced to be true. It could become problematic when resulting in too much data. This can pose a challenge to the researcher, as s/he might be trying to incorporate as much of the results as possible, something that might potentially lead to too wide a focus or blurry conclusions.

Flexibility is another argument for the application of this research tool. The interview situation allows the researcher to deal with a variety of subjects (ibid.), something of value especially when researching within a field as broad as sustainability. However, if during the interview a different angle or an argument emerges, the researcher has the opportunity to pursue this because the structure of this research tool allows for this. In addition, the interview situation allows for immediate responses (ibid.) from both the interviewer and the interviewee. This leaves less room for misunderstandings as both can cross- check with the other if anything appears to be ambiguous.

Problematic about interview situations might primarily be the problem of reliability of the subjects and – along with this – the issue of bias. Naturally, most interviewees want a positive light to be cast on themselves and their profession. This might lead to distortions in their answers. Bias might also occur due to and because of the choice of interviewees, which poses a possible danger in the later analysis and results if the researcher remains unaware of this (Brenner et al. 1985).

A final shortcoming worth is the effort connected to carrying out interviews. Time and work has to be put into the designing of the interview guide, which requires an analysis of previous data (e.g. from observational fieldwork or document analysis). In addition, each interview takes time for the execution and the transcription. Language can also become a challenge for both execution and transcribing. In my situation, all interviews were carried out in Norwegian (or English in one case), a language that I then had been speaking for roughly 1 year. Despite this, I chose this option as I was researching ESD in Norwegian primary schools. It seemed appropriate to me to adopt Norwegian as my main language of communication, because I did not want to miss important aspects that might have gotten lost had I prioritized English. However, in this thesis, I translated all quotes into English, except for the one interview carried out in English.

2.4. Doing Research the Interdisciplinary Way

Finally, I would like to mention some aspects connected to the challenge of doing interdisciplinary research. My topic is located somewhere in the intersection of pedagogy and didactics, political science, cultural history as well as environmental and climate change science. Manoeuvring within this intersection or the inter-culture that all the latter have created in the context of my research has been challenging, interesting and rewarding. However, especially when moving within a pedagogical content, i.e. during observation in schools, I sometimes felt uneasy because I lacked pedagogical and didactical background knowledge. Interpreting my data and making suggestions for the future based on that is yet another challenge. I do not intent to offend those whose work I respect, and sufficient insight into which I might lack.

However, I am still convinced that a topic like ESD can and must be understood properly by approaching it in an interdisciplinary fashion. Thus, one-sided emphases on the social, political or educational aspects can be avoided, and a more diverse and holistic perspective emerges.

3. Theory

Solutions to solve or counteract the environmental crisis the world is facing are manifold. Some prefer technological solutions while others favour behavioural change. The latter is directly related to ESD. The idea behind it is to not let patterns of behaviour and thinking that have been identified as detrimental to the state of the environment emerge and manifest at all. This option sounds easy to achieve, as education is what happens at school anyway. In addition, it is much harder to change the habits and attitudes of adults than those of children, as the latter are still acquiring patterns of acting and thinking during the years of their childhood and early adolescence, via the process of socialisation. However, how is this to be achieved? The following part will introduce a model of effecting sustainable behaviour that appears promising. The second paragraph will introduce a theory by Bronfenbrenner that and provide justification for why a holistic and systemic approach is necessary to the topic of ESD, while the last chapter will introduce the concept of culture used in this thesis.

3.1. Environmental Sensitivity

Taking a closer look at how behaviour and attitudes can be influenced with regard to sustainable behaviour, a model developed by Hungerford & Volk (1990) - the model of *Environmental Citizenship Behaviour* (ECB) - is important (see App.IV). It provides an alternative to traditional approaches towards effecting behavioural change via the mediation of knowledge. With reference to the Tbilisi Conference on – what was then still called – Environmental Education in 1977 they formulated objectives of the latter: awareness, attitudes, skills, participation and sensitivity. These aspects are said to foster environmentally responsible citizenship. Hungerford & Volk define these as factors whose manipulation goes "beyond 'basic' education in its traditional sense" (1990: 9). These objectives are target and result at the same time, and have to be influenced or created.

Within their behavioural model, they acknowledge several so-called variables leading to environmentally responsible citizenship, and group them into three main categories: entry-level variables, ownership variables and empowerment variables. Within each of the categories exists a set of sub-variables .With this, the model follows a logical procession from initiating behaviour, providing a foundation for it, and finally endowing people with the relevant skills. This implies that if Norway wants to follow up the goals set in chapter 36 of LA 21, this model could provide a suitable approach to define a foundation for the national aims of effecting change and help becoming part of the vanguard of ESD.

One of the sub-variables – environmental sensitivity – is standing out as showing "a dramatic relationship to behaviour [in the research]" (Hungerford & Volk 1990: 11). It can thus be viewed as being of utmost importance, standing out from the other sub-variables in this category regarding the initiation of environmentally sound and sustainable behaviour. Later studies did recognise this importance as well, as Chawla shows in her research (1998; 1999).

Hungerford & Volk define environmental sensitivity as an

> "empathetic perspective towards the environment" [and] "a function of an individual's contact with the outdoors in relatively pristine environments either alone or with close personal friends or relatives" (Hungerford & Volk 1990: 11; 14)

Chawla acknowledges though that this definition cannot be taken for granted in its entirety (1998). What I would consider critical in this is their use of "relatively pristine environments" due to two reasons. First, what is the definition of a pristine environment? Secondly, it would limit the possibilities for urban teachers to succeed with sparking interest in children, as a park or a school garden would therefore not be suitable.

Her review of other research on the topic found positive experiences in nature features to be *the* most important influence factor, followed by role

models (teachers, parents, etc.) and education (1998). Her own study executed with numerous environmental activists from Kentucky and Norway supports this picture.

I am intending to apply this theory to the Norwegian concept of ESD, and to analyse in how far the aims set by it are – according to the theory – likely to be achieved. Even though Chawla acknowledges difficulties in simply applying outdoor experience as the most important factor, she states that "contact with natural areas has emerged as one of the most significant influences in all the studies reviewed" (1998: 19). This is related to what Richard Louv – journalist and founder of the *Children & Nature Network* - argues about a well-founded concern that in today's world, children are becoming more and more removed from natural habitats, are losing contact with nature and the outdoors at an alarming degree, eventually leading to a decline in interest in sustainability issues.

Finally, some might argue that we are morally obliged to provide children with the possibility of a sustainable future and the same quality of life as we have today. In order to do this, children have to be provided with the tools to shape and create that future themselves.

3.2. Children Caught in Webs

Schools are a part of most people's lives in the Western world, five days a week, and approximately 42 weeks each year. However, they are only one of the many systems people – in this case children - move in and between every day. Still, most people would probably not be aware of the fact that these various systems are interconnected and that they influence each other to varying degrees. Schools are a part as well as a manifestation of culture, and thus they themselves and ESD cannot be analysed or examined without considering the larger context they are embedded in.

In order to do this within a suitable framework, I am referring to Bronfenbrenner's theory of the *Ecology of Human Development*. The intention

is not to apply the theory in all its aspects, as it was initially aimed at psychological research on the development of the child. However, Bronfenbrenner's thoughts on the interconnectedness of the every-day systems we move in and between, and their influence on the development of children are relevant to this thesis.

Bronfenbrenner considers behavioural development as a function of the interplay between individual and environment (Bronfenbrenner 1979: 16). Environment in that respect should in the first place be considered as referring to non-natural surroundings (including the family, educational institutions, circle of friends, district, etc.), but it includes the natural environment as well. There might be differences in certain developmental traces between a child growing up in the country, close to forests and lakes, and a child growing up in downtown Berlin. Furthermore, this theory views the "environment as it is perceived rather than as it may exist in 'objective' reality" (ibid.: 4). This means, the emphasis is on the environment as it makes sense to the individual (in this case the child), filled with culturally transmitted meanings. To use Geertz' words, here we have the child entangled in webs of significance (Geertz 1973: 5).

The environment is in itself subdivided into several sub-systems – the microsystem on the lowest level, followed by the mesosystem, exosystem and finally the macrosystem. Within this division, importance is given to settings and the interconnections between them, which Bronfenbrenner defines as places "where people can readily engage in face-to-face interactions" (Bronfenbrenner 1979: 22). The microsystem is a child's closest surroundings, usually the family, school or kindergarten, and the immediate neighbourhood. Proceeding to the next higher level, the mesosystem is defined as the relationships or connections that exist between the microsystems, i.e. for example between the family and the child's school. The exosystem then is made up of settings in which the child is not actively involved in, but which nonetheless have influence on its life. An often-cited example here is the

parents' workplaces, but the local community – an important factor within ESD – can also be included here. This level is important as far as decisions made here might have an influence on the child's life, without the child being able to have influence on the former. Laura Berk, a developmental psychologist, explains what Bronfenbrenner defined as the macrosystem in her book "Child Development". It is the all-encompassing structure, consisting of "cultural values, laws, customs, and resources" (Berk 2006: 29), which makes this level as immaterial and invisible as the mesosystem. The state would be located at both the macro- and exolevel. The latter would find its manifestation in e.g. the state's departments, community governments, the educational system or the health system. It is also to be found at the macrolevel, which is made up of beliefs and values typical for that system, because the way the country is governed is a manifestation of these beliefs and values. Public policy is affecting the systems at the lower levels, and hence they are affecting people on a daily basis, "steering the course of behaviour and development" (Bronfenbrenner 1979: xiii).

Applying this to schools – which Bronfenbrenner describes as those settings that carry "primary responsibility for preparing young people for effective participation in adult life" (ibid.: 53) - and the role that is given to them within society, the three outermost layers of his model become important. Macro- and exosystems should be given primary importance here, but information on the perspective on schools' function can also be found on the mesolevel. Macro- and exosystem are important because it is here the formal conditions for schooling are being defined and executed, within the respective cultural and social context. Targets of analysis in this case would be governmental documents on schooling and its role within politics, especially documents issued on the significance of school's roles within sustainable development. Additionally, the national curriculum constitutes an important source as well. At the same time, cultural and social views and ideas on what

school's role within society should be – thus the more implicit, more elusive aspects - can also be found on this level.

Bronfenbrenner's theory provides the backdrop for an explanation for the influence of the child's surrounding structures (family, school, state, ideology, culture) as well as an argument for the importance of integrating the local community into teaching, an often-mentioned argument within ESD research. Thus, it provides a suitable framework that comprises all important factors of influence in one, as well as it argues for the importance of paying attention to the influence of larger social contexts. This means that schools can and must not be looked at and analysed in an isolated fashion, something that also Sterling – a researcher in ESD and Educational Development at the University of Plymouth, UK - argues for (Sterling 2001). It implies that when analysing ESD in a Norwegian context, we have to take into consideration national climate policy, the curricula of the schools as well as their sociology. Apple & Weis, who argue for interpreting schools socially, culturally, and structurally (1983) support this.

At the same time, Bronfenbrenner argues in favour integrating cultural factors, which in the context means analysing ESD against a Norwegian background. Because they are making up the overarching macrosystem and because of the interconnectedness of all systems – as Bronfenbrenner argues that

> " the complex of nested, interconnected systems is viewed as a manifestation of overarching patterns of ideology and organization of the social institutions common to a particular culture". (Bronfenbrenner 1979: 8)

A holistic approach that considers all layers is essential for achieving a complete and rigorous picture of the situation under scrutiny. In addition, the perspective taken on human development within his theory – making it a product of the interaction between the individual and its environment (ibid .) – provides yet an argument for the importance of a framework-oriented approach.

3.3. Culture

> "Culture contains the socially acquired traditions and ways of life of the members of a society, including their structural, stable manners of thinking, feeling and behaving (i.e. behaviour)." (Harris 1989: 20, my translation)

This definition of culture is one of the manifold definitions that exist for this term, a term whose definition is equally disputed as is the definition of sustainable development. Since culture is an essential factor within my thesis, it is essential to delineate a definition that I apply in the context of my research.

I do partly agree with the definition Harris provides. What I disagree with is the expression "*stable* manners of thinking, feeling and behaving". If this were the case, then the cultural change required for a sustainable future would be out of reach. Even though every culture potentially has certain tendencies of thinking, I do not think that they could be called stable. A concept of culture always has to be dynamic, both to acknowledge its nature and its potential for being a tool for change. I thus favour a dynamic definition of culture.

Thus, I am following Geertz in his definition, in which he defines culture as

> "denot[ing] a historically transmitted pattern of meanings embodied in symbols, a system of inherited conceptions expressed in symbolic forms by means of which men communicate, perpetuate, and develop their knowledge about and attitudes towards life." (Geertz 1973: 89)

I consider this definition most suited because it encompasses both broad and narrow definitions of the concept. Cultures thus are "webs of significance" (ibid.: 5) in which we grow up and move in, and we can see similarities with Bronfenbrenner, whose systemic approach to child development resembles a web.

Regarding the importance of culture in child development, Lew Vygotsky's socio-cultural theory and within this, especially his views on cultural mediation, can be cited as additionally supporting reference. Vygotsky, a Russian psychologist, was interested in the influence that culturally specific patterns have on child development (Vygotsky 1978; Berk 2006). Unlike numerous theorists before him, Vygotsky acknowledged the importance of culture on the development of children. The tools to act and function in the society that children are growing up in are handed down by their culture, via interactions – i.e. cultural mediation. This is mainly done by older, more knowledgeable members of the former - mainly adults, as Crain explains Vygotsky's concept (Crain 2005).

In his writings, Vygotsky attributes a great deal of this learning process to schools, but by using his theory in connection with Bronfenbrenner's model, we can apply this to other levels. Hence, we see that many more settings influence a child while s/he is growing up. If culture is important, we cannot leave social and political aspects out of the analysis. Social interactions are essential if children are to learn the ways of thinking and behaving of their culture - via a process called cultural mediation. Attributing significance to "socially elaborated learning" (Vygotsky 1978: 125) automatically directs attention to the framework children are growing up in, while at the same time reminding us of the importance of approaching a holistic picture when looking at ESD in Norway.

4. Background

Different school types approach education in different ways, they put their emphases differently and might have diverging views about teaching and human nature. Thus, this chapter is going to give an overview over each of the two school types that are under scrutiny in this thesis. I consider this essential foundational knowledge for the later discussion. In addition, I will start by giving a brief overview over ESD and the long way it has come since the early 1970s.

4.1. Sustainable Schooling

Education is the not the filling of barrels, but the lighting of flames.
(Heraclitus)

ESD has been on the environmental agenda since as early as 1972 - in its earliest, basic form in connection to the Stockholm Conference[9]. In 1975, the UNESCO paved the way for making Environmental Education (EE) a formal goal worldwide, and provided it with a basis through the Belgrade Charter[10] (Raumolin 2001). The Belgrade Charter – bearing the subtitle "A Global Framework for Environmental Education" - explicitly states that whatever changes concerning policy, taxes or regulations are being introduced, they are "no more than short-term solutions" (Belgrade Charter 1975: 2) if we do not provide a different kind of education to young people that effects a change in thought and action patterns. Thus, it aimed at contributing to „develop[ing] a world population that is aware of, and concerned about, the environment and its associated problems", and to provide them with the relevant "knowledge, skills, attitudes, motivations and commitment" (BC 1975: 3).

9 See e.g. Annex II, Particular Policy Objectives
10 http://portal.unesco.org/education/en/ev.php-URL_ID=33037&URL_DO=DO_TOPIC&URL_SECTION=201.html

However, the focus back then was on educating *Eco-Citizen[s]* who "would understand environmental problems, be conscious of their importance and active in findings solutions to problems" (Raumolin 2001: 5). Raumolin also mentions that natural and engineering sciences were the main areas that fed into EE at that time. Social and cultural perspectives had largely been left out, for fear of "introducing 'non-scientific' points of view" (ibid), and probably also because the problems back then were mainly conceived to rather be of a natural sort that social. We know now that social and cultural perspectives are essential in order to understand the roots of the problems, and to find solutions and effect change.

A change in both discourse and possibilities of implementation occurred after the Brundtland Report (BR) with the introduction of the term *Sustainable Development*. Additionally, the UN Framework Convention on Climate Change (UNFCCC) and Agenda 21 (A21) contributed to this shift away from a purely natural scientific perspective to integrating social foundations as well. From now on, the term *Education for Sustainability* was more appropriate than *Environmental Education*, because the former includes both natural and social science perspectives (Raumolin 2001, Scott & Gough 2003).

In addition, both the UNFCCC and A21 contain paragraphs that refer explicitly to educating the public in order to raise awareness, and states' obligations to provide this. A21 contains a statement that explicitly clarifies the need for a more integrated perspective. It says with regard to raising people's awareness of SD that what is essential is "achieving environmental and ethical awareness, values and attitudes, skills and behaviour" (A21 1992: ch. 36, §3). As much as this seems more appropriate and more promising, it implies complications concerning both the curriculum as well as techniques of education. Sticking to the focus on children, it is – most will say – more feasible to teach about biological or physical foundations and impacts of climate change issues. Teaching about values and the foundations and impacts

of behaviour is much more complex and demanding when fit into a pedagogical contexts.

Scott & Gough (2003)[11] support this. Their first claim relates to both the curriculum as well as the school as an institution. They argue that ESD crosses the borders of schools, and requires interaction with the whole surroundings (communities, etc). This is echoed by Raumolin (2001), who argues with regard to the complexity of environmental issues that "educational institutions should be reshaped to function as multi-, inter- and transdisciplinary laboratories" (ibid. 16). However, not only this, but also teachers and the way they are trained have to be considered.

> ESD today – as defined by the United Nations University –
> "is a dynamic concept that encompasses a new vision of education that seeks to empower people of all ages to assume responsibility for creating and enjoying a sustainable future. The overall aim of ESD is to empower citizens to act for positive environmental and social change, implying a participatory and action-oriented approach"[12].

National and international equality as well as a maintaining or recreating a natural environment that can sustain and delight humans are further important goals. It is about values and opinion, choices and attitudes. This now means that if we want to affect children's (i.e. the later citizens) behaviour and thinking, it would come naturally to start with this during the early school years already. However, the wish to create aware, reflective and responsible future generation might move dangerously close to the line of indoctrination, something that brings up the issue of ideology.

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11 Their focus traceably is on learning, not so much on teaching, communicating knowledge. However, I think that what they say can also partly be transferred to the challenges that teachers face, or whoever it is that is involved in transmitting the respective knowledge.
12 http://www.ias.unu.edu/sub_page.aspx?catID=108&ddlID=182 accessed 30/10/2010

4.2. Schooling in Norway

This chapter is going to rely mainly on Tønnessen's (1995; 2004) and Myhre's (1997) overview of Norwegian educational history. Both have their main emphasis on schooling, and only briefly mention tertiary education or further education for adults.

Until about 1850, Norwegians received most of what they needed to know by taking part in society and its everyday live and work (Tønnessen 1995), by growing up in a social network that taught them what was essential. Different social milieus would thus develop different kinds of knowledge. Someone growing up on a farm in Northern Norway would receive a different "toolbox" than someone whose father was a clerk in Bergen.

The first schools as institutions were established as ecclesiastic places for learning[13] about Christian faith and morals, and simultaneously emphasised the acquisition of Latin (thus *Latinskole* – Latin Schools) (Tønnessen 1995; Myhre 1997). Only boys from predominantly prosperous families attended. When labour specialization became more and more a part of Norwegian society in the 17th century, there was a need for more children attending school, so they could learn their parents' trade and be prepared for taking over after them. This paved the way for the bourgeoisie to establish their own schools (*Borgerskole*), where subjects like religious education, history or accounting and sewing were taught (Tønnessen 1995; Myhre 1997).

In the18th century, *Allmueskolen* (Common People's School) was established, influenced by a growing German pietism movement demanding education for everybody. Thus, by the end of that century, Norway had three types of schools – *Latinskole*, *Borgerskole*, and *Allmueskole* who all had Christian values as their foundations. It was at this time when Niels Treschow, then minister for Church Affairs, said that education and teaching were mainly

13 The first of these in Norway were established in Oslo, Bergen and Trondheim, religious centres back then. (Tønnessen 1995).

the parents' responsibility, and not a matter of the state. Even though the latter could provide guidelines, parents had to carry all the responsibility[14] (Myhre 1997: 29). This made education the personal responsibility of each citizen, and the state did not feel obliged to support this matter.

Later, a reform of the school system resulted in a twofold system where *Allmueskolen* was separate from the one that would eventually lead to the Higher Citizen School (*Høyere Borgerskole*), reflecting a class-segregation that would be impossible in today's Norway. Still, the obligatory duration of school attendance differed between rural areas and towns (12-16 weeks vs. two days a week for 45 weeks).

Already back then, the view was that schooling should provide children with "knowledge and skills that every member of society should possess" (Myhre 1998: 33). Related to this, Tønnessen traces a development that changed the social perception of schools. She explains that first in the 18th century the division of labour started to change, and work was relocated from home to other places. This excluded children from working at home, and they did no longer learn everything they needed to know for the life as an adult at home. Especially after the industrialisation reached Norway, the responsibility for upbringing and education was slowly but surely moved from the local community and the family to the schools. The qualification for the newly established occupations and the role as a citizen in a new and larger society was no longer something the children could solely learn via taking part in their parents' everyday activities" (Tønnessen 1995: 35).

By the end of the 1930s, Norway had a unitary school system (*Enhetsskole*), which it still has today. This was also the time when the first Steiner School was established in Norway (see next section). In the course of the following decades, the 9-year primary school was introduced, more lessons

14 My own translation.

were added to the curriculum, and teaching by grade started[15] (Tønnessen 1995). Moreover, the age of starting school was lowered to six, and the compulsiveness of schooling extended from the first nine to the first ten years. In addition, different choices were provided for those who had finished primary school and wished to continue on different paths. At Upper Secondary School (*Videregående Skole*), youth could now choose different courses of study according to the desired specification.

In this context, Myhre cites three motivations for the development of the school system. An *economic* motivation – children as important future employees, important in the international competition. *Social* motives such as equality based on social and geographical background[16]. Finally, *personal-cultural* motives (Myhre 1998: 94), the conveying of values and opinions. All three are important in an ESD-context, but the emphasis put on each of them decides on the standing given to ESD.

Tønnessen mentions that certain traits of Norwegian education policy are clearly related to social development (Tønnessen1995:77), like the revolts that happened all around Europe in 1968. Back then, the educational system was criticized for being based on bourgeois and capitalist ways of thinking, which might still in parts be brought up as a critical issue today[17]. This is based on school being viewed as preparing pupils for work and social life, where the focus rather seemed to be on preparing them for a life as an employee, as was the increased focus on testing and examinations in the 50s and 60s witness to (ibid.).

These decades after 1930 also witnessed changes in the curriculum, with for example the national curriculum from 1976 giving an enormous amount of

15 Before that, all pupils of a school were often taught at the same time.
16 This is important because settlement in Norway was and is so spread that children from rural areas often were disadvantaged in educational issues.
17 Cf. for example Sterling's (2009) critique of educational systems as mainly educating children into being good employees, instead of good citizens.

freedom to teachers regarding the choice of the syllabus and topics to include. Tønnessen classifies this as a strong decentralization and democratizing. The establishing of pupil and teacher councils in schools (ibid.) are a further witness to this. In the 80s, this changed a shift in political ideas, resulting in the opinion that schooling "should not be preoccupied with changing society, but rather concentrate on imparting knowledge and skills" (ibid.: 133). A new curriculum from 1987[18] narrowed down what was going to be taught in schools, and the freedom of choice given in 1974 was gone again (cf. Tønnessen 1995: 135). In addition, schools could from now on choose how to distribute the content of the curriculum to the different grades by means of a local curriculum that every school made, something that also included an emphasis on integrating local issues, and which has been kept until today.

A new primary school curriculum from 1997[19] contained what was called *Den generelle delen* (*General Part*), which stated principles for education on all levels, and at the same time conveyed the prevailing view on humanity, knowledge and teaching (ibid.:145). In the 1990s then continued what Myhre characterized as

> "traits in social and cultural development in the last decades [that] have accentuated the question about school's role as a social institution and the challenges and task it is facing to a high degree[20]" (Myhre1998: 268).

He acknowledges several issues that he considers most important, as for example a change in family structures or the rise of new media. However, he also mentions the ecological problematic, which includes climate change, biodiversity and the exploitation of resources, something that Tønnessen supports (Tønnessen 2004: 98ff.).

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18 Mønsterplanen 1987 (M-87)
19 Læreplanen 1997 (L-97), at the same time the age for starting at school was lowered to 6 years.
20 My own translation

Another change that occurred in this decade was a political shift in educational politics towards more decentralisation, a movement that had started as early as in the 1970s and that had both advantages and disadvantages. An advantage was that it provided a feeling of belonging to one's school and taking part in its everyday life, disadvantages could potentially be lying in differences between single schools and an ambiguity regarding responsibility (Tønnessen 2004). The idea was that the authorities were providing aims and controlling whether and to what extent they were achieved. However, how and by which means they were achieved was more or less left to the schools. Analogous to this, with the curriculum from 1997[21] becoming obligatory and binding, teachers could have less influence on the content of the teaching. However, towards the end of 1997 some of these binding aspects were slightly softened by giving a bit of freedom back to the teachers (ibid.).

Socially, schools' perception underwent a change as well. Tønnessen evaluates this by comparing the time from 1990 until 2004 and two Ministers of Education and Research, Gudmund Hernes and Kristin Clemet. The former, responsible for L-97, saw schools as having a constructive role within society - they strengthen the community and are a counterculture to negative trends within social development. Clemet – who held this position from 2001 until 2005 - on the contrary, viewed schools as suppliers of a service that customers demand. Diversity, freedom of choice and competition are valued high in this perspective, as well as a stronger emphasis on skills and knowledge (ibid.: 163). Tønnessen considers especially the competition aspect as being critical, since it is argued that if these values are becoming more and more important, "soft" values, like education in its normative meaning[22], are falling behind. At

21 Læreplanen 1997 (L-97)

22 Tønnessen distinguishes between a descriptive and a normative definition of education. The descriptive definition refers to the shaping of attitudes, behaviour and skills, which is related to socialisation. The normative definition is referring to "refinement, to stretch

the same time, the development took a turn towards more diversity in methods, and the schools can now choose themselves which kind of working methods they want to apply.

The principles for teaching today are recorded in the Statute on Education (*Opplæringsloven*), which is binding for every teacher and school. Connected to this is the National Curriculum (*Kunnskapsløftet*). The latter consists of four parts - the *General Part*, which represents the value base and official view on humanity constituting the foundation for teaching (Kunnskapsdepartement 2006[23]). The second part - the teaching decree (*Læringsplakat*) - contains specific principles for teaching. The third and fourth part are the distribution of subjects and hours (*Fag- og timefordeling*) and the subject plans (*Fagplaner*), which specify what is to be taught at which grade. In addition, they contain the content of the competency aims to be accomplished after certain grades.

Being a knowledge school (*Kunnskapsskolen*) is stressed in educational policy. Several international tests evaluating pupils' skills and knowledge have left Norway on one of the lower positions, although the country is among those that spends most money on education (Kjærnsli et al. 2007; Tønnessen 2004). "To strengthen the professional level" has thus been a major concern for years. In order to achieve a better score, emphasis is put on accomplishing competency aims set after grades 2, 4, 7, and 10, - depending on the subject – exams in schools as well as national exams in reading and arithmetical skills[24]. Thus, constant competition and evaluation have become an important part of schooling.

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towards what is worth pursuing […] to realise one best opportunities […] to become a free, responsible, and balanced person" (2004: 164) (My own translation).

23 Accessed at http://www.regjeringen.no/nb/dep/kd/tema/grunnopplaring/kunnskapsloeftet/kunnskapsloftet---brosjyre-til-elever-og.html?id=115134 , 11/10/2010

24 http://www.udir.no/Sporsmal-og-svar/Om-nasjonale-prover/ , accessed 06/10/10

A final aspect, the physical appearance of schools shall be mentioned. There is a large variety of buildings that have either been erected to serve as schools or converted to host them. It is impossible to make generalising assumptions, but when walking through a Norwegian primary school, one can often see that every classroom has been decorated with pictures of the pupils, shelves where the children keep their books, souvenirs from trips, etc. In addition, I often observed posters of e.g. mathematical or grammatical rules or overviews over geological periods on the walls. Thus, each classroom is coined by the pupils of the respective year, providing point of orientation during the school day to them. In one of the schools, I saw a picture with a monthly motto, and a short poem or song related to the respective month or season. The schools can be situated in any kind of surroundings, with fields, forests, a park or residential area neighbouring. Those two schools I worked with were both situated in direct proximity to a forest and a lake, making them very pleasant places to be at.

Summing up, schooling in Norway developed from being reserved for a very limited amount of pupils to more including, especially after World War II. Today, schooling in Norway is meant to be for everyone, and a special emphasis is put on the primary school as a unity school that everyone can attend, "no matter where they live, social background, gender, religion, ethnical background or functional ability" (Myhre 1998: 277) [25]. All children attend the same school until grade 10, something that is not to be taken for granted in a European context[26]. The enormous differences that for a long time

25 In the school year 2009-2010, 598.091 children attended state primary schools, compared to 15.387 in private primary schools (http://skoleporten.utdanningsdirektoratet.no/rapportvisning.aspx?enhetsid=00&vurderingsomrade=fed86d60-df13-45c8-a544-457b84fc8216&underomrade=864ffad8-86a4-4bdd-831b-bc52089b2556&skoletype=0&periode=2004-2010&orgAggr=A&fordeling=2&artikkelvisning=False#rapport accessed 29/09/2010.

26 Germany starts separating pupils according to their skills and knowledge at a very early age. Depending on each Federal State, children are sent to different types of school as early as grade 4, at the latest at grade 6.

existed between rural schools and town schools have vanished. This is particularly important since still a large amount of the Norwegian population live in rural.

Historically, the focus in early schooling was on preparing for work and social life, two spheres that were more tightly connected back then, and could not be separated as they can today. Schooling now is supposed to prepare children for both being successful employees as well as active and responsible citizens, which in the majority will take place in two different social spheres, if not more.

4.3. Steiner Schools

Currently, there are about 1000 Steiner Schools[27] – in some countries also known as (Steiner) Waldorf Schools – worldwide, most of them in Germany, their homeland (Carlgren 2008). In general, most Steiner Schools are located in Europe, thereafter the US. Norway has 35 Steiner Schools all around the country (Bøhn et al. 2010), most of them situated in Southern Norway, with the first school having being established in 1926 (ibid). It is estimated that about 5000 pupils in total are attending these schools each year, so compared to the number of State School pupils given earlier (cf. footnote 25), only a small amount of primary school pupils attend a Steiner School. Norway has a Steiner Teacher College (*Steinerhøyskolen*) in Oslo, and Norwegian Steiner Schools have their own association, Steiner Schools in Norway (*Steinerskolene i Norge*)[28].

They are officially approved pedagogical alternatives to State Schools in Norway (Privatskolelova 2003).However, unlike State Schools, they are not

27 http://www.waldorfschule.info/de/schulen/index.html , accessed 07/10/10
28 http://www.antroposofi.no/antroposofi_i_praksis/pedagogikk/ , http://www.steinerskolen.no/nor/pedagogikk/En+internasjonal+pedagogikk.9UFRfU1A.ips accessed 07/10/10

completely free of charge, and a tuition fee is obligatory[29]. Norwegian Steiner Schools receive 85% funding from state grants (Bøhn et al. 2010; Clouder & Rawson 2003, Tønnessen 2004; Privatskolelova 2003: §6). The tuition fees cover the remaining amount[30]. In addition, there is an internationally working trust (*Freunde Waldorf*) that is collecting money and channelling it to selected projects in Steiner Schools and kindergartens worldwide. The state support makes these types of schools accessible to a much broader class of people, unlike in many other countries, where they thus carry with themselves a rather elitist reputation[31]. In general, the policy for support of Steiner Schools varies from country to country. Most schools that receive funding are located in European countries. In order to also attract children from financially weaker families and avoid social exclusiveness, most Norwegian Steiner schools offer the possibility to apply for a reduction in school fees. Thus, the social blend in the Norwegian schools appears more balanced than it is in other European countries. However, due to their ideas and methods, Steiner Schools could be considered more likely to attract parents with academic or intellectual backgrounds.

Steiner Schools' basis for teaching are the social and pedagogical ideas of Rudolf Steiner, an academic with a diverse university background. Steiner was the founder of anthroposophy, a spiritual worldview that represents a "holistic and scientifically accentuated understanding of human development and its position in a larger worldly context"[32]. Reincarnation and karma do play an important role within this philosophy, but Steiner emphasized that Anthroposophy must not be understood as a closed system not open for new

31 These amounts can vary according to which grade the child is attending and how many children from one family are attending the respective school

30 This amount can vary from 1000 – 1500 NOK p. month for one child attending primary school.

31 In the UK, for example, only some of the Steiner Schools receive public funding (Carlgren 2008; SWSF Summer Newsletter 2006). School fee can easily amount to10.000 – 13.000 £/year.

32 http://www.antroposofi.no/antroposofi_rudolf_steiner/ accessed 07/10/10

impulses or change. Influenced among others by the state of destruction and social instability in Germany after World War I, he developed a model for the reorganization of society, the *Concept of a Threefold Society* (Carlgren 2005). This basically aimed at establishing a new social order – which "the situation of modern humanity demands" (Carlgren 2005: 13) – that is based on three spheres of life – economic, spiritual-cultural, and legal-political, with liberty, equality, and fraternity as their main ideals.

Steiner was obviously very active in spreading and discussing his views, which the enormous amounts of recorded lectures testify. Some of these lectures dealt with educational issues, based on his anthroposophical and social ideas. Having become interested in Steiner's ideas, German factory owner, Emil Holt, owner of the Waldorf Astoria cigarette factory in Stuttgart, approached Steiner. After giving a lecture to Holt's workers, Steiner and Holt agreed on establishing a school for the children of the factory workers that was based on Steiner's principles. Thus, the first Waldorf School emerged in 1919, and the movement has since been spreading all around the world[33] (Carlgren 2005; Clouder & Rawson 2003).

A distinguishing feature one is met with when approaching a Steiner School is its appearance. Those buildings I have seen gave me the impression that they have an organic and round appearance. Once inside one feels as if taken back into the time of one's grandparents and great-grandparents[34], a somewhat idealized past. This continues – and sometimes even amplifies – when entering the classrooms. Similar to State Schools, they are filled with details prepared by every teacher, using the respective season or holiday as a backdrop in order for the children to grow up with an awareness of the different shapes and needs every season is bearing with it. The interior of

33 http://www.waldorfschule.info/de/schulen/waldorfschulen-weltweit/index.html accessed 22/09/2010.

34 However, in order to avoid a biased judgement, one gets a similar feeling when entering a State School housed in a building from the turn of the 19th century.

classrooms signifies the importance attributed to arts and aesthetics. This applies not only to teaching but also during "time off", when the children are eating their lunch or relax between lessons. The lessons I experienced often involved at least three senses, hearing (the teacher talking about the topic), feeling (rendering of the topic in their notebooks in their own words and with their drawings) and seeing (illustrations made by the teacher, their own drawings, experiments in the classroom).

Besides this multi-sensed approach, Steiner pedagogy puts a main emphasis on artistic work. Practical and artistic subjects are valued equally much as classic subjects, because Steiner pedagogy aims at the child developing "all its soul powers to become an as much as possible balanced and thus free, social individual" (Bøhn et al. 2010: 299). Additionally, handicrafts are an essential part of the teaching as well. This is not because teachers want everyone to knit their own jumpers, but because they want the children to get to know the process, get them to know what it takes to be able to wear a jumper[35]. Art is a way to approach all subjects. It involves several aspects of the pupils' skills and personalities, and thus helps to learn about a topic in a personal way, probably making it easier to keep what has been learned and to connect positive experiences to it.

The age-appropriateness of the curriculum and the respective methods used are considered essential within Steiner child-centre educational approach (cf. e.g. Carlgren 2005), "based on the ongoing study of the developing human being" (Clouder & Rawson 2003: 18). Education is adapted to the mental and spiritual developmental stage that the children are at, and not their age. Special topics are related to certain stages that children are in. The material is chosen and presented "in such a way that the differing age-groups can engage in particular and appropriate manner", and "themes evoke a mood specifically

35 Julie, Steiner School teacher, in interview

relevant" to a certain age group[36] (Clouder & Rawson 2003: 16). Grade 1 is still part of kindergarten, and children will not start regular schooling before grade 2. This is based on the view that children do not want to go to school or learn before the age of seven (Carlgren 2008: 27), because they are still in development stage one, life-epochs as Steiner called it. Every life-epoch has the child in a different spiritual and mental stage[37], and is connected to specific characteristics inherent in the child. Steiner defined three of those epochs, the first lasting from birth to the age of seven, the second from age seven to age 14, and the third after the onset of puberty.

Regarding educational aims, Steiner Schools depart slightly from State Schools. A main intention of the schools has always been to "be active in the development of new social movements"[38] (Mathisen 2007a: 25). They are aspiring to be "evolving social organisms that stand in a reciprocal relationship to their cultural environment" (Clouder & Rawson 2003:9; Sekkeposten 2009: 10) and actively aim at involving both the local community and parents in the schools' activities by means of market days, performances and dugnad[39] (Steinerskoleforbundet 2009). This is in accordance with ESD's principles, since it considers the active involvement of the local community and surroundings as essential for a successful learning process. Additionally, Steiner Schools have their own, independent curriculum, but they are bound to

36 An example that is given by Clouder & Rawson is a speech by Martin Luther King, which is full of impassioned idealism that they say is specific to 15-year olds (2003: 16).
37 I will not go into detail about this here, suffice it to say that teaching has to adapt to these stages, which will be shown later.
38 My own translation
39 According to www.ordnett.no, this term can be translated as "voluntary (community) work" (22/09/2010). However, no translation can embrace the cultural and social meanings this term is loaded with, and it plays a very important role within Norwegian culture. Its etymological origin tells us that it originally meant that several people helped one person to get a work done (http://www.edd.uio.no/perl/search/search.cgi), without monetary payment. In 2004, it was elected to be Norway's national word by the public broadcaster NRK (http://no.wikipedia.org/wiki/Dugnad).

the current national curriculum by having to accomplish the competency aims after grades 4, 7 and 10[40] (Mathisen 2007).

In 2006, a new evaluation system was introduced that contains both exams and grades for those who decide to go to secondary school and / or upper secondary school. In addition to this, an evaluation project is currently going on in Steiner Schools. Common quality demands have been set in order to guarantee coherence in teaching, and this project will be completed in 2013 (ibid.).

Steiner Schools are self-organizing, meaning the schools are run and managed by the teachers. They organize themselves in a low hierarchy and deal with all issues that a headmaster would take care of at State Schools. This principle is applied in order to guarantee the freedom that Steiner Schools stand for - educating children towards freedom and methodological freedom for teachers (Carlgren 2008; Mathisen 2007). However, the latter is also a feature of State Schools. In addition, parents often help out with other issues, often of practical nature, such as cleaning the classrooms, raising new buildings, arranging and preparing autumn and Christmas markets[41].

A feature that distinguishes them from State Schools is that experiencing and doing are the main approaches to learning, and the acquisition of knowledge happens via actively experiencing, taking part, seeing, feeling, hearing, tasting. Narration is also emphasised heavily, and is especially important in the lower grades, where fairy tales and myths are an integral part of the teaching. The teacher's ability to convey a subject's content via oral narration is weighed more heavily than textbooks, since it is the latter that brings the matter to life (Carlgren 2008).

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40 http://www.asker.steinerskolen.no/laereplaner.html accessed 14/09/2010

41 This also takes place in State Schools, but the greater responsibility parents get by taking part in Steiner Schools' everyday doings and also that their voice may be heard more is a fact that distinguishes them from other schools.

Part II - Findings

5. Analysis

Data – according to Gibbs - is just another form of human communication (Gibbs 2007). How does one extract reliable meaning and explanations about the respective topic from this communication? Analysing data is transforming the information gathered in the field into a coherent and meaningful whole. Implicit in this is that data analysis starts already during the process of collecting. Human beings have to continuously make sense of their world, and thus analysing and interpreting data already happens while being on fieldwork or doing an interview, not only afterwards (ibid.). What I am noting down in my field notes and the way I do it is already an interpretation, and while doing an interview I am processing in my head what my counterpart could mean, and I might adjust my notes according to this.

Making sense at the same time involves categorising. When encountering an issue or thing for the first time, our points of orientation are known categories, or stereotypes, which are helpful in preliminarily classifying experiences so we can act upon then. Something similar can be done with data collected for research. In order to find patterns within the large amount of information that has been gathered, it is helpful to categorise it. In my case, I scanned my interviews for common themes or aspects. This can for example reveal consent on issues, congruency in what informants viewed as challenges or benefits, and it can make visible issues that would not have become visible otherwise. This helps "establish[ing] a framework of [thematic] ideas" (ibid.: 38). I have thus organised my analysis into six chapters, with each chapter dealing with the main categories that emerged as relevant findings . It is based on the data I gathered from observation, interviews and document analysis. The data will be considered in the light of my theoretical background.

5.1. The Ashes and the Fire – Cultural Values and the Thin Red Line to Ideology

This first chapter is going to put the macrolevel – cultural values, customs, etc. in relation to ESD.

Today Norwegian nature is the epitome of breathtaking, unspoilt landscapes. At the same time, Nils Faarlund is quoted in Witoszek (1998: 165), saying that "our present culture is on collision course with nature". What made him say this? Witoszek mentions values that she considers to "have been essential within Norwegian culture for a very long time: the ideal of solidarity and equality, continuous social improvement, democratic individualism and a fundamentally rationalist *modus operandi*" (ibid.: 160). The second one in this row - continuous social improvement - appears most interesting in the context of Faarlund's statement and what was argued in my interviews. Here the majority was of the opinion that today's prosperity of the country is both blessing and curse – something that results in a double-identity.

Until the post-war period and the discovery of oil in the North Sea in 1969, Norway was a rather poor country. However, the development accelerated after oil had been found, and today, Norway is one of the wealthiest countries in the world[42]. Since, then, the aspect of continuous social improvement has been an important driving force in the development of the Norwegian welfare model. It has left most Norwegians in a privileged position, giving them the opportunity to afford goods.

However, this trend of changing Norway from a relatively poor country to the world's most prosperous ones has – many will claim – lead to traits of overconsumption within some parts of the society, and children are growing up in and socialised into these patterns of behaviour. At the same time,

[42] In a recent study, Norway was identified as the world's most prosperous country. http://online.wsj.com/article/SB10001424052702304388304575574000872990256.html?mod=WSJ_latestheadlines

Norway is promoting its sustainable image to the outside, and I believe that outside of Norway (or at least outside of Scandinavia), the country is considered to be one of the most progressive countries when it comes to environmental protection and sustainable development. One of the reasons why I chose to come to Norway was that I had exactly this image in mind, but I was disillusioned some months later. Projects like REDD or the fact that most of the country's energy is provided by hydro-electric power provide a nice facade, but increased consumption of e.g. clothes[43] or an extremely polluting oil-industry make the inside of the house look rather ugly. This contradiction on the macro-level can be found on the micro-level (= education and ESD) as well, where Norway claims to be progressive and hard working, but this picture does not fit the reality. Finally, it is arguable whether the country needs more wealth creation or whether the current level can be kept, with rather structural aspects requiring change.

With respect to the political dimension, some of my interviewees argued that the citizens are incapacitated, and the message delivered by the government is that the change does not have to happen on a social level, but that the problem rather is of a technical nature, and that effectiveness can solve it[44]. One teacher was indignant about the focus on emission trading and an afforestation project in Bolivia because what seemed unjust about this is that in her opinion this is portrayed as a main solution:

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[43] http://www.framtiden.no/200901222488/pressemeldinger/klima/klimafiendtlig-norsk-klesforbruk.html accessed 26/11/2010

44 An interesting recent analysis by PriceWaterHouse Coopers for example argued that if everybody's consumption were at the level of Norwegians', there would be three planets necessary to cater for it. However, the solution that is put forward is one of effectivising technology. There is no mentioning of Norwegians thinking about their consumption, and probably reducing it, making it more sustainable. For the article see http://www.tu.no/miljo/article264953.ece

> "Is there no one who realises that we have to do something with our way of living? That it is there we can find the key? […] It is about us, about here and now, about this society"

This does not mean that official governmental documents do not acknowledge consumption as one of the major issues, but when a national report on how Norway can become innovative and sustainable states that what is needed is wealth creation, then this seems to spell out paradoxical double standards. One interviewee even went so far as to state that "Norway is no pioneering country in Education for Sustainable Development", which contrasts with the government's own opinion. However, quite recently, Ivar Kristiansen from the Conservative Party (*Høyre*) said in a public debate[45] that "We should not fool ourselves, Norway is an eco-culprit"

This discrepancy between actual and desired development also has impact on Norwegian mentality, something that was echoed in my interviews by both those affiliated State and Steiner Schools. Simultaneous to a still strong outdoor tradition and a higher awareness regarding buying second-hand and organic and/or fair trade,

> "we have had a generation now, two generations, that solely have lived in economically rising curves, and that have taught their children that success and happiness are to own things, it is to get even better trousers, an even newer car, and the kitchen interiors are being exchanged every second year in some social circles".

Merethe (working in an ENGO connected to Local Agenda 21) said in connection to this that many people confuse what is required for happiness and success. Signal words like 'pressure to buy' should not be dismissed as superficial and contemporary phenomena, but rather be taken serious, probably also in the context of the "hidden structures" that Anette (a

45 Olje eller Idealer? Norge i verden: idealist eller realist?, Litteraturhuset Oslo, 08/11/2010

researcher with a background in pedagogy and natural sciences) considered to be having major impact on contemporary Norwegian society. These, in her perspective, can only be discovered by providing people with an outsider's perspective.

Interesting in this regard is a theory by Jan & Aleida Assmann from 1994, the theory of *Collective Memory*[46]. The collective memory can be called a culture's hard drive, which has two sub-categories. The communicative memory is the body of traditions of up to three generations into the past, whereas the cultural memory reaches far back in time, and can be represented by buildings (e.g. the Colosseum) or Monuments (remainders of the Berlin Wall in Berlin). The aspect of overconsumption within Norwegian culture appears to be recent, with only the last two generations having grown up in oil-era Norway. According to Assmann, these values are only part of the communicative memory, not yet having been transferred into the cultural memory. This means there is yet the possibility to reverse this movement, by trying to recall those values within the communicative memory that are more sustainable, like using less energy, repairing, making children spent a greater amount of time in the outdoors. The danger is of course that of nostalgia, and not adapting these values to contemporary life and contexts. It is about nourishing the fire, not worshipping the ashes. At the same time, as Thoresen notes, values are created via discourse and upheaval, "which often have had influence on the creation of unity and community across attitudes and convictions (Thoresen 2006: 53).

When researching ESD, there is another aspect that must not be neglected - the issue of ideology. Especially for those passionate about sustainability and environmental protection, this aspect might seem slightly

46 Cf. Assmann & Assmann. "Das Gestern im Heute. Medien und Soziales Gedächtnis". In: Die Wirklichkeit der Medien. Eine Einführung in Kommunikationswissenschaften. Ed. By Klaus Merten et al. Opladen: Westdeutscher Verlag, 1994.

provocative. Environmentalism and ideology are terms that are not as far apart as they may seem upon first glance. Most people who consider themselves environmentalists might reject an assertion that claims environmentalism to be an ideology. Calling something an ideology usually puts it in a negative light, as the term in itself has a negative connotation. Clifford Geertz states in congruence with this that "the term 'ideology' has itself become thoroughly ideologised" (Geertz 1973: 193). If we follow Rønnow though – who compares the environmentalist movement to a religious awakening, a revitalising movement (1998) – it might appear appropriate to place environmentalism under the umbrella of ideology. Terry Eagleton defines ideology as the "promotion and legitimation of interests of social groups in the face of opposing interests" (1991: 29). It is the promotion of a set of ideas and systematic believes (ibid.), in this case the belief that a sustainable way of living is the only way to get life on our planet back into balance. Eagleton's definition is action-oriented, making the promotion an active matter within society. This fits with Rønnow's view of environmentalism as an awakening-movement, portraying the former as a counter-movement to current mainstream culture.

Environmentalists might understandably be critical to such a claim as a counter-argument would be that being an environmentalist is being on the right side, doing the right things, etc. Those who will not typically call themselves environmentalists or are sceptical that climate change is anthropogenic, could raise the concern that children are being indoctrinated with a green ideology at school. With ESD also being part of this ideology, it is necessary to analyse educational politics regarding ESD to the general climate policy strategy of the Norwegian government. The interesting aspect is to find out in how far ideology and practice are in agreement or not. Thus, this theoretical backdrop provides arguments for the importance of including official governmental positions.

Among those I interviewed I sensed an awareness of this issue. In the interviews where this came up, the interviewees acknowledged the importance of not being categorical and of not opposing an opinion on the children by saying "this is how and what you need to do". Those with Steiner and State School background agreed on this. What was most important to teachers was to educate children into critical and reflective beings that can make decisions based on what they have learnt at school. Even though I did not ask this question in the interviews, I would assume that this might be a potential conflict issue. Those teachers who are interested in and passionate about sustainability and environmental protection have to manage to balance on the fine line running between ideology and disbelief. It is in the intersection that ESD belongs, knowledge paired with a critical and reflective mindset.

Those who are sceptical might be countered with the following two arguments. For one, children are already being indoctrinated with another ideology, namely the one that is prevailing in current Norwegian climate policy. Secondly, ESD is not only about climate change, biodiversity and melting glaciers. It is about fundamentally changing the way we are living, because it is neither sustainable regarding the healthiness of our planet, nor regarding social justice and its implications for current and future generations. As has been shown in 4.1., ESD developed from Environmental Education, where the focus was mainly on natural science aspects, such as the ozone layer or acid rain. ESD adds the dimension of interconnectedness of everyone and everything on the planet. A concrete example that everyone can relate to is chocolate. A recently released documentary shows how cocoa farming systematically exploits children as cheap labour. The cocoa that comes from these farms is very likely an ingredient used in Norwegian chocolate as well[47].

ESD's task is to not only raise awareness about our actions having influence on people and countries we will never meet and see, but also to

47 http://www.aftenposten.no/nyheter/uriks/article3566783.ece accessed 29/10/2010

provide skills for critically assessing issues like this, and finding creative ways to solve the problem. Especially with respect to the uncertainty that is still surrounding the natural science side of climate change and environmental protection, this is important, as Knain & Sinnes acknowledged in a newspaper article early in 2010. They are sceptical towards ready-made knowledge, and argue that

> "To evaluate and assess uncertain knowledge, be able to make up one's mind about the knowledge that is presented and choose a pattern of behaviour in relation to this is undoubtedly going to be decisive for how we as human beings are going to deal with the big challenges of our time. Then it is going to be important that schools provide pupils with the competency they need to be able to make decisions like this" (Knain & Sinnes 2010[48])

This issue sometimes came up in my interviews as well, and then my interviewees were aware of it and acknowledged that a critical view on this aspect is essential. In this case, State and Steiner schoolteachers were of the same opinion, as were those that were not working in schools. Those who deny this aspect might imply that they themselves not necessarily recognise that their life styles are having an effect on society. Merethe for example supported the importance of critical and reflective pupils by saying that we have to be

> "careful with specifically saying what it is that is going to help, what is it that everybody should change about their behaviour. Because then it easily becomes political, or indoctrination. One of the most important aspects is to educate individuals to think independently, that they think critically, value-oriented".

This qualitative view of learning is the one that seems most appropriate in the context of ESD. Learning should rather be

48 Accessed 19/03/2010

> "an iterative, reflexive process through which the individual progressively constructs meanings out of past and present experiences" (Scott & Gough 2003: 93)

than an accumulation of knowledge which detaches children from the happenings around them.

5.2. ESD in a Political Context

In congruence with Bronfenbrenner, one cannot understand a social phenomenon – in this case ESD - by only looking at it from one perspective. It is essential to look at the macro-level and exo-level, where the state and its underlying structures are located - the political level. This is supported by Gundem's comment to understand the "curriculum as intentional political action" (1995: 7). Education is always connected to policy, which can be exemplified by the shift in the view of education and some amendments in the curriculum that took place in the 1990s[49].

Two documents are going to provide the basis for this chapter –*Norway's Strategy for Sustainable Development* (NSDS) (Norwegian Ministry of Finance 2008) and a White Paper report titled *An Innovative and Sustainable Norway* (WP7; Norwegian Ministry of Trade and Industry 2008).

The NSDS is a 94-pages long document, with the section about ESD in Norway comprising one page. This document acknowledges schools and municipalities – who in Norway are the owners of primary schools - as essential participants for achieving sustainable development. This is due to an emphasis of the importance of knowledge within ESD. Besides this, it cites two web-resources as well as stating that the Ministry for the Environment (*Miljøverndepartementet*, MD) is working together with diverse social actors to foster sustainable development and children's understanding of it. It would be hastily judged to say that this preciseness or shortness of the section is reflecting the importance that is given to the topic on a national level. However, considering this in the light of the importance and enormous potential that is lying hidden here, it seems puzzling why not more attention is directed to it. Judging from this document, it appears that not much weight is given to ESD as a means for accomplishing the goals of the strategy.

49 See paragraph on State Schools

My interviews supported this lack of focus. Those who had an opinion on Norwegian environmental and sustainability policy stated that in their opinion, there was too little focus and emphasis on ESD, especially in public debate. In the cases where it was mentioned, one of my interviewees said that "when it comes to measures, there is nothing. And this is probably more due to incompetence than reluctance" (Anette). Another teacher mentioned that in her opinion, the majority of teachers basically accepts what politicians are saying (or not saying, in this case), they just accept that "what the big guys have written must be right" (Lene, a researcher with a background in natural sciences, and former Steiner School teacher). The problem appears to be that it is included in documents, but "politically viewed, there is no emphasis put on it in practice" (Merethe).

Furthermore remarkable is that the emphasis is clearly put on the acquisition of knowledge. Without defining what constitutes this knowledge, it is hard to work with achieving it as a goal. Is it knowledge about technological solutions? Knowledge about the climate system? Knowledge about how food is produced? Knowledge about all the latter is important in order to bring about environmentally and socially just ways of living, but without specifying what kind of knowledge a sustainable Norway needs, schools and educators struggle. In another document, Bård V. Solhjell - then Minister of Education - was cited, saying

> "We need knowledge to create wealth. Therefore we need an education system in which more people finish educations where they have gained more knowledge" (WP7)

However, already Hungerford & Volk showed that the linear model *knowledge → awareness / attitude → action* is not corresponding to reality. It is not enough to provide citizens with information about climate change, sustainable life styles and poverty. This alone does not create citizens with sustainable mindsets, especially when the focus mainly is on the natural science basis of climate change and sustainability. One teacher argued that

> "the more of this type of teaching you have, the less interested they are. It's an inverse relationship. And I think it's quite easy to understand. Because what teachers have been doing since my time, the end of the 60s and 70s – they're talking about this all the time […] and it gets more and more dismal […] and they wonder why they're not interested […] there are two Danish researchers now that say 'This doesn't work unless we're doing something, we got to get down to the level where they're doing something."

At the same time, Hungerford & Volk acknowledge that at a later stage in the process, in-depth knowledge is important, but it is *not* an entry-level variable. Only teaching children about the facts and science behind climate change, sustainability and poverty is not sufficient for the emergence of critical, aware and responsible citizens. 9 of my 10 interviewees argued that especially these characteristics are important. Thus, the Norwegian strategy appears to a certain extent incongruent with what research has contributed to the topic.

Corresponding to Solhjell's quote, the message drawn from WP7 (2008-2009) is that the educational system has to be improved in order to ensure the availability of a competent workforce. Why such a clear focus on work force? Why is there no emphasis on creative, responsible, and aware citizens who can contribute to both innovation and sustainability? This is not to say that someone who leaves the educational cycle should not have been equipped with knowledge that assists him / her in succeeding in his / her job, but it appears that the view that is promoted is very one-sided. Stephen Sterling, who advocates a paradigm shift in educational systems if ESD is supposed to succeed, argues for the following when talking about changes that have taken place in the educational systems of many Western countries since the 1980s:

> "The emphasis has shifted from *educational* values to do with process, and developing potential and autonomy, and *social* values relating to equality of opportunity, community and social cohesion, towards *economic* values such as

efficiency, quality control and production, which education is required to serve in an unprecedented way" (Sterling 2009: 39)

Even if not all of this criticism can be applied to the Norwegian educational system, he is making a point worth keeping in mind, especially when we remember Myhre and the three types of motivation for the development of the Norwegian school system that he cites.

On the exo-level where the departments are located, there is no direct coordinating position for ESD, something I found out when contacting both the Ministry for Education and Research (*Kunnskapsdepartement*, KD) and MD regarding who I could approach for research on my topic.[50]

The importance of ESD is acknowledged in Norwegian climate policy, as is the importance of especially social competences within the context of a required social change. The role of schools is defined by stating that they must "contribute to social development and building the nation as bearers of culture and identity, as normative institutions and as creators of identity" (Ministry for Education and Research 2007).

However, what seems to be problematic is that there is a gap between what is aspired and what is realised. A common point of departure for critically viewing Norwegian climate policy is the paradox lying within it. Norway is said to advocate environmental protection and sustainable development on an international level, and is supporting measures in foreign countries with enormous amounts of money. At the same time, quite the opposite appears to be happening at home. The Norwegian economy's dependence on the oil business is only one example, and Norway is quite certainly still far away from the sustainable society it would like to be[51]. In a

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[50] . I was directed to projects of both departments, like *Den naturlige skolesekken* (The Natural School Bag) or *Framtidens byer* (Cities of the Future).

51 See also http://www.forskning.no/artikler/2010/november/271766, accessed 02/12/2010

recent public debate, Karen O'Brien summed the paradox up[52]. The widespread opinion is that climate change and its consequences are not happening in Norway, it is not going to affect Norwegians. Thus, the government is rather supporting foreign measures than making cuts at home.

Here could lie an explanation for what will be argued later – that the foundations for ESD are good on paper, but the reality looks different. This shows that changes need to happen on both macro-level and exo-level, since the interconnectedness of the system shows that these two levels feed into lower levels, providing an overarching framework. If not more emphasis is put on ESD on this highest levels of the system, it exacerbates changes on the levels below.

[52] "Elefanten i rommet: Cancún, klimafilosofi og økopolitisk teori for begynnere". Lecture held at Litteraturhuset, Oslo, 29/11/2010

5.3. Two curricula – similar basics – worlds apart?

And never the twain shall meet [?].
(Rudyard Kipling)

The next aspect that has to be considered is also to be found on the exo-level. What is said in official governmental documents will eventually make its way to the lower levels, and in this case, I intend to look at what I call "foundational documents". These documents provide not only the view on humanity and schools' role, but also ideas on teaching and what is important to provide children with while they grow up. My interest was to see how these documents arrange for ESD to be integrated into teaching, and what teachers' perceptions regarding them are.

Important for State Schools is the national core curriculum and here especially the *General Part*, with the ideal of a human being described here being both means and end for teaching. This document consists of several sub-chapters, each describing a trait within this ideal.

One of these sub-chapters, *The environmentally aware human being* stresses the importance of the acquisition of technological knowledge, since "modern societies […] are more and more based on technology" (General Part 2006: 35). Additionally, a need for more holistic knowledge, interdisciplinary and cross-boundary thinking requires counteracting "fragmentized and compartmentalized learning" (ibid.: 38). There is further correspondence to Hungerford & Volk's model in the respect that education should furnish children with trust in the effectiveness of their own and collective action, a factor that constitutes an essential part in the final stage of the model of *Environmental Citizenship Behaviour*, called *internal locus of control*[53].

53 "Locus of control refers to an individual's belief in being reinforced for certain behaviour. A person with an 'internal locus of control' expects that he/she will experience success or somehow be reinforced for doing something […which] appears to strengthen his/her

Finally, the last section mentions what both Hungerford & Volk and Chawla consider the quintessence of and trigger for behavioural change – positive experiences in the outdoors. The document acknowledges that outdoor experience should be an essential part of teaching, in order for children to enjoy Norwegian nature's beauty and develop a feeling for the interconnectedness within an ecosystem that we are a part of and dependent on. It seems that the importance of this is not recognised.

Another sub-chapter, *The Spiritual Human-Being* is important in an ESD context as well, since a re-connection with nature is often also a spiritual reconnection with the forces in the world around us. However, the *General Part* does not mention this, but rather emphasizes Christian and humanistic values and traditions as the foundations for education[54]. Mentioned as most important are

> "equality and dignity of man […] the democratic state as framework for equal political participation and debate […] charity" and "[…] progress through criticism, reason (sic.) and research"

This is highly important because Norway, like many European countries, has been greatly influenced by Christian and humanistic thinking.

On the other hand, though, there is the viewpoint that exactly the influence of the Christian religion has majorly contributed to the environmental crisis (cf. e.g. Rønnow 1998). Teaching children the diversity of the world's religions and acceptance for people with a different religious and cultural background is an important factor, especially in a country that has become a country of immigration, just as the US or Germany. "Education must […] [also] take advantage of the potential for enrichment" (ibid.: 10) that

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internal locus of control. On the other hand, a person with an 'external locus of control' does not believe that he / she will be reinforced for doing something and, therefore, probably will not do it" (Hungerford & Volk 1990: 12)

54 Interesting in this context is also that until 1982, the Department for Education and Research was part of a common Ministry for of Education, Research and Church Affairs, which shows the close ties that have existed between education and religion for a long time.

these cultures bring with them. Nevertheless, this should not be limited to culinary enrichment, but has to go deeper and also look at these cultures' view on nature and social justice. However, if this is what is meant by taking advantage of the potential, it is very implicit in these words. Simultaneously, also the aspect that Rønnow mentions about the role of Christian values should be discussed, and children who are educated into critically assessing and reflective persons will be able to handle this topic.

Furthermore interesting is also another comment in *The Creative Human-Being*, which states that "education shall foster both loyalty towards our heritage and an urge to break new ground" (ibid.: 11). ESD embraces both old traditions and cultural values as well as demanding to be revolutionary in order to break new grounds for a sustainable future. Especially in a Norwegian context it seems that these two aspects are of high importance. Norwegian cultural traditions until the oil-era were coined by weaker materialism, lower energy use, less strong individualism, more focus on spending time in the outdoors (especially children), due to the living and economical conditions back then (Barstad & Hellevik 2004). This is not meant as an idealisation or glorification of the past, but remembering this and trying to apply it in a current context, paired with a bit of revolting against what some might call negative tendencies in contemporary Norwegian culture[55]. In my interviews, I asked which role the latter and its values and morals play in ESD. The tenor was often that the fact that a large part of Norwegians is fairly well off financially, can afford things, and thus does not reflect too much when making consumer decisions, is often preventing sustainability perspectives from being taken up in school.

55 And all around the world in general. ESD acknowledges that many cultures have developed a very materialistic and individualistic thinking, and it is about reversing these trends via educational means.

All of the four people with background in State School teaching that I interviewed agreed that the *General Part* of the curriculum has it all, and provides a very good foundation for implementing ESD and its related issues in schooling. The view of humanity that is presented here is one that corresponds to ESD's views of humanity. However, it could be more explicit further in certain aspects, e.g. the importance of the outdoors, the inclusion of spiritual traditions - like for example a much stronger emphasis on teaching about Sámi traditions - and more emphasis on daring to think and act revolutionary where required. However, teachers also uttered their disappointment over the fact that the *General Part* is being left almost unused in their everyday job life, because it is the local subject plans and textbooks that receive most attention.

Steiner Schools have a similar document backing up their teaching, called "Overview – Idea and Practice of Steiner Pedagogy" (*Oversikt – steinerpedagogisk idé og praksis*; Mathisen 2007). It can be considered to provide similar basic views that feed into the teaching as the *General Part*, and with reference to the latter it is explicitly stated that this document is "valuing and attending to these as well, but with different words and many additions" (ibid.: App. 2). Steiner Schools view is that the *General Part* does not sufficiently cover their pedagogical ideas. The document is structured differently, but it conveys the view of humanity that Steiner Schools represent.

Knowledge plays an equally important role, but it is emphasised that it has to be grounded in a context that the children can sympathise with, ideally through own experience, and where "the explanation comes at the end, and the pupils should preferably find it themselves"[56]. Knowledge is defined as including skills that are of practical, emotional, theoretical and social character (ibid.: 8). This definition results in an ethical orientation and approach to

56 Inge in interview

knowledge, implying that it should be used for general benefit. In congruence with what was mentioned in the *General Part* of the CC, it is said that the knowledge that is required is of a holistic nature, and with a focus on society and nature. This is explained by a need for a knowledge that has its "focus on wholeness in society in nature, knowledge about the consequences of changing or influencing a cycle or process" (ibid.: 8).

Regarding the natural environment, the document explicitly enforces the importance of including respect for nature and biodiversity. Outdoor experience is mentioned as an essential component in teaching, just as in the *General Part*, be it through work on a farm, the schools' own garden or trips into the school's local environment. Thereby, children are supposed to bond with nature, which makes up one of the most important pillars of Steiner's educational views. Steiner School's focus on spiritual development and characteristics give it a focus on the connection between everything material and spiritual. Those children realize this by both guided and unguided outdoor experience, which both are stressed as essential aspects.

Considering cultural heritage and values as well as current social norms, Steiner Schools equally acknowledge the importance of making these an integral part of the pupils' mindsets. However, while the call for revolutionary thinking is rather subtle, and carefully formulated in the *General Part*, the Steiner document openly refers to equipping children with both current cultural knowledge but also tools to make changes in and shape their own future. "The task of pedagogy is not to keep track with this development [of attitudes and living conditions] but to get there first[57]" (Mathisen 2007: 5). Thus, the same is true regarding the (unwilling) of the locus of control as was mentioned in the analysis of the *General Part*.

57 My own translation

A final, quantitative aspect that related to the foundational documents and curricula is the distribution of hours within the curriculum. I am here concentrating on grades 1-7 in State and grades 2-7 in Steiner Schools. Both put most emphasis on Norwegian and Mathematics, making up a total of 28% (State) and 42% (Steiner) respectively of all teaching[58]. At State Schools, these are followed by Physical Education (PE), Arts & Crafts, Religion and Philosophy, Social Sciences, Natural Sciences and English, Music, and finally Food & Health. The 3rd place in Steiner Schools is occupied by Religion & Philosophy, followed by English, Social Sciences and Arts & Crafts, 2nd Foreign Language and PE as well as Eurhythmy, the last three places being held by Natural Sciences, Music and Food & Health, just as in State Schools (see App. VI for overview). Even though it was argued that all subjects could be integrated in outdoor teaching, Norwegian and Mathematics might be one of those whose contribution to ESD could be considered rather marginal.

What I could gather from my interviews was that sustainability topics are by now mostly being integrated into Social and Natural Sciences. Two interviews with State School teachers confirmed this aspect. They acknowledged that most of ESD is taking place in the Natural Sciences, something that is mentioned as a common critique point in ESD research (cf. Raumolin 2001; Scott & Gough 2003). It is argued that ESD requires an interdisciplinary perspective, just as environmental and sustainability research does. Subjects like PE, Arts & Crafts, Religion & Philosophy can be useful in ESD, and they are even outplaying Social and Natural Sciences regarding their proportion in total teaching (except for PE in Steiner Schools). Scoring worse than the latter two is only Food & Health, a subject that could be argued to contain an enormous potential for ESD. In addition to this, knowledge on food constitutes a significant factor within a sustainable lifestyle, regarding for

[58] The total amount of hours in State Schools is 4930 hrs, in Steiner Schools 4959 hrs.

example wasting food, its production and the connected use of resources (e.g. beef production).

Summing up, Steiner Schools and State Schools agree with each other regarding basic aims of education. The difference seems to lie in the different view on humanity that Steiner Schools represent. Humans are viewed more as an integral part of nature, and not separate from it, based on a more spiritual approach to nature and human's place in it. It might be that this results in more emphasis being given to outdoor education. However, this is only a hypothesis, requiring more research with a larger sample in addition to a balanced view. Both school types do promote a holistic approach to knowledge, and emphasise that this is require for ESD. Additionally, there are aspects that correspond to Hungerford & Volk's model of the emergence of sustainable behaviour. It is important to acknowledge that because this level of the system is having a direct influence on children's schooling.

However, from what emerged from my interviews it appears that at least the General Part has to become a more integrated part of everyday teaching. Even though it was only four interviewees who mentioned this aspect, these were all people who are in contact with other teachers and with teacher training, so I would dare to say that this finding could be generalised to at least a certain degree. It furthermore appears that the *General Part* is too cautious with some utterances. One can sense that there is a large potential looming behind many aspects mentioned, and they could become more powerful is expressed more clearly.

A final argument I would like to propose is related to Steiner Schools. Based on Steiner's ideas and the foundational document, there as one tendency that suggested itself. It appears that in Steiner pedagogy, ESD has – at least partly – been implicit from the beginning. One Steiner School teacher said that it is not that a specific topic related to ESD is picked out, but "they live with that in their everyday lives". ESD is here not something that is coming from outside, but rather from inside the ideological framework.

Finally though, both documents provide a suitable foundation for ESD and present a great number of opportunities and freedom to the teacher who wants to include ESD in his / her teaching.

5.4. Get the Kids Outside! – On Outdoor Education

I am very interested in, very fond of being out in nature, […] I suppose that is in some way influencing each other (Heidi)

Based on my own experience, I can see that a large number of Norwegians are very active in the outdoors, children go hiking or skiing from a very early age on[59], young people go on cabin trips with friends and it seems that even the percentage of older people who is still actively engaging in outdoor activities is very high. Even for the 8 out of 10 Norwegians that now live in towns or the suburban areas[60], access to natural and green areas is easy and convenient because often public transport can take you there. Several internet pages provide innumerable and nationwide hiking trail possibilities and offer tips for hiking with children, dogs, or older people. The capital, Oslo, has parks around almost every corner, two rivers running through town, and its surroundings leave no wishes open for those who enjoy being active in the outdoors.

Norwegians themselves might perceive it the way that one of my interviewees, Hege, phrased it:

> "It is obvious that we from very early on are being raised to, or taught to be outside"

The situation is similar in the rest of the country. With only Iceland having fewer inhabitants per m^2 there is enough nature for everyone[61]. Due to Norway having been a largely agricultural society well into the 19th century, people were on the one hand depending on nature for their survival, but at the same time seem to have developed an appreciation and respect for

59 I have been skiing with friends whose son was put on ski as early as age 2.
60 http://www.ssb.no/norge/bef/ accessed 11/10/2010
61 http://www.ssb.no/norge/natur/ accessed 11/10/2010

experiencing nature in their leisure time that appears very special and important (cf. Nedrelid 1993; Witoszek 1998).

This perception of nature, an important trait in Norwegian cultural understanding, is an important aspect. Richard Louv argues that the growing disappearance of what he calls a free-range childhood is not only contributing to - among others – obesity in children, attention-deficit order, and isolation. It is also contributing to a lack of bonding and sympathizing with nature, which in his view again leads to less engagement in and awareness of environmental and sustainability issues. This could be a lack in knowledge about how food is produced, or a non-existing awareness that we are dependent on the ecosystem, and that our actions have influence on the latter as well as other people (Louv 2005). Even though *friluftsliv* is the epitome of Norwegian-ness, as many would argue, there are indications that a participation in these outdoor traditions is declining among Norwegian children and youth (WP 39, Miljøverndepartementet 2000).

Why is this important? On the one hand, natural surroundings can be part of a child's micro- and mesosystem, thus having influence on its development. On the other hand, the theory of both Hungerford & Volk and Chawla propose a relationship between the emergence of *Environmental Citizenship Behaviour* and positive outdoor experiences in childhood. There are several terms for the integration of the local surroundings and natural environment into teaching – outdoor teaching, outdoor education, outdoor learning, the environment as an integrated context for learning, etc. The ultimate goal of using the outdoors a learning tool is to create a sustainable mindset that will eventually aid in protecting the learning tool itself as well as a recognition of the interconnectedness of all things and people, something that is hoped to lead to a higher sense of awareness and responsibility. However, this alone might not be result enough for relocate a certain amount of teaching into the outdoors. The important question to ask is how this is being integrated in Norwegian schools, and which advantages schools can get from it.

One interviewee – a State School teacher – argued that in his opinion, there is too much emphasis put on reading, writing and arithmetic skills, and that ESD is falling behind. An increased focus on improved performance in e.g. PISA is taken as a sign for this focus on evaluable skills. That which is hard to evaluate falls behind. However, there are studies that not only show increased pupils' performance in these skills, and even beyond that.

So does for example a study from the United States indicate a clear improvement of pupils' performance across almost all subjects when "using the Environment as an Integrating Context for Learning" (EIC) (Lieberman & Hoody 1998: 1), an approach that "can be implemented across all geographic and socio-economic settings" (ibid.). This study shows what can be achieved by relocating more teaching into the outdoors. The benefits of this approach were manifold, from better performance in selected subjects[62] to more efficient learning, more enthusiastic pupils with increased abilities to think creatively as well as fewer discipline problems. Most important with this study is that it confirms that not only performance and interest in science or social studies – which would mainly be related to sustainability issues – improves, but also reading, writing, and mathematics performance.

This is echoed by a recent study of the Royal Horticultural Society (RHS), which identified three core areas of improvement when using another form of outdoor teaching – school gardening - as a tool. "They [children] become ready to learn, resilient, [and] responsible" (RHS 2010: 6). At the same time it showed that in the context of their study, only 1 out of 4 primary teachers uses gardening as a teaching tool (ibid.: 7). Arne Jordet – who holds a PhD in pedagogy – did a study on outdoor school (*uteskole*) that furthermore confirms these results. His study provides four areas where advantages emerge – the knowledge area, the social area as well as on an individual and holistic-developmental level (Jordet 2007: 315). A project carried out by the

62 Reading, Writing, Math, Science and Social Studies

University of Life Sciences, Ås (UMB), called *The Farm as a Pedagogical Resource*, showed similar results and argues for the importance of and advantages with relocating teaching into the area around the schools. This project is a good example for the development of a sustainable mindset, awareness, responsibility and knowledge within children. At the same time, it has positive effects for the municipality or local community, and not least for the farmers. (Jolly 2003).

What has to be kept in mind is that being outside has to be connected to learning. Jordet mentions that it becomes questionable when outdoor learning takes place just for the sake of being outdoors. Even though there is little direct research about this, he mentions that "classroom research in general indicates […] that they [teachers] seem to have problems in handling especially the academic dimension" (Jordet 2008: 4). This has been confirmed in two of my interviews. Arild, who has a background as a State School teacher, for example said, "it happens easily that it is activities only for the sake of activity". The danger with this can be that the children are then "placing this [experience] so far away from their school activity that they do not perceive it as having learnt something from it"[63]. One interviewee told a story of a little girl who – when asked what she learned from taking part in some outdoor education – said that she did not learn anything, only to never give

Could not this be an incentive for Norway, which wishes to improve its results in international tests? At the same time, ESD could be substantially developed. One could even extend this further and argue that integrated teaching – which showed to result in better relationships among pupils as well – can be a helpful tool to foster integration of immigrants and a growing tolerance and intercultural competence among pupils. Norway has enough immigrants from all corners of the earth around the country, and an integration

63 Julie in interview

of teaching into the local environment should certainly also include immigrant communities and culture[64].

As mentioned earlier, the curricula and subject plans of both schools provide for such integration, something that also Jordet argues for: "Major parts of the school curriculum can be moved out of the classroom" (Jordet 2008: 5). He simultaneously provides some examples for how this integration could work in several subjects like Religion or Arts & Crafts (see Jordet 2007: Del III &Vedlegg 3). My interviews suggested that might not always be happening to the extent that the aforementioned documents allow for. In addition to this, State Schools do no longer require 1 day outside per week, as it was the case before the new curriculum was introduced. Another challenge connected to this is a need for out-of-the-box thinking, which additionally has to cross subject-boundaries. It is a challenge because teachers are teachers in mathematics and natural science or Norwegian, and not in Environmental Science or Development Studies. Thus, persons with a background in a specific field of study or work might face challenges when having to co-operate with someone on a common, interdisciplinary project. This might become problematic because "more than one literacy will normally be useful in understanding any particular sustainable development problem" (Scott & Gough 2003: 32).

My interviews revealed a problem first and foremost for the Oslo-region, but the same might be true for urban and suburban areas all around the country. Several of my interviewees argued in favour of an integrated approach and said that schools must not be isolated entities that do not make use of what is around them. In the interview with Anette, she talked about the prevalence of a too advanced and complicated thinking about using the surroundings as teaching arena. When teaching a seminar on outdoor

64 Which would e.g. work towards fulfilling the competency aims in Religon, Philosophy of Life, and Ethics and was has been said about *The Spiritual Human Being* in the General Part.

education in natural science, a teacher she talked to said that when she wants to do this they have to take the bus to Nordmarka[65], which would require money, time, and a lot of equipment. Not only this, but when asking a teacher from a school in a centrally located area of Oslo - with one of the city's largest parks and a river close by – about how much they are using the nearby park, the answer was negative. When they were going outside with the children, they went to Nordmarka, but again, then a bus was required, etc. This was confirmed by another interview with Arild, who said that

> "the competency to dare to be in other places than in the classroom is not very good. You are not confident enough as a teacher, and that is for example because they did not have basic knowledge in natural sciences in their own education. Nevertheless, it is teachers in Natural Science or other subjects that are relevant for sustainable education. So it is this feeling of insecurity that the teachers have, to create a sense of comfort when using nature as an arena for teaching, this is where we find our challenge."

The most import aspect in his view was that we have to convey to teachers that using the outdoors does not come in addition to regular teaching, but that it is rather an extension of the classroom. "It is about attitudes", Arild said.

However, the two mentioned interviewees were both affiliated to State Schools. Regarding Steiner Schools, my interviews gathered two different perspectives – one that claims that the situation is similar to the one at State Schools and another one saying that outdoor teaching is an inherent part of teaching at Steiner Schools.

Regarding the former, a teacher that has been affiliated to Steiner Schools for since the early 1980s, said that "there is not so many people doing

65 A large forest and fields area right at the town's Northern border, very famous among the locals.

the real practical work […] the teachers at the schools do not really have a relationship to this". Contrary to this, a teacher from another Steiner School told me that because their focus was on the children experiencing and doing things in order to learn about them, there is big emphasis put on spending time outside, school garden and using natural materials in teaching. This was supported by Inge, another Steiner School teacher who stressed the importance of taking the children outside as "especially urban children, they are inside so much, I think also children in the country. […] So the need to be outside during school time has suddenly increased". In addition to that, he stated that he was very free to just take the class outside for a day and teach there, something that is in contrast with the opinions uttered on the status quo in State Schools. It seemed that the awareness of the importance of integrating the outdoors was higher. This might be due to the different perception of nature that appears to be prevailing, as has been argued in chapter 4.3. and 5.3. It seems that Steiner Schools have a rather spiritual perspective of nature, and when they are talking of bonding with it, they literally mean it.

Interesting in this context is also that some of my data implicitly corresponded to Chawla's argument about the emergence of environmental sensitivity. 6 out of 11 interviewees confirmed that their engagement for the environment and ESD had been influenced by either a childhood spent mainly outdoors (4 out of 11) or good role models at school and at home (2 out of 11). One of the latter states that her interest was sparked by dealing with "everything that was related to emotions and justice, environment, North-South [issues], poverty". One interviewee did not see a connection between time spent outdoors and engagement[66], but rather in the implicitness of these issues during her years at Steiner School.

66 This interviewee admitted that she was not a very active outdoor person, and did not feel the need to engage in outdoor activities too much.

Concluding, it can be stated that an awareness of the importance of the integration of the schools' local surroundings and the natural environment does exist, since it is part of the foundational documents and curricula of both State Schools and Steiner Schools. Jolly supports this claim by stating that "the principles [in the *General Part*] lay great emphasis on the importance of the local community as a learning arena by underlining the importance of utilizing the community actively" (Jolly 2003: 3). Studies from the US and Norway suggest that the effects of this are overwhelmingly positive, but according to Jordet, there is too little research on this in a Norwegian context (cf. Jordet 2008).

Outdoor experiences certainly have an enormous importance within ESD. However, the danger might be that this is being considered as the panacea, and the dangers with simply relocating parts of the lesson into the outdoors have been discussed. The important aspect is – in accordance to Hungerford & Volk's model – to provide for the emergence of a sustainable mindset by outdoor education, but also to ensure that the other aspects – like knowledge of issues, personal commitment and locus of control. Environmental sensitivity is not called entry level variable for no reason, but one has to remember that the process does not stop after having entered. Once a person has understood the interconnections in the world and has developed a bond with nature, this capacity has to be utilised and enlarged by providing knowledge and motivation for action.

It appears that regarding implementation there are still some obstacles to overcome. It was not possible to compare the situation in the two school types since there were inconsistent arguments on the Steiner School side. What can be concluded though is that three of four Steiner School teachers I talked to appeared content – or at least not discontent – with the status quo. All teachers were aware of the importance of integrating the outdoors into teaching. This integration should and must not be limited to the natural surroundings. Social

settings are equally important, just as sustainability is not exclusively about the preservation of nature, as we will see in the next chapter.

5.5. No School is an Island - On Schools' Awareness of ESD and *lokalsamfunnet*[67]

Schools cannot exist isolated from society, they have to be a part of it. (Arild)

As we have seen earlier, it is important to consider ESD in a connected and holistic way. All levels of social life play a role, and after already having had a look at the super-ordinate structures, the schools itself must not be forgotten. Schools, "places or establishments for instruction", as the OED[68] defines them, carry major responsibility for ESD. However, schools are not only places for instruction, they are places for creativity, innovation, relationships and respect, and they are part of the child's micro- and meso-structures.

In Norway, the municipalities are owners of primary (state) schools. Thus, "the municipality is responsible for education from grade 1-10, and for securing that children and young people are receiving their education as prescribed in *Opplæringsloven*"[69]. They are responsible for what is happening at the schools. The integration of schools into the municipalities work on LA 21 – which includes ESD – thus seems connected to the status of sustainable development within the municipality. Nevertheless, there is no guarantee for this happening.

One teacher was expressing discontent with the gap between the community's focus on sustainable development and the integration of schools into this. In her opinion, her municipality – which is aiming at being highly profiled in the environmental section – should reach out to the district schools much more and introduce binding requirements in order to achieve the municipality's goal. Hege from MD also stressed the importance of the

67 Norwegian for "local community"
68 Oxford English Dictionary, www.oed.com , accessed 27/10/2010
69 http://www.asker.kommune.no/Tjenester-til-deg/Skole-og-utdanning/ accessed 27/10/2010

cooperation between schools and the municipality, especially when it comes to green certificates the schools can apply for, like the Green Flag (*Grønnt Flag*) or the Environmental Beacon (*Miljøfyrtårn*), an aspect that is also emphasised within *Framtidens Byer*.

Directly connected to this is what has been argued about the integration of the school's surroundings. While the focus in the previous chapter dealt with the natural environment and local stakeholders, I would now like to put more focus on the latter group, and extend this even more to include the whole community. A21 mentions this as especially important in chapter 28, which refers to what can and should be done on the local level, within LA 21. I quote here from Connelly & Smith (2003: 339):

> "Because so many of the problems and solutions being addressed by Agenda 21 have their roots in local activities, the participation and cooperation of local authorities will be a determining factor in fulfilling its objectives […]. As the level of governance closest to the people, they play a vital role in educating, mobilising and responding to the public to promote sustainable development" (UNCED 1992: ch. 28)

This emphasises that schools cannot consider themselves and be considered as isolated entities, but are part of a living and creative municipality. Several interviewees confirmed this in the interviews. Being aware of this is an essential part of teaching according to the *General Part*, where it says that

> "good teachers are favourable towards and trained to involve parents, local firms, and organizations for the benefit of the school." (CC, General Part 2006: 24)

In addition to that, the Principles for Education and Training (*Prinsipper for opplæringen*) include a separate section on cooperation with the local community, which stresses the importance of cooperation of "the school, the

business and job sector, art and cultural life and other parts of the local community" (Kunnskapsdepartement 2006b: 6).

Steiner School's underlying principles do not explicitly mention the requirement of integrating the local community, but it becomes clear from the competency aims and the subject content that the latter is considered an essential part of the teaching as well.

What is imperative here is that there should be no boundaries to creative approaches for including the local community. Why is this an important thought? Heidi sums up what numerous other ESD researchers as well as seven of my interviewees said, "I think it is very important to start with the local and develop something like an affection for the things around you". To have a relationship to what one is doing, being able to put it into context and to thus see the effects of one's behaviour is essentially important in the learning process, especially in children. One teacher mentioned that the children do for example visit recycling factories to see how this system is working, and why it is important to recycle. Three out of the four schools had established a cooperation with a local farm.

Another project I got in contact with during the conference I attended – the Aurland Project (*Aurlandsmodellen*) - was including a whole row of local actors into their outdoor education concept[70]. All those stressed that what is important is that children develop a sense of belonging to a place, which will result in a wish to keep it and protect it. In reverse, this participatory approach to ESD can contribute to the aforementioned living and creative municipality. As one of the members of Aurlandsmodellen said during the conference, using the whole community for learning will give its members a sense of being important, something that can be especially beneficial for older people, farmers or members of indigenous populations, like the Sámi in Norway. In

70 See Bugge et al. *Aurlandsmodellen – vegen vidare. Semesteroppgave i kurset Garden som pedagogisk ressurs* – UMB 2009. Ås: Universitetet for Miljø og Biovitenskap, 2009.

return, children and the municipality can benefit from their knowledge and work. At the same time, it can help prevent migration from smaller and / or rural municipalities, as those who develop an affection for the place as children might want to establish themselves there as adults, and thus help keeping the community alive.

All of this again shows that the bases are supportive for both school types. Guidelines for the integration of the structures and institutions within the schools' local community exist, and it is upon schools and community to get together. This might additionally be aiding the municipality to work with LA 21.

What still seems to remain is the need for an epiphany on several levels - the national, local and school level, a need to realise that using the surroundings is not additional work, but that it can be in line with what the curriculum demands. At the same time, there might be a danger of limiting integrated teaching to teaching in nature, instead of also making use of the manifold social structures that each community has to offer. This could be getting in contact with democratic processes by relocating teaching to the municipal administration. However, this demands effort on both sides, and as long as the curriculum does not make enough room for this, it will be difficult for teachers to implement. As Connelly & Smith say,

> "LA21 can be understood as 'the process of developing local policies for sustainable development and building partnerships between local authorities and other sectors to implement them' […] *Rather than being seen as a single, standard approach, the process will involve different initiatives and priorities in different localities*." (2003: 342, my emphasis).

This requires not only creativity and willingness to cooperate on both sides, but also state support in several ways. In addition to that, the aforementioned lack of information and awareness might contribute. Most teachers might have heard about *Den naturlige skolesekken*, but how many have heard about the Idea Bank (*Stiftelsen Idébanken*), the coordinators for LA

21? They collect projects and ideas for sustainable action on a local level, and they have numerous resources on ESD as well. So again, it seems that favourable foundations exist, but all the several actors have to be interconnected and made aware of the possibilities that exist. This is true for both State and Steiner Schools. As Merethe said,

> "you have to work cross-wise, don't you, across subject boundaries, across institutions in the local community, utilise what is there locally."

Another teacher stressed that "the walls of the schools have to become permeable"[71]. I would like to take up that thought and stress it in congruence with Connelly & Smith (2003) -this permeability has to be bilateral – schools including local structures and institutions more as well as the latter including schools into their daily activities. However, as Merethe said, there is

> "far too many who think about school as school, isolated from the rest of the world, that learning should take place in school, in books, close to each other, far too few who take advantage of the possibilities for learning in the local surroundings".

71 Anette in interview

5.6. I want but I cannot. Teachers' attitudes, Teacher Training and the Issue of Freedom

The process of finding schools that I could work together with was long and elaborate, and initially, I did not understand why schools did not reply. Later, when I was interviewing a teacher from one of the Steiner Schools that eventually agreed to work with me, she told me an interesting story. She told me how my request had been brought up in a teachers meeting. Some were sceptical to my project because they thought that sustainable development was nothing they had at their school, meaning as a subject, and it rather sounded like something that would belong to a state school. One of these teachers came to me after a lesson I had attended and said, "I was sceptical when they told us about your project, but now I see what you meant". It simply seemed that they were not familiar with the term ESD.

I met with similar reactions of scepticism, mainly when approaching teachers in person after I had gained access to the schools. In both of the State Schools where I was observing, I was introduced to several other teachers. However, none of these seemed willing to allow me into their lessons, even though I assured them that no evaluation was involved. I tried again to take contact per mail, but out of seven or eight teachers, one replied. Something similar happened at the other State School, were I got in contact with three teachers, one of them did not reply to my email at all, one was positive to my project. The third one was also positive towards me observing in her lessons. However, when I asked if there was a possibility to join for some Food & Health or Arts & Handicrafts lessons, the reply was that it was Natural Science lessons that had been asked about[72] and it was only in these lessons that there was capacity for me.

72 This was not true, because in my email I said I was interested in Natural and Social Sciences, Food & Health, Arts & Handicrafts, Religion, and outdoor teaching.

These reactions puzzled me, also because they starkly contrasted with my experience at the Steiner Schools. After I had succeeded in receiving their trust and permission to take part in teaching, it was easy to gain access to the lessons. In both cases, all teachers I contacted willingly agreed to my observation. In one school, the flexibility went that far that one day I went there without prior notice, but it was still no problem to find someone that I could be with that day. I did not understand these differences, and I was wondering what the reasons were.

During the process of contacting schools I was sometimes left with the impression that the term ESD (*Utdanning for Bærekraftig Utvikling*) was not as widely known as I would have expected, at least two interviewees appeared confused when I asked what they connected to the term. Was this caused by a lack in knowledge of or awareness about ESD or environmental issues in general? The same happened when talking to some acquaintances who are trained teachers themselves. Often they would associate a rather narrow field to the term, like teaching children how to recycle, or energy saving. What does this imply? Is it just empty words that are used on the higher level, within governmental discourse, and only some of those who are working on the below levels might not have heard of them? Or is it a term for something that is already happening in schools, but nobody puts a name on it there?

My data suggest that two factors have a major impact on the perception and accomplishment of ESD. Factor #1 is the teacher's opinions, attitudes, and awareness of the topic itself. Factor #2 can only partly be applied to Steiner Schools, while at the same time being in disfavour of ESD in two ways. The teachers' lack of time caused by a strong focus on evaluation and exams and the connected workload (in State Schools) is intertwined with a simultaneous lack of obligatory elements regarding the integration of a broad spectre of ESD-related issues, preventing these topics from being taken up in schools.

Factor #1 – teachers' opinions, attitudes and own awareness – was found to be a major variable. Almost all my interviewees were of the opinion that the

relation to living a sustainable life and protecting the environment plays a major role in the realisation of ESD. This aspect can be applied to both State and Steiner Schools, but we have to differentiate a bit. In State Schools, the result I gathered from my interviews was that if teachers are not "green" themselves, the chances that they are going to include ESD aspects into their teaching are low, and vice versa. Why this can be possible despite the aforementioned good foundations belongs to the discussion of factor #2. In Steiner Schools, this aspect of personal interests certainly is significant as well.

Due to the ideological foundations of Steiner pedagogy, the issue of a lack of the required attitudes and awareness appeared to be less of a problem. None of my Steiner School interviewees mentioned the importance of attitudes and awareness in a negative context, as it was the case with those without a Steiner School background. People who are teachers at a Steiner School might have a background interest in the connected philosophy. Thus, it seems that attitude and awareness issues do not play as big a role as in State Schools. My fieldwork is hinting at that as well, but cannot confirm it entirely.

At State Schools, this seems to differ, which both interviews and my fieldwork confirmed. As mentioned earlier, everybody agreed that an own interest is essential if ESD is to succeed in school. During the conference I attended, several teachers mentioned that they often had to defend their projects against a sceptical council that was questioning the practical and educational importance of this. This scepticism might have been based on a lack of knowledge and awareness. One teacher said in an interview,

> "it is quite simply dependent on each teacher's attitude, and if you are passionate about it, you do something with it, and if you are not

> passionate about it, then you do not care, that is not my responsibility, that is not my job, somebody else can do that"[73]

The other teachers who supported this viewpoint made similar utterances. If you do not care (or you are not aware), you do not include it in your teaching. In addition to that, several informants mentioned the challenges connected to keeping updated on the relevant issues. This was mainly connected to accessibility and collecting of information.

The government has identified this aspect as well, and has been offering a one-day seminar called Climate Smart (*Klimaklok*). The seminar is arranged by Climate Elevation (*Klimaløftet*), which is "the government's initiative for providing climate information to the citizens"[74]. It acknowledges the fact that climate is an important topic and that is has to be approached in an interdisciplinary fashion. It aims to give teachers an update on both the natural and social science aspects of climate change. This course is intended to spark interest, although signing up for this happens on a voluntary basis. It is important to spread knowledge about the causes and consequences of climate change, but it cannot be restricted to exclusively transmission of knowledge.

The ECB shows that his is not enough. Stephen Sterling adds another dimension to this. He differentiates between transmissive and transformative education, where a message is communicated from above (government), and the information that is transmitted is mainly "factual knowledge and skills" (Sterling 2009: 39ff). What is required is transformative education, which contributes to conceptual understanding and capacity building (ibid.).

Additionally, even though the course promises a balance between natural and social science information, natural science perspectives prevailed when I attended. It also appeared that technological solutions and emission trading

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73 Eivind in interview.
74 http://www.klimaloftet.no/Ovrig-innhold/Hvem-star-bak/ , accessed 22/10/2010, my translation

were preferred over social measures. The last minutes gave some examples of what can be achieved on an individual and social level, but considering the scope of the change that has to happen on the latter, this did not appear sufficient. In addition, what was missing was a stronger focus on development, the interconnectedness of our actions, food production and waste, or the integration of indigenous perspectives.

However, this course is an excellent and promising tool, and a good initiative taken by *Klimaløftet* in order to take the theory out into the practice. In addition, it is designed to be a one-day seminar, which limits the possibilities. However, the composition of topics could potentially be modified towards a more balanced picture. Knowledge of the scientific foundations is important for teachers, but they should not be left with the impression that it is solely technology or natural science that is going to solve the problem. The impression remained that reduced consumption and energy use are not explicitly spelled out as alternatives. CCS[75], emission trade, renewable energy sources are good measures, but if teachers are receiving a message that mainly things have to change on national and international, and not individual level, the consequence might be that the same view is going to be conveyed in teaching. If we remember what Chawla said regarding the emergence of environmental sensitivity, role models like teachers, exert an enormous amount of influence as well, something that becomes important in this context.

It became obvious in my interviews that teachers need more assistance with this, as even one of those engaged teachers said, "I do not think it is easy to integrate it into everything I am doing [in teaching], I do not"[76]. Even though there are numerous available resources– most of them online – it appeared that the teachers I talked to as well as their colleagues have problems

75 Carbon Capture & Storage
76 Heidi in interview

with the integration of these resource into teaching. In addition to that, two of my interviewees mentioned that probably a large number of teachers do not even know about resources like ww.sustain.no or www.natursekken.no. Both the spreading of information as well as providing teachers with tools to approach this broad and complex field are essentials for a future political agenda. The problem that arises is that there obviously is a gap between theory and practice. As it appears now, there has not been a success in transferring the theory presented in governmental documents like NSDS into practice in the schools.

This is directly connected to teacher training, where "there are no strong obligations […] that there should be more of it [ESD]", as Arild said. Just as in school, there is a strong focus on discipline thinking, and the interdisciplinarity that ESD requires is falling behind. State School teachers often mentioned that teacher training was and is not sufficient, while Steiner School teachers did not express any discontent. Although this thesis does unfortunately not provide the capacity to go into details about the relationship ESD – teacher training, some aspects need to be mentioned.

Regarding teacher training for State School teachers, the government issued new guidelines this autumn. These new guidelines specifically include the formation of values, by emphasising that it is essential to "develop ethical and historical perspectives about one's own professional role and a critical perspective on teachers' role within society. Future teachers are also required to have a good understanding of global issues and sustainable development" (Aasen et al. 2010: 8). Additionally, a stronger emphasis is now put on practice and subject knowledge. All teacher students are obliged to take credits in Norwegian and Maths (Kunnskapsdepartementet 2010 (a)[77]). At the same

77 Accessed at http://www.regjeringen.no/upload/KD/Rundskriv/2010/Forskrift_rammeplan_grunnskolelaererutdanningene.pdf , 25/10/2010

time, subject knowledge is emphasised, which is contradictory to the argument presented earlier - that what is needed for ESD is interdisciplinarity. A focus on specified subject knowledge does not work in favour of that. However, it would be irresponsible to deny that subject knowledge is important. However, a focus on thinking-out-of-the-box and combining the knowledge of certain subjects with each other in order to create the kind of inter-knowledge required for successfully handling ESD might be helpful as well. Arild said that the problem with ESD is that "it is caught between two chairs – between social sciences and the natural [sciences] in particular". ESD demands creative and connective thinking, and to acknowledge this and give expression to this in teacher training might be a big step forward.

Another influencing aspect is that the respective university or university college is responsible for the structural build-up (and thus distribution of emphasis) of the teacher training. Some places might put emphasis on ESD, others might not because "there is no sufficient binding regarding this [ESD] in the schemes"[78]. Sustainable development and the importance of sustainability issues in teacher training are mentioned in the official guidelines, but again, it does not seem that there is an obligation directed towards this.

Among those who decided to focus on sustainability issues in teacher training is the University of Life Sciences in Ås (*UMB*), who aims at furnishing teacher students with "sustainable teaching expertise", as Anette said. At the same time, she acknowledges that this is very demanding, but worth the effort. In addition to this, another interviewee from UMB mentioned that the problem that still remains is that UMB students receive good training at the university, but what meets them later in the schools – e.g. curriculum, the school's and teachers' views, lack of time and focus on achieving good pupil results in exams - often counteracts this. In addition, it might make them

78 Arild in interview

turn back to what they themselves experienced at school – e.g. a strong reliance on text books, etc.[79]. Again, personal attitudes and motivation become important.

Teacher training at Steiner Schools has its foundations in Steiner's pedagogical ideals as well. The only institution in Norway that offers teacher training is Rudolf Steiner University College in Oslo (*Rudolf Steinerhøyskolen*). Just as the pedagogical ideas itself, nature and bonding with it are central aspects of teacher education. Natural and environmental science are obligatory subjects for everyone taking a three-year teacher training. At the same time, this university college offers a Master's degree in Environmental and Social Education, tailor-made for those "who are interested in actively using nature in children's upbringing and education"[80]. One teacher at a Steiner School, Helga, stated that in her opinion, the environmental / sustainability perspective is more integrated in Steiner teacher training, even if

> "it is actually rather immanent that the environment is to be preserved and that mankind has done wrong against nature and that there is indigenous peoples that have been extinct […] all these things are just very obvious, you do not actually have to [mention them]".

In her opinion, those who apply at Steinerhøyskolen are rather inclined to take up these topics in their teaching, because it comes natural with their motivation for teaching. This implicitness is a good thing as long as teachers' own awareness goes that far. However, just as in State Schools, implicitness can become dangerous, for both teachers and pupils. It appears that Steiner School teachers exhibit a greater diversity in educational background, something that might complicate or support the issue furthermore. Not everybody teaching at a Steiner School has taken a degree at *Rudolf*

79 Lene in interview
80 http://testlabstein.squarespace.com/master/ , accessed 25/10/2010

Steinerhøyskolen, partly also because this university college has only been existing for 29 years.

Factor # 2 was where differences between the two school types became most obvious. Almost all State School teachers that I interviewed mentioned that another major factor hindering ESD is that they simply do not find enough time to include related issues into their teaching, something that is amplified by a lack of obligatory demands in the curriculum regarding ESD. Securing quality of the teaching, evaluations, national exams often lead to teachers prioritising exam content. Additional workload - like the keeping of a journal connected to securing quality - put teachers under more pressure, as Eivind, a State School teacher, stated. A recent directive issued regarding what should influence pupils' grade states for example that commitment in lessons does not count. Teachers who are critical to this say that it means extra workload for them and that it sends a signal to pupils that the only thing that counts is "formalised tests and exams" (Ruud & Olsen 2010).

However, what emerged as a further interesting aspect was that throughout my interviews, a number of informants was expressing disappointment in lack of more control from above, more governance and more regulations about taking up sustainability issues in the lessons. Simultaneously, they considered this one of the factors having influence on an absence of ESD in State Schools. As has been mentioned earlier, both the *General Part* and the national curriculum would provide a good basis for ESD, as has also been acknowledged by most of the teachers I interviewed. However, if all the good features are non-compulsive parts of teaching, then those teachers without an awareness of the importance of ESD will not include it because everything that is not compulsory comes in addition. Heidi stated that, "it has to fit in with the curriculum […] for you to take the time to do it". She goes on saying something that also Anette echoes,

> "the possibilities for the teachers who possess an awareness of this and work with it, you can work with it within the framework [i.e. the *General Part* and the CC]. But you do not have to do it, and that is probably the limitation".

Merethe, who argues the following, repeats this:

> "You can easily come up with good ideas and the structures are there because it says in the curriculum, it says in *Kunnskapsløftet*, it is being said in public contexts that this is something the government is supporting, you hear about it, there is means, books, sustain.no. The problem is that if you do not possess an interest in this […] it is neither a problem to drop it"

It seems thus that the control and rules from the governmental side are applied at the somewhat wrong end. There appears to be a lot of pressure regarding the achievement of the competency aims, which are reflective of what is considered to be essential skills and knowledge at the end of a learning period. This is something that does not leave teachers with too much time and opportunities to go into issues that are important, but not too well anchored in the competency aims[81]. One teacher also acknowledged that often a lack on side of the schools' management to make a statement for e.g. becoming a Rainmaker School (*Regnmakerne*[82]) contributes to this.

At the same time - as Eivind argued - there is rather focus on

> "basic [skills in] Norwegian, English, and Math […] and then environmental education (sic.) is put on hold a bit."

At the same time, "this [ESD] is not what you are evaluated in", as Anette said. This is what Sterling calls an "effect of the managerialist revolution", which has transformed educational systems towards being occupied with economical rather than educational values (Sterling 2009:41).

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81 This is not to say that issues of sustainability and environmental protection are not included in the competency aims. They are, but not too a large extent.

82 A project to support climate- and energy education at schools.

In this context, it means "a narrowing of what counts as achievements to that which can be measured" (ibid.). Anette also supported the call for more regulations by saying that she thinks that "it has to be made much more obligatory". However, I did not ask my interviewees how they precisely envision an increase in rules and regulations, but it appeared that most of them wish for more direct and outspoken inclusion of ESD into the curriculum, in a teachable way, as one of them said. Simultaneously, a stronger integration of the *General Part* was welcomed as well.

The spectre of possible solutions is big, but one aspect has to be kept in mind. The paradox is that too much rules and regulations regarding the emphasis on Norwegian, English, Mathematics and Natural Science skills (due to performance in PISA) are perceived as restrictions with regard to ESD, but at the same time there is a wish for more national control in favour of the latter. Especially within a Norwegian context, where liberalism and democratic principles are valued highly, this might cause problems. At the same time, demands regarding mathematical knowledge or English skills might be more readily accepted because they – in a way – can be measured. It is easier to test whether a pupil has command of the principles of curve sketching or the use of the Past Perfect in English than to evaluate his or her level of sustainable skills and awareness. The latter might be perceived as belonging to the domain of ideology as with ESD we are also talking about climate change, a topic that is still controversial among both scientists and the public. The challenge that remains is that of finding a balance the discussed lack of and teachers' wishes for more control.

Interestingly enough, however, exactly this freedom, or rather lack of restrictions, was what Steiner School teachers experienced as an advantage to their teaching. Even though their pupils have to accomplish certain competency aims as well (cf. chapter 4.3.), both their basic foundations and curriculum differ from State Schools, as we have seen. This might be only one of the reasons, but none of the Steiner teachers expressed discontent.

However, just as this freedom can work in favour of ESD, so can it work against it. Even if it might be the case that Steiner School teachers in general possess a higher awareness of the related issues[83], there is always those who might not do so. Then the freedom might have the same effect as in State Schools – if one is passionate about it, the framework supports and enables integration, but if not, one does not have to fear punishment. At the same time, the lax obligations prescribed by the government, the competition aspects mentioned earlier can be bypassed, and more ESD can technically find its way into the curriculum and teaching. Thus, this freedom can be both advantage and disadvantage in Steiner Schools.

In pairing with Factor #1 it appears that a stricter regulation in favour of ESD might help promoting it. Scott & Gough mention several factors that are important within the practice of teaching that could be used to argue for stricter regulations. The first one is inertia on side of the teachers, inertia to break habits of teaching and approaching subjects. This could be compared to the inertia inherent in people when it comes to e.g. saving energy, recycling or buying local and organic food. This is directly related to the second aspect, espoused beliefs vs. theories in use. A teacher might well be aware of environmental and sustainability issues and support their realisation on say for example a national level. At the same time, s/he might not advocate or realise these in her/his teaching. This is not to put the blame on teachers, these aspects are general issues that are being brought up when talking about the potential lying within the civil society or societal measures.

Here as well, there are researchers arguing for more regulations and restraints that in their eyes need to be imposed on citizens if we want to approach a sustainable society. With an argument like this, we are moving on a fine line. However, in the light of what was uttered in the interview, this suggests itself as a solution. However, stricter rules and regulations have to be

[83] Which I am not claiming, but this aspect might be interesting for further research.

enforced by the government, and the question is whether this is in their interest. Climate change and sustainability are still controversial issues, and they still do not meet broad agreement in the population.

This shows again though how there is separate layers or systems that are having an influence on each other, and eventually the child. If not the government pays more attention to ESD on a national politics level, there is going to be a lack of focus on it in schools, and only those children who were lucky enough to have an engaged and aware teacher will come in contact with it.

Another factor that has been identified earlier and that is related to this is the view of the role of schools, and thus that of education. Jon Hellesnes, a Norwegian author and philosopher, is quoted by Hennum & Østrem as differentiating between two types of socialisation – adaptation and education. Adaptation is "learning the 'rules of the game' without seeing that the game can be discussed and changed", while education does exactly this – socialise children into "active, thinking subjects within a democracy" (Hennum & Østrem 2010). This is considered as being in favour of governments, because adapted citizens can be controlled and governed easier than those that are reflective and critical, and who ask inconvenient questions. The implicit main argument in Hennum & Østrem's article is that the government's educational discourse is that of adaptation. There is aspects within my case study that point at the same argument, but as I said earlier, it is dangerous to extract generalising statements from case studies. This implies that more research is needed, but it is worth contemplating on Hennum & Østrem's argument, and look at ESD in Norway in that context. Those children who have not learned to approach sustainable development in a reflected way, who are not able to critically reflect on their own behaviour and position, are not going to be able to critically reflect on the actions and positions that their own government has towards sustainability.

6. Conclusion

"Schools - by virtue of their role as culture- and value- imparting institution – are holding a special position when it comes to finding a definition of what society perceives quality of life to be, and this has to happen in cooperation with the pupils" (Thoresen 2006: 54)

This thesis has been looking at Education for Sustainable Development in a Norwegian context, with taking two different school types as cases, as to make this broad topic more accessible. In the context of Urie Bronfenbrenner's system approach to child development and theories about the emergence of environmental citizenship behaviour, it has analysed the several layers that are having an influence of the conception and realisation of ESD in Norway.

Contrary to my expectations, I did not find too many differences between the two school types when it comes to ESD. Both are to certain degree similar in their overarching goal and view of education – which is that it is supposed to create reflective, aware and responsible citizens. Differences have become visible on the practice side, with better chances for realisation of these goals in Steiner Schools. Nevertheless, both need to keep on making an effort.

However, the findings I made are not representative for Norway in general, especially because the schools I worked with were all situated in approximately the same area, and the sample was too small. Each school will usually have their local plans, and access to surroundings and resources will vary greatly throughout the country. What I found where tendencies, and it is upon further research to put them under closer scrutiny.

A Cultural Revolution?

The first section intended to view ESD in a cultural perspective, against the background of contemporary Norway. Following Bronfenbrenner, this is the all-encompassing macro-level, the views and perspectives of which are handed down to children via cultural mediation.

The paradox that was earlier identified to exist within Norwegian climate policy was found to be true on a cultural level as well. Norway is intending to be a sustainable country, but simultaneously high consumption and a polluting oil industry are significant aspects in today's society. This can and must of course not be generalised, but it was acknowledged as a problematic tendency in my interviews. How can a society with such a high level of consumption advocate sustainability principles in a credible way when the current level of consumption is not compatible with these principles? At the same time, if this is the prevailing mindset, the outlooks for giving more priority to ESD are rather dismal. Which effects would this have on children who are receiving at least some ESD in schools? Would not that appear like a paradox, a sort of double-bind? We are teaching children at school that consumption has to be reasonable, that it is important to use public transport and to improve the existing structures for this, but when they are meeting society they find out that what they were taught at school is irrelevant in real life? A large part would probably become discouraged.

At the same time, there is a potential downside looming behind ESD. ESD's idea is to impact the creation of a sustainable society, a society that we would like to mould after what we consider to be the principles of an appropriate and ethical way of living. If we do not acknowledge and critically assess that this entails traits of an ideology, we might meet resistance of those who are not convinced of this "truth". Even if we think and know that this is what required for achieving a world in balance, that this is the "right" way of living, we have to accept that not everybody shares our opinion, and some of them might be parents.

Regarding the ideological aspects of ESD, almost all teachers agreed on the fact that this danger exists, and that we must never indoctrinate children with what we think is right and appropriate. It was stated that what should be most important is to educate children into becoming critical, reflective and creative citizens, who can handle information and choices they have in life in a balanced and unbiased way. This aim is already part of teacher education, but it might need more emphasising. It is important to convey that what is most important is not to be the smartest, have the best grades in exams and get a job that puts you on top of the financial elite. Children need to learn to counter the world and the information they are subject to daily in a way that makes them become balanced, responsible, and aware citizens. They need to develop an awareness of being part of an enormous set of interconnected systems. It is important that we endow them with agency, and the belief that their actions can make a difference. This is a key point in Hungerford & Volk's model, and thus crucial in the creation of sustainable future generations. They need to counter the crisis the last generations have created in a creative way, and it is we who have to provide them with the tools for that.

For this, a paradigm shift in thinking about sustainable development and ESD in particular has to happen. Climate change and its connected impacts will eventually affect Norway at home, and society has to be made aware of this. We cannot expect this to happen over night, but we need to start with small steps. The Norwegian government carries a large amount of responsibility for this, and it needs to pave the way for taking the debate out into society, in a comprehensible and not intellectualised way. It is time for actions, and it has been so for a long time. If we are taking the words seriously, that children are our future and the most precious thing a society possesses, Education for Sustainable Development needs to be given much more emphasis and attention that it currently is within Norwegian climate policy.

A Paradigm Shift on the Governmental Level?

On the top level, the macro-level, we also find the state. The analysis showed that both schools and ESD are acknowledged as important tools for sustainable development, but this acknowledgement appeared to be sparse. From looking at several official governmental documents I have tried to show that ESD does not emerge as being considered as a priority area when it comes to approaching sustainable development. This impression was supported by my interviews, where those who were informed about Norwegian policy stated that the issue does not receive the desired attention, neither on paper nor in public debate. In their opinion, there is either a lacking awareness or knowledge of the importance of ESD. Simultaneously, those involved in the latter on a daily basis negated the government's own opinion of being on the forefront of ESD. At the same time, an argument regarding a paradox prevailing in Norwegian climate policy was presented that could be considered as having influence on a domestic level. Regarding policy measures, Norway appears to be more engaged on foreign grounds than at home. This was related to a distorted perception of who is going to be affected by climate change and its multifaceted consequences.

How could this be changed? It might seem that a general shift on the political level has to happen, so that it might have impact on educational policy as well. What is needed is more awareness of the fact that today's and tomorrow's schoolchildren are the future Norwegian society. They are not only future employees and the force behind wealth creation, but they are also the force behind social and cultural innovation. The current opinion, which does not see Norway being affected negatively, makes the chances for ESD to succeed seem rather gloomy.

A bottom-up approach might thus seem more promising, but my research has shown that teachers already feel a large amount of pressure regarding the achievement of competency aims, national and local exams and evaluations. If there is no room for bottom-up, and if those teachers that include and prioritise

ESD in their teaching are disadvantaged because the current system does not leave too much room for pursuing *both* the evaluation and examination requirements and ESD, this might be the wrong track we are on. There are initiatives though which provide teaching material that tailor the content of (sustainable) teaching issues so they fit the competency aims. Ultimately though, the paradigm shift has to happen on a governmental level, since views and guidelines eventually come from there and are implemented at schools.

The next chapter looked at the next lower level, the curricula of both school types. In the case of State Schools, this was the *General Part*, in case of the Steiner Schools it was *Overview*. Both foundational documents were found to contain viewpoints that are in favour of the integration of ESD. However, *Overview* was to be found more outspoken about the related issues, something that works in favour of ESD. In addition to that, it appears that this is based on a different view of nature and humanity. Steiner Schools are more influenced by spiritual ideas about nature, something that is considered an advantage for sustainable development by some scientists[84].

The *General Part* was found to be very cautious with some utterances. These might increase their significance when being formulated more poignant. In general, though, this document provides a good foundation in favour of ESD. A critique that teachers uttered regarding the latter was that it does not receive much attention in everyday teaching. The (local) subject plans receive greater importance here. However, no State School teacher that I interviewed had negative comments on this document. What could be a possible solution ? Making the *General Part* a more important constituent of teaching would be a first step, and again this demands governmental action. The teachers have to be given a voice, and more attention has to be paid to their opinions and

[84] Cf. e.g. Caroline Egri ”Nature in Spiritual Traditions: Social and Cultural Implications for Environmental Change”. In: Frank Fischer & Maarten A. Hajer (eds.). Reprint 2005. *Living with Nature*. Oxford: Oxford University Press, 1999.

concerns. All school types have to be included, because ESD does not leave room for discipline thinking. The walls of the schools have to become permeable, as was argued, and this regards not only contact with the local community, but also other schools and school types. Eventually, all teachers have a common goal – educating children so they can meet the future prepared, and contribute to the social and cultural change that is so desperately required if we want to live sustainably.

Integrated and Interdisciplinary Teaching

Another major issue taken up in this thesis was that of outdoor education. Based on the model by Hungerford & Volk, and the research made by Chawla, I looked at the emphasis given to outdoor education. Positive outdoor experiences were identified as crucial and necessary for the emergence of what Hungerford & Volk call the entry-level variable into environmental citizenship behaviour – environmental sensitivity. Again, both school types provide for it in both their foundational documents as well as in several subject plans. Additionally, it would be hard to find a spot in Norway that would make access to outdoor areas difficult, even if we were to stick to Hungerford & Volk's narrow definition of pristine environments. Nature is among those things that exist in abundance in Norway.

However, regarding the State schools, the aspect that was identified as major obstacle was a lack of confidence in and awareness of integrating the outdoors into teaching. Lack in confidence because my interviews suggested that a lot of teachers did not feel comfortable teaching outdoors because they feel they lack the competency. Lack of awareness because the enlargement of the classroom beyond its walls is obviously something that many would consider an additional burden, but this was rather based on the lack of back up from the curricula in this matter. Being under pressure, the choice between going out or staying inside might become an easy one. Furthermore, a still commonly held view that ESD mainly belongs into the natural sciences exacerbates the issue. Those teachers who do not have a background in natural

sciences might feel insecure about extending their classroom. There is a strong need for promoting the interdisciplinarity that ESD requires, and help it find its ways into schools. It is unlikely that the whole single-discipline structure as it exists in schools today is going to be abolished within a short time, and this might not even be necessary. Working across subject boundaries and in cooperation with other teachers might be a first approach. Even if it is going to be difficult, but teachers have to start daring to think of out the box, and not think about outdoor education as something complicated and difficult.

Regarding the Steiner schools, there appeared to be a stronger awareness of this issue, and taking the children outdoor seemed to be a normal part of teaching. The teaching here differed in execution from the outdoor teaching I witnessed at State schools, but again, my data does unfortunately not provide a god enough basis to fully support this. Teaching at the Steiner schools appeared to be rather unguided, in accord with the ideal that the children should find the explanation themselves.

However, a general danger that was mentioned was that the children might place the experience too far away from a learning context, and thus no effect might be given. This makes it even more important to support teachers in developing frameworks for proper outdoor education.

Outdoor education is not only related to utilising the natural surroundings and resources, but also to make use of the surrounding social structures. The two projects presented earlier that emphasise working with farmers or with several stakeholders in the local community show how important this aspect is within ESD. Local Agenda 21 (LA 21) puts responsibility on the municipalities, and ESD is a part of this. Connecting schools to the happenings in the municipality is crucial, and it is certainly happening already. However, also here there is a need for more creative approaches. Again though, this requires governmental support, both structural and financial. Creative out-of-the-box thinking is required, and this can employ the existing structures as long as a possible restructuring process is

still going on. It requires re-thinking on side of schools and municipalities, but also in society. What was identified as obstacle in my thesis is that the prevalent thinking is that of schools as isolated entities, but the same might also be true for institutions within the municipalities.

Rules and Regulations

A surprising aspect that has been identified within my thesis is the aspect of personal awareness and motivation on side of the teachers. This has emerged as extremely important for the implementation of ESD, and is directly connected to a second important aspect, a lack of regulations regarding the integration of ESD in schools. It was exclusively State schoolteachers or those connected to ESD through their work with projects or within an organisation mentioned this latter aspect. The problem was that if teachers do not possess an awareness of sustainable development and climate change, the educational framework allows for simply dropping these issues in teaching. Those who are passionate about it can use the system to their advantage, but not in a sufficient way. Even though ESD topics have found their way into the General Part and the subject plans, these are not prioritised, as has been mentioned earlier. In Steiner schools, this did not emerge as an issue.

It is not enough to say that the introduction of more binding rules will solve the problem. Government and teachers have to get into a dialogue, and try to bring the different social levels together. If ESD is an important aspect within all the systems that children move in, success is more likely. This is a cultural and a social challenge that does not only involve the government, schools and teachers, but also parents and higher education institutions. If the government wants to keep its promise of providing essential education for everybody, ESD needs to be taken more seriously in order to make this promise be valid for those who are children now and those who will be – the future generations.

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Appendix

I. Core ideas within Sustainable Development

(Connelly & Smith 2003: 6, adapted from Jacobs, M. "Sustainable Development: Assumptions, Contradictions, Progress". In: J. Lovenduski and J. Stanyer (eds.). *Contemporary Political Studies: Proceedings of the Annual Conference of the Political Studies Association*. London: PSA, 1999.)

1. **Environment-economy integration**: integrating economic development and environmental protection in planning and implementation.
2. **Futurity**: explicit concern with the impact of current activity on future generations.
3. **Environmental Protection**: reducing pollution and environmental degradation and protection of the non-human world.
4. **Equity**: commitment to meeting the basic needs of the poor of the present generations and to equity between generations.
5. **Quality of life**: recognition that human well-being is constituted by more than economic growth and prosperity alone.
6. **Participation**: recognition that sustainable development requires institutions to be restructured to allow all voices in society to be heard in decision making.

II. Interviews

Name	**Affiliation**	**Date**	**Location**
Eivind	State School	22.01.2010	Stokke, Vestfold
Irene	Natur & Ungdom, Norges Naturvernforbundet	02.02.2010	Oslo
Hanne	Ministry of the Environment	10.02.2010	Oslo
Julie	Steiner School	23.02.2010	Bærum
Arild	State School, *Den naturlige skolesekken*	24.02.2010	Oslo
Heidi	State School, *Den naturlige skolesekken*	15.03.2010	Asker
Lene	Researcher UMB Ås	18.03.2010	Oslo
Helga	Steiner School	22.03.2010	Bærum
Anette	Researcher UMB Ås	26.03.2010	Ås
Inge	Steiner School	26.04.2010	Oslo
Merethe	Stiftelsen Idébanken	20.05.2010	Oslo

III. Interview Guide

As described earlier, the questions were guidelines in the interviews, and depending on the situation, I modified, dropped or added others. In those cases where I was interviewing persons who were not teachers but working with projects, I asked about that project and its importance for and connection to ESD. In addition to this, I adjusted my questions when interesting issues had come up in an earlier interview, and I wanted to pursue them and find out what others thought about the same thing.

Personal Experience with ESD

a) Can you please shortly introduce yourself and tell a bit about how you came to work with ESD?
b) Would you consider yourself as an environmentally aware person or are you interested in environmental / sustainability issues?
c) What role does ESD play in your job / how does it influence your work / how do you work with it in the context of your job?

ESD in a Norwegian Context

d) How do you evaluate ESD's position within Norwegian climate policy?
e) If you look at contemporary Norwegian culture, how would you evaluate its relationship to ESD?
f) How would you evaluate the connection social change – school's role?

School Types

g) (To Steiner School teachers) How would you evaluate the relations between ESD and Steiner philosophy?
h) (To both) How would you consider ESD's position within State and Steiner Schools?

Methods of ESD

i) What do you consider most important in connection to ESD?

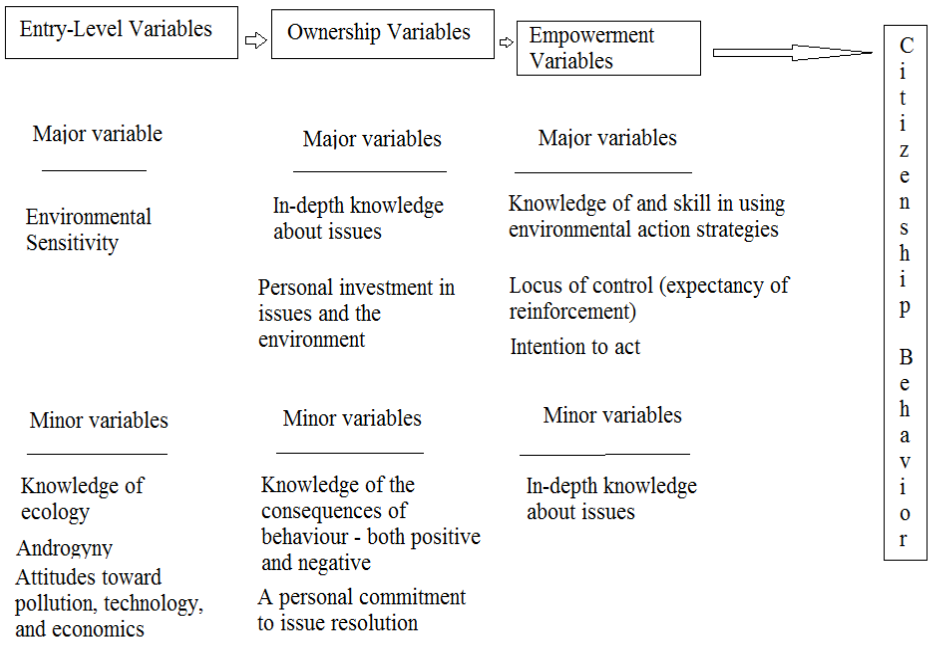
j) Which role do you attribute to outdoor education?

Miscellaneous

k) Where do you see challenges and / or chances with regard to ESD?

l) What views do you have on teacher training in connection with ESD?

IV. Hungerford & Volk Model



V. Distribution of Hours

Steiner Schools - Steinerskolens veiledende fag og timefordeling for grunnskolen (Mathisen 2007)

	1st grade	**2nd – 7th grade**	**8th - 10th grade**	**Sum**
Religion	38	389	157	584
Norwegian	117	1179	398	1694
Maths	76	736	313	1125
Natural Sciences	38	290	280	608
English	/	328	227	555
2nd foreign language	/	300	227	527
Social Sciences	/	320	230	
Arts & Crafts	38	320	160	518
Music	38	247	85	370
Food & Health	38	60	76	174
Physical Education	117	300	228	645
Pupils' Council	/	/	71	71
Project / Optional Program Subject	/	/	113	113
Eurhythmy	38	300	100	438
Information & Communication Technology Included in Other Subjects				

Total Sum	**538**	**4769**	**2665**	**7972**

State Schools – Ordinær fag- og timefordeling (Kunnskapsdepartementet 2010b)

Subject	**1st – 4th grade**	**5th – 7th grade**	**Sum**	**8th – 10th grade**	**Sum**
Religion & Philosophy	427			157	584
Norwegian	931	441	1372	398	1770
Maths	560	328	888	313	1201
Natural Sciences	328			256	584
English	138	228	366	227	593
Foreign Language / Intensive Language Course	0			227	227
Social Sciences	385			256	641
Arts & Crafts	477			150	627
Music	285			85	370
Food & Health	114			85	199
Physical Education	475			228	706
Pupils' Council	0			71	71
Choosing an Educational Pathway	0			113	113
Flexible Hour	38			0	38
Physical Activity	0	76	76	0	76

Sum	**5234**	**2566**	**7800**