"We Do This for the Environment to Feel Good"

– Children's Perspectives of Environmental Education

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Abstract

This study investigates two schools, which are a part of Keep Sweden Tidy's environmental education program, Green Flag. One goal of environmental education is for its participants to adopt pro-environmental behaviors. The Green Flag program aims for schools to adopt sustainable development goals, to assist the school to actively work towards these goals, and to give children a voice in environmental questions. I compared two schools by looking at the children's perspectives of this program. This study calls on practice theory in order to compare the practices in place at each school and discern what is necessary for the children to feel that the practices are meaningful for them, in that they can reflect upon the meaning of the practice, they feel enabled, have influence, and a mandate of agency in environmental questions.

   With this study, I found that certain environmental practices are more successful at engaging children in environmental questions. Practices that have transformed from a dispersed to an integrated practice were more successful in enabling the children to feel that they had influence in the practice and a strong mandate of agency. Also, I found that practices that have been in place for a longer period of time have structures that are more well-defined, which constrained the children and hindered their mandate of agency in the practice and their engagement. On the other hand, practices with a newer structure enabled the children to act and in turn they felt that they had a strong mandate of agency to influence the practice. Last, the environmental practices that influenced the children's behavior outside of school where the ones in which they felt that they had influence and a strong mandate of agency.

Keywords: environmental education, Keep Sweden Tidy, Green Flag, practice theory, dispersed practices, integrated practice, structure and agency, children

Forward

I have formerly worked in several schools. During this time I often tried to engage the children with environmental issues. For example, one day when I was in a park with a preschool group, I took some of the children with me to the recycling bins in the park because the children had found some garbage and gave it to me to throw away. Instead of throwing it away, I went with the children to the recycling bins and showed them where to throw each item, be it plastic, paper, or metal. We made it into a little game and they thought it was fun. The next day in the park, the children asked me if we could go and recycle again. This is one insistence of many which sparked my interest in environmental education. Children are inquisitive and have an important role in environmental issues. How can children, as formative learners, become tomorrow's agents for change? What is needed for them to take ownership for the environment and to have a strong mandate of agency that makes them feel like they are making a difference?

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1 Introduction

In Sweden, it is mandatory for children from the age of 6 to 15 to attend school. The curriculum covers subjects such as math, science, Swedish, and English. The Swedish school handbook, Läroplan LGR 11, has goals dealing with the environment and sustainable development (Skolverket 2011). One of the goals that it lists concerns the norms and values school children are to adopt. It states that students should *"show respect for and protection of the local environment as well as the environment in a more general perspective"* (Skolverket 2011). The handbook also has goals for environmental knowledge that the school children should have gained. First, the children should *"have received knowledge of the conditions for a healthy environment and sustainable development"* (Skolverket 2011). Next, it also states that children should have *"received knowledge and understanding of the effect that one's lifestyle has on health, the environment, and society"* (Skolverket 2011). This shows that in the Swedish school curriculum it is mandatory to teach children about protecting the environment, sustainable development, and how each individual's lifestyle choices can affect the environment. However, it is unclear how the schools should tackle these grand issues. Is it enough for the school children to gain knowledge on these topics? Does this contribute to them having environmental protection values and understanding sustainable development and how their individual lifestyles affect the environment?

Environmental education aims to answer these questions and to provide its practitioners, in this case teachers, with the tools to tackle these issues and to help engage the participants, school children, in these matters. There are many organizations that promote environmental education and also give support to schools to implement environmental programs in a better way. The non-governmental organization, Håll Sverige Rent (Keep Sweden Tidy), runs a Grön Flagg (Green Flag) program for schools. Green Flag is an environmental education program that supports schools to adopt environmental sustainability goals, to actively work towards achieving those goals, and aims to give school children a voice in environmental issues. This program, which will be discussed in further detail below, has far-reaching goals, but what does it look like in practice? This study will investigate what environmental education looks like in two schools who both are a part of the Green Flag program.

1.1   Problem Formulation

Environmental education aims to teach its participants about the environment and aims to encourage them to adopt pro-environmental behaviors. Many environmental education projects follow the idea that increased knowledge about the environment will lead to pro-environmental attitudes and behavior, even though a number of studies have shown that behavioral changes are much more complicated to achieve than this (Baur & Haase 2015, Dresner et al. 2013, and West 2015). To create conditions where pro-environmental behaviors are to be adopted, environmental education projects need to be designed in a way which allows the school children to feel actively engaged in the projects and to be able to reflect upon the environmental activities that are carried out in the education, including the project's consequences for the everyday life of the children (Baur & Haase 2015). In addition, a spotlight on the participants' perspectives of environmental education needs to be shone in order to understand perspectives and improve education (West 2015).

1.2 Aim and Research Questions

The aim of this study is to understand how children, in two different schools, make sense of the environmental education projects in place at their schools. This will be done to understand if these projects are meaningful to the children in that they can reflect upon the greater meaning of the projects and enable them to feel that they have influence and a strong mandate of agency in environmental questions. Green Flag is a project designed by adults, to affect children. This study will focus on the latter, and is thus a study which sees the project through children's eyes. This will be done by answering the following research questions:

- What characterizes the environmental practices in the two schools respectively? What do the practices look like when it comes to their ability to make the students feel engaged in them, take ownership, and reflect upon these practices?

- If, and if so how, can the environmental practices at the schools influence the children's environmental behavior outside school?

2 Literature Review

Environmental education aims to teach its participants, such as school children, about the environment and what they can do to help protect it. One of the key purposes of environmental education is to change the behavior of the participants into pro-environmental behaviors (Dresner et al. 2013). Manzo and Weinstein (1987) define pro-environmental behavior as "behavior undertaken to preserve or improve environmental quality" (p. 674). There have been several studies on how environmental education can promote pro-environmental behaviors.

   It has previously been thought that increasing knowledge about the environment was enough for the participants to adopt environmental attitudes and in turn pro-environmental behaviors. Environmental attitudes are attitudes that show concern for the environment (Gifford and Sussman 2012). Some of the previous literature on environmental education challenges this information deficit model, which "states that increasing environmental knowledge leads to positive attitudes towards the environmental and pro-environmental behavior" (West 2015: 46). This model holds the belief that the more one knows about the environment the more environmentally friendly one will behave. However, it has turned out that this does not necessarily hold true and that the model can break down at any stage from knowledge acquisition, attitude formation, and behavior (West 2015). This means that the participant in environmental education might gain some more knowledge about the environment but that their attitudes may not necessarily change or that they may have adopted pro-environmental attitudes, but they do not change their behavior.

   Baur and Haase (2015) also found the information deficit model to be problematic. Previous studies of German schools show that the students' knowledge acquisition about the environment has not lead to pro-environmental behaviors on part of the students (Baur and Haase 2015). Another study on environmental education by Dresner et al. (2013) found that increased knowledge about the environment does not necessarily lead to pro-environmental behaviors. In addition, West (2015) criticizes the idea that knowledge about the environment will lead to pro-environmental attitudes, which will in turn lead to pro-environmental behaviors. She states that "only a portion of pro-environmental behavior can be linked to environmental knowledge and awareness" (West 2015: 46) Therefore, it is apparent that more than knowledge acquisition about the environment needs to take place, if the aim of environmental education is to be met, for participants to adopt pro-environmental behaviors.

   Some of the previous studies of successful environmental education where the participants adopted pro-environmental behavior have been attributed to active participation. Dresner et al. (2013) found a positive correlation between frequent involvement in pro-environmental activities and pro-environmental behaviors. Their study found that the more frequently adults volunteered and participated in environmental activities the greater positive effect it had on their pro-environmental behaviors. Baur and Haase (2015) investigated, "whether active involvement and organization in environmental activities influences the environmental behavior of pupils," and they found that this was effective for the pupils to adopt pro-environmental behaviors (p.92). They tested this theory

in three schools and found it to hold true. Yet, they found that the pro-environmental behavior increased in the students only in the area where they were actively involved in participating in activities and not in their overall environmental behaviors (Baur & Haase 2015).

Another area that is important to consider in environmental education is the participants' perspectives. West (2015) choose to follow a more pragmatic approach in her study by investigating what practitioners and participants of environmental education actually thought of it. West found that looking at practitioners' and participants' perspectives of environmental education is an understudied area of investigation. Practitioners and participants are the two different groups involved in environmental education, such as teachers and students. She found that using both the practitioners' and participants' perspectives to design projects can help ensure that environmental education projects meet the participant's needs and that they may continue to be interested in the environment and work with it constructively in the future (West 2015).

The previous literature on environmental education shows that more than just increasing a participant's (student's) knowledge about the environment is needed if the participant is to adopt pro-environmental behaviors. It has shown that the information deficit model is not an appropriate model for environmental education, rather that active involvement in environmental activities is necessary. Furthermore, understanding the participant's perspectives is necessary when designing an environmental education project

The point of departure of my study has been linked to these previous findings. I have chosen to investigate environmental education from the participant's point of view, in my case from a child's perspective. I have also chosen to investigate what kind of environmental activities the children are participating in and if they are actively involved in the projects.

3 Green Flag and the Two Schools

In this chapter the Green Flag program will be described, as well as how the two schools in the study implemented this program.

3.1 The Green Flag Program

The departure point for finding schools that work with environmental education was Keep Sweden Tidy's program, Green Flag. As mentioned previously, Green Flag is an environmental education program with the aim to encourage schools to adopt environmental sustainability goals and to actively work toward achieving those goals. Keep Sweden Tidy provides schools with materials, support, and activities for children and youths to become engaged in and take an active role in sustainable development (Håll Sverige Rents Grön Flagg, 2013).

The Green Flag program is the Swedish equivalent to Eco-Schools, which is run by the Foundation for Environmental Education. A preschool, elementary school, or high school can all become a Green Flag school. There are currently 2,600 Green Flag schools in Sweden (Håll Sverige Rents Grön Flagg, 2013).

There are several steps that a school has to take in order to become a Green Flag school. Some of the steps will be outlined hereafter. First of all, the whole school has to be on board with becoming a Green Flag school (Håll Sverige Rent 2013). It does not make sense that one class is actively working towards certain sustainability goals, if another class is inadvertently sabotaging those goals. Thus, the whole school must be on board. Next, the school needs to find a political contact, so the politicians stay informed about how schools are working towards positive sustainable development goals, to get some inspiration, and to provide support to the schools (Håll Sverige Rent 2013). After these first two steps are taken, the school can apply to become a Green Flag school.

Now, the school just needs to begin working towards sustainable development goals. The school must decide what sustainability goals they wish to work with, such as climate and energy, water resources, or consumption (Håll Sverige Rent 2013). Then the school needs to make an action plan and set up a student council for the Green Flag program. The idea of the student council is that the program should be student led and supported by the teachers and other staff. Once all of these steps are in place, the school can begin to work actively towards its sustainability goals. The school then needs to document what it has been doing for last 6 to 18 months and can report this to Keep Sweden Tidy to become an official Green Flag school.

There are 11 Green Flag elementary schools in the Stockholm Region, where this study took place. All of the 11 schools were contacted by email and later followed up with telephone calls. Three schools were able to take me on during the time of data acquisition. Of the three schools, two participated fully, while the third school only participated in a portion of the study and is not included in this paper. The two school in focus in this study are both public schools. Each school will be described in detail here afterwards.

3.2   School A

School A is an elementary school from kindergarten to sixth grade. The following information presented in this portion of the study was acquired from a focus group interview with two teachers at the school, who run the Green Flag program. There are approximately 450 students in the school. This school has been a part of Green Flag program for the past three years. The school became a Green Flag school because they were going to participate in a Comenius program and one of the criteria to participate in this project is to be a Green Flag school. The Comenius program is a European Union educational project which aims to promote and increase the standard of education in the EU (European Commission).

They have worked with different areas of Green Flag for the past three years. During the first year their focus area was urban gardening. The second year the school focused on composting and the school had its own compost station outside. This past year the focus has been on consumption with an emphasis on food waste. Also, during the past three years there has been a focus on sorting garbage and recycling.

The whole school is involved in the project with food waste. The goal of the school is to minimize the amount of food waste thrown away. The food waste is weighed at the end of the day and compared to the following days', and depending on how much food waste is thrown away, the students get different colored smiley faces. The faces hang on the cafeteria wall. A red face represents that a lot of food has been thrown away, a yellow face represents that a moderate amount of food has been thrown away, and a green face means that a little food has been thrown away.

Since becoming a Green Flag school, the teachers have said it is much clearer how they are working with the environment. One teacher said that *"it has created an apparent environmental thought"* throughout the school (Teacher 1). Hence, since becoming a Green Flag school it has become more apparent how to work with the environment and clear that the school has some guidelines to follow now when working with environmental questions.

This school does not have a separate environmental council. The environmental council is combined with the existing student council. During the student council meetings, the teachers who are leading the Green Flag program present what area they will be working with and how they will be working with it. In the beginning, they tried to get the students to come up with ideas but they did not know what to do and could not come up with anything, so the teachers leading the Green Flag program have decided how they will work with it. The teachers hope that in the future the ideas will start coming from the students. This is "because the children have started working (with Green Flag) from a young age and when they move up classes they may have this (environmental) thought with them from the beginning" and be able to come up with their own ideas (Teacher 2).

3.3   School B

The second school in this study is an elementary school, also from kindergarten to sixth grade. The information about the school came from an interview with one teacher and a follow-up email questionnaire answered by several members of the staff. There are approximately 50 students in the school. This school has a focus on the outdoors and being out in nature as much as possible. It is an "ur och skur" (outdoor) school, which is grounded in outdoor education, outdoor recreation, and experiential learning (Friluftsframjandet).

The school has been a Green Flag school for nine years. It became a Green Flag school because the certification ensures that school continues to work actively with the environment which is central to the school and its goals.

The area of focus for this school is life in water and organic farming. The school has worked with many different areas in the past. Some of their past environmental projects include; electricity free days, climate friendly food, and reusing materials and remaking clothes.

This school has an active environmental council, which is separate from the student council. The environmental council consists of four students and two teachers. The council meets two to three times a semester. The students who want to become a member of the council sign up and then there is a democratic vote for who will be on the council. The votes are cast on ballots so the votes are private. This way the students can feel free to vote for who they think is most suited to be on the council.

The school has two environmental focus days in the spring. The environmental council decides on the details of the focus days, i.e. what they will be doing, how to divide the students, and how they will get to the locations. The teachers decide the themes and the overall activities, but the students provide input on the smaller details and say what they think they would like to do and how they would like to do it.

Since becoming a Green Flag school, the school has changed in several ways. The school uses more environmentally certified products such as cleaning products and paper products. They also try to lower the consumption of products such as paper. The school has also began composting since becoming a Green Flag school. Thus, the school has changed and become even more environmentally friendly since becoming a Green Flag school.

4 Practice Theory

The theoretical frame that will be used in this study is practice theory. Practice theory is the theory that is the most conducive for comparing two schools and the environmental practices in place at the schools. This is because the theory provides clear points for analysis and takes into account the practice as a whole including the structure of the practice as well as the agents. Also, practice theory is the theory most suited to meet the aim of this study, to understand how children make sense of environmental education projects and if they are meaningful to the children, in that they can reflect upon them and enable them to have influence and strong mandate of agency in environmental questions. Practice theory is useful to answer the research questions guiding this study as well. Hence, practice theory was consulted and used in this study.

4.1 Introduction to Practice Theory

Practice theory is one of the four theories that falls under cultural theory. Mentalism, textualism, and intersubjectivism are the other three theories (Reckwitz 2002). Practice theory differs from other cultural theories in regards to where it situates the social. In mentalism, textualism, and intersubjectivism the social is situated in mental qualities, in discourse, or interactions, respectively. In practice theory, on the other hand, the social is situated in the actual practice. According to Reckwitz (2002), a practice consists of bodily actions, mental actions, things or artefacts, and know-how to complete a routinized activity (p. 249). This study focuses on the practices in place at the schools.

There are several prominent practice theorists. Bourdieu, Giddens, Lyotard, and Taylor all make the short list of practice theorists (Schatzki 1996: 11). These theorists *"agree that practices are not only pivotal objects of analysis in an account of contemporary Western society, but also the central social phenomenon by reference to which other social entities such as actions, institutions, and structures are to be understood"* (Schatzki 1996: 11). Reckwitz and Schatzki are two of the more recent practices theorists. They were both influenced by several of the aforementioned practice theorists (Gram-Hanssen 2010). Reckwitz has been influenced by Bourdieu and Giddens the most in his conception of practice theory (Gram-Hanssen 2010). Schatzki was influenced by Bourdieu and Giddens as well, but attributes Wittgenstein's observation and description of practices for his conception of the theory (Schatzki 1996). According to Niccolini, Schatzki *"has developed one of the strongest versions of practice theory"* (Niccolini 2012: 163). Thus, Schatzki's theory of practice will be in focus in this study. Reckwitz theory has been used in a more general way to understand the meaning and development of a practice and practice theory. Lastly, Giddens will be used in regards to his theory of structure and agency.

4.2 Schatzki's Approach

Schatzki draws upon Wittgenstein's observations and descriptions of practices, which focus *"on how practices carry understanding and intelligibility"* in order to formulate his theory of practice (1996: 12). Schatzki (1996) defines a practice as a combination of doings and sayings that are linked to together to form a practice. The doings and sayings can be linked through (1) *practical understanding* of what to do and say, (2) the *formal and informal rules* of the practice, (3) the *"teleoaffective" structure* of the practice, and (4) *general understanding* (Schatzki 1996: 89, Niccolini 2012).

Practical understanding refers to tacit knowledge or know-how. This is knowledge that requires very little analysis or thought. For example, when a student stands in line in a cafeteria, she does not have to analyze the situation, she just knows that she needs to wait her turn. In addition, she may have a hard time explaining practical understanding of something, for it is something that she just knows how to do. For a researcher, practical understanding is most easily observed, since the "researched" may have a hard time explaining it or do not explain it at all.

Formal and informal rules are the rules that are put in place that make up the structure of the practice. They can also be referred to as the norms of the practice. The formal rules/norms are the rules that the children can talk about and are aware of. The informal rules/norms are less apparent and the children do not talk about them openly, because they are less aware of them. This study focuses primarily on the formal rules/norms of the practice since it is these the children discussed with me.

Teleoaffective structure is the idea of the practice being goal oriented (Gram-Hanssen 2010). This is the goal of the practice. The members of the practice, in this case, children know what the goal is and try to achieve this goal. For example a goal could be to waste less paper.

General understanding has to do with the explicit knowledge of the members of the practice. This means that the children may be able to reflect back on the practice or reflect upon why they are doing what they are doing. For example the students can reflect upon why they should not waste paper; because it protects trees.

Schatzki (1996) states that *"The understandings, rules, and teleoaffective structure that organized a practice specify how actions ought to be carried out, understood, prompted and responded to; what specifically and unequivocally should be done or said; and which ends should be pursued, which projects, tasks, and actions carried out for that end, and which emotions possessed-- when, that is, one is engaged in the practice* (p. 101). Thus, according to Schatzki, the four criteria holding the doings and sayings of practice together are crucial to the practice and for the people engaged in the practice to know how they should act.

Schatzki also makes a distinction between two different types of practices, dispersed and integrated practices. Dispersed practices are referred to as such due to their "dispersion" into other aspects of social life, and that they are not contained in just a specific practice (Schatzki 1996). Dispersed practices differ from integrated practices in the fact that they are usually only linked by (1) *practical understanding* (Schatzki 1996). A dispersed practice is the simpler of the two types of practices.

Integrated practices consist of a combination of doings and sayings, but are linked by (1) *practical understandings*, (2) *rules*, (3) t*eleoaffective structures*, and (4) *general understanding* (Schatzki, 1996, Niccolini 2012). Schatzki's four criteria of linking an integrated practice is also known as the organization of the practice. He further states that people are aware of which integrated practices they are participating in and that they usually have denoted words for this practice like green, smiley faces as in school A (Schatzki 1996: 104). Additionally, dispersed practices are usually found within integrated practices as well. Integrated practices are the more complex of the two practices.

An example of integrated practice could be minimizing food waste during lunchtime in a school. There is *practical understanding* of how to do this, i.e. a member of this practice waits in line, takes food, sits down and eats his/her lunch, and then discards the waste. A

rule in place may be that the food waste is weighed after lunch. The *teleoaffective structure* is that there is a goal to throw away food under a certain weight every day. The *general understanding* of this practice is that the members know explicitly why they are participating in this practice and what its greater meaning is. For example, it may have a meaning such as they are saving natural resources and they do this by fulfilling the teleoaffective structure of minimizing food waste, following the rules, and having the know-how of the practice. Dispersed practices are seen throughout this integrated practice. Waiting in line is a dispersed practice. The members do not need to ask each other what they are doing, they all just know the procedure. Where to scrape the food waste after lunch is another dispersed practice within this integrated practice.

4.2.1 Schatzki's Approach Applied to a Case

Gram-Hanssen's article *Standby Consumption in Household Analyzed with a Practice Theory Approach* has been used to understand how practice theory can be applied to a comparative case study. Gram-Hanssen looks at how daily routines can be altered to be more sustainable in regards to standby consumption (2010). Standby energy consumption is the energy that is used when an appliance such as a DVD player is in standby mode. This study attempts to make the participants aware of their standby energy consumption and to lower their standby energy consumption. Gram-Hanssen states that, "*this article develops a consumer approach to standby consumption and focuses on how practices can (or cannot) be influenced by communicative and technological initiatives*" (2010: 153). She draws upon several prominent practice theorists in her article, including Giddens, Bourdieu, Reckwitz, and Schatzki. She looks to Schatzki's theory of practice and his distinction of dispersed and integrated practices. She says that *"dispersed practices are most often free of both knowledge and engagement"* (Gram-Hanssen 2010: 160). From this she says that by making people aware of their standby consumption habits and trying to get them to lower their standby consumption, one is essentially trying to change the practice from a dispersed to an integrated practice (Gram-Hanssen 2010).

Gram-Hanssen found that one family in her study contributed an important insight for understanding practice. This insight is *"that changes can spread from one practice to another by carrying the motivation from the home to the office"* (2010: 158). She also found that motivation was important for how engaged the participants were in the study. She said that *"whether one is motivated is important for changing the practice of standby consumption"* (Gram-Hanssen 2010: 161). This article has been useful to understand how to apply practice theory to a comparative case study. In addition, Gram-Hanssen says that the *"identification of the four elements that hold a practices together provides an easily understandable and usable analytic tool"* (2010: 162). This is what I will be doing in my study, which is why this article is of significance as a guiding tool.

4.3   Giddens' Theory of Structure and Agency

Giddens was not initially going to be consulted, but was added later on because Schatzki's theory of practice did not address agency to the extent that was needed for this study. I went back to practice theory literature and searched for a theorist who made sense of structure and agency and could be used for this study. Without Giddens notion of structure and agency, important results would not have been highlighted and brought to the forefront.

Giddens (1993) discusses structure and agency in his book *New Rules of Sociological Method*. Giddens defines *"action or agency as the stream of actual or contemplated causal interventions of corporeal beings in the ongoing process of events-in-the-world"* (1993: 81). According to Giddens, agency means that people make informed decisions to do something or take action in their daily lives. Giddens refers to structure as *"systems of generative rules and resources"* (1993: 134). Additionally he says *"it is essential to*

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recognize that structures only exist as the reproduced conduct of situated actors with definite intentions and interests" (Giddens 1993: 134). Thus, structures are made up from the rules and resources apparent in a specific situation, but they are also made by the actors in the situation and that actors produce and reproduce the structure by adhering to the norms in place.

Furthermore, there is a duality of structure, which means that structures may not only constrain agents, but they may also enable agents to act (Giddens 1993). Consequently, Giddens argues that neither structures nor agents can exist without each other. Agents produce and reproduce structures and act within the constraints of the structure in place. However, agents also have the ability to change the structures. Accordingly, the structures in place may constrain agents, but they may also enable the agents to act.

4.4   Practice Theory in this Study

In the analysis, Schatzki's four criteria for linking a practice's doings and sayings together will be used, as well as Giddens' notion of agency and structure. Schatzki's criteria are helpful in understanding what characterizes an integrated practice in the schools. This is important when it comes to understanding the children's ability to reflect upon the practice and thereby take ownership and responsibility for the practice. The criteria also provides a basis for comparing the two schools. In addition, Giddens definition of agency and structure will be used to discuss the mandate of agency the children feel they have in the practice and the structures in place. This will be used in an attempt to show how the structures in place in one school enable the students to act, and in turn have a stronger mandate of agency. This is important to investigate because it helps clarify why some of the students take ownership for the environment and feel like they can affect it, whiles others may not.

5 Methods

This chapter will describe the research design of the study, the methods used for data collection, how the data collection took place in each school, and the methods for analysis.

5.1 Research Design

In order to fulfil the aim of this study, to understand the children's perspective of the environmental practices in place at the school, a qualitative approach with a multiple case study design has been chosen. Qualitative approaches are concerned with meanings and how to understand the meanings in which individuals and groups give to an issue such as the environment (Cresswell 2014). In addition, a qualitative approach is also concerned with words and what individuals and groups say rather than number as in a quantitative approach (Silverman 2014). Further, this study has been conducted in schools, which is a naturally occurring setting for the participants. This is also in line with qualitative research. Lastly, the research design that has been used is a multiple case study design, which is also in line with a qualitative approach.

The multiple case study design has been used for investigating sustainability in Green Flag schools. This design was chosen because two schools were investigated and later compared for data. This design *"embodies the logic of comparison, in that it implies that we can understand social phenomena better when they are compared in relation to two or more meaningfully contrasting cases"* (Bryman 2012, page 72). Hence, by comparing the two schools I can better understand the meaning of environmental sustainability in schools through the perspective of the children. Also, by comparing two cases I can make sense of how environmental sustainability is viewed in the schools.

There are three main methods used in this study; interviews, focus groups and participant observations. The different methods were used to collect background information and fulfill the aim of this study.

5.2 Data Collection

A combination of focus groups, interviews, and participant observations were used to understand the children's perspective of the environmental practices in place at the schools. The focus groups were semi-structured and the children were presented with several open-ended questions (Silverman 2014). The children discussed the questions amongst themselves and then I asked follow-up questions. I also moderated and steered the conversation back to the topic. I choose to use focus groups because I wanted to make the children feel as comfortable as possible with me and to be able to discuss the topic openly with their peers.

Furthermore, children have been shown to work better with their peers than on their own in regards to interviewing (Christensen & James 2008). Additionally, by interviewing

children one on one, they may have felt more intimidated by me, not only an adult but also a researcher. The use of focus groups may also have helped lessen the power relations between myself and the children, again as an adult speaking with children, and as a researcher and the researched (Christensen and James 2008). Finally, the focus group method helped shed light upon how the children discuss the environment and sustainability with each other and how they make sense of it together (Crang and Cook).

A few interviews with individual children also took place. Even though focus groups were the desired method to collect data, individual interviews were also held. This is because some of the children were unable to participate in the focus groups because they had lessons at the time and had to be interviewed individually. These interviews were semi structured with open-ended questions. The individual interviews were designed this way to make the children feel comfortable and to allow for a more of a conversation type of interview to take place.

Another method used to understand the children's perspectives was participant observation. I observed the children in a natural setting and participated in an activity with the children in each school. After the participant observation, I wrote down and recorded everything that I could remember about the observations. The observations were done to gain more insight into the school and to see how the children behaved in a naturally occurring setting rather than in a focus group or interview setting.

The use of multiple methods, allows me to triangulate my data. Triangulation is the method of finding out where the data intersects between focus groups, interviews, and observations (Silverman 2014).Through triangulation, I can draw the strongest conclusions from my data rather than simply relying on one method for my conclusions.

5.3 Data Collection in Each School

In each school, I used the aforementioned methods to collect data. The parents at each school received an information sheet about the study and a consent form to sign. The children who participated in the study were the ones who received signed consent. However, the methods looked slightly different due to the different layouts of the schools and how each school conducted its Green Flag activities.

In the school A, I led three focus group interviews with 12 children between the ages of 7-10. The children who participated in the focus groups were chosen by the teacher and were those who received consent from a guardian. Next, I observed how the Green Flag practice actually worked by participating in the children's lunch time routines. This participant observation occurred after the focus group interviews. The children of the last focus group led me through their lunch time routines and I sat and ate with the children. We chatted informally over lunch and they pointed out aspects of their environmental projects in the lunchroom, which were previously discussed during the focus groups. They showed me how and where to clear my plate. The purpose of coupling participant observations with the focus groups was to gain more insight into the environmental practices of the students, and how the practice looks like in actuality rather than in discussions.

In school B, I led two focus group interviews with five children and individual interviews with two children between the ages of 6-10. There were two more children who were supposed to participate at this school, but they were ill on the day of interviewing. I also conducted participant observations by participating in and observing an environmental council meeting. The participant observation in school B took place before the focus group interviews. This allowed me to understand how the school goes about its environmental practices and allowed me to re-structure some questions for the focus group interviews and individual interviews to better fit the school. Also, by having the participant observation first, I was able to ask the children about what I observed and how they understood it.

5.4   Analysis of Data

My analysis was based on the transcribed focus group interviews, individual interviews, and data from the participant observations (Silverman 2004). The transcribed interviews for each school were coded and kept separately from each other. The school A was coded and analyzed first and then school B.

Schatzki's four criteria for linking a practice were used as codes in the transcriptions. The codes were applied systematically to each transcript of the focus groups and interviews at each school (Silverman 2004). The quotations from the transcripts were color coded to one of the four predefined categories of linking a practice. After the utterances were color coded, they were cut and pasted into each specific category, and then charted into a graph. The graph consisted of the sub-practices that make up the practice on the vertical left hand column, and the criteria for the linking a practice on the horizontal column. This way the information was deconstructed and then reconstructed into the coding system.

Next Giddens' notion of structure and agency was used. His definitions of structure and agency was applied to the transcripts of focus groups and interviews. This was done to determine the character of agency the children have in regards to their respective environmental practices.

6 Analysis and Results

In this chapter, the environmental practices in each school will be presented and analyzed. The practice, structure and agency, and overall meaning will first be presented for school A and then school B will be presented afterwards.

6.1 The Practice in School A

The children give meaning to their environmental practice carried out in the school through the doings and sayings of the practice which are linked by practical understandings, rules, teleoaffective structures, and general understanding. The meaning the children give to the environmental practice is that they want *"for the environment to feel good"* (Child 1), because *"the environment is like a body just like ours and part of our world and we have to take care of it just like we would with our own bodies"* (Child 2). They also give meaning to the practice by stating that *"if it (the environment) feels bad then we also feel bad"* (Child 2). Hence, the overall meaning of the practice is that the children want the environment to "feel good" and to help it "feel good".

There are three main sub-practices within the environmental practice in school A. The children discussed these three sub practices during the focus group interviews. The sub-practices are picking up litter, minimizing paper consumption, and minimizing food waste. These were the sub-practices that came up during the focus group interviews. There may be more, but these are the ones that the children discussed with me. Each sub-practice will be discussed in regards to Schatzki's criteria and how these practices have helped guide the children to establish the meaning of their environmental practice.

6.1.1 The Sub-Practice of Picking Up Litter

In this sub-practice I can identify all four of Schatzki's criteria for the practice of throwing away garbage. I assume that the children have (1) *practical understanding* of this sub-practice. This is because of the way the children talked about this sub-practice. However, I can only assume they have practical understanding of picking up litter because I did not directly observe this. The way the children talked about this sub-practice makes me conclude that they have practical understanding of it.

The (2) *rules* of the practice that I could identify are that one *"should not throw things in nature"* and that it's important to *"sort garbage and recycle"* (Child 6, Child 7, and Child 8). The (3) *teleoaffective structure* (goal) of this practice that I could identify is to pick up litter off of the ground. The children discussed how they pick up garbage and litter from the ground in the school yard and during "garbage pick-up days" (skräpplockardagar). Another indication that the goal is to pick up litter, is that the children think it is fun to pick up litter. This is because they said that *"it's fun when you have collected a lot of garbage"* (Child 2), and I have concluded that they think it is fun because they are meeting the goal of the

practice of picking up litter and because they feel that they are doing something good for the environment. Both the rules and the teleoaffective structure go hand-in-hand and hence they are quite similar and overlap.

I could identify (4) *general understanding* in this sub-practice through the way the children reflected upon what they were doing. One child stated that *"there should be more garbage cans because there are not that many and with more garbage cans one can help save the environment"* (Child 12). Child 9 reflected on the practice by saying that *"in the beginning, I did not think so much about what I did and maybe I would throw an apple core and thought that the birds would eat it or something but now that the teachers and mom and dad have talked about it, I think no there is a garbage can over there and then I throw it in there instead"*. Thus, from the way the children reflected about this sub-practice allowed me to determine that the children have general understanding of it.

6.1.2   The Sub-Practice of Minimizing Paper Waste

Another sub-practice of the environmental practice in school A is the usage of paper. In this sub-practice I could not observe the children's (1) *practical understanding* of paper products and what they mean for the environment, but I assume that have the practical understanding through the way the children discussed what they were doing and why. In this sub-practice, I could pinpoint the (2) *rule* that one should not waste paper from the focus group interviews. The children said that they had just *"written down that we have to draw on both sides of the paper"* (Child 6). I determined that the (3) *teleoaffective structure* (goal) of this practice is to minimize the amount of paper that is thrown away. This is because children said that *"you should not throw away a lot of paper"* (Child 5). The children showed (4) *general understanding* of the practice by reflecting upon the meaning of this practice. One child reflected that *"if you do not draw on both sides of the paper, then you just wastes trees"* (Child 1). Another child interjected and said *"and without trees we cannot live because trees create oxygen"* (Child 4). Child 6 also said that *"then you cannot get any oxygen because trees and oxygen hang together, and we just chop down trees"*. By discussing this sub-practice with the children I could establish that Schatzki's four criteria for linking a practice together were present in the sub-practice of minimizing paper waste.

6.1.3   The Sub-Practice of Minimizing Food Waste

The third and most important sub-practice of the environmental practice in school A is minimizing food waste. This is the only sub-practice in which I was able to observe (1) *practical understanding*. I observed this while I participated in the lunch time routines with the children. The children knew what to do and led me through the practice without any difficulties. They showed me where and how to get the food, where to sit, and after lunch was finished where to take my plate and silverware.

There are several (2) *rules* that I could spot in this sub-practice. The main *rule* of this sub-practice is to minimize food waste. The following rules go in hand with the main rule. One example is that a person should only take as much food as he or she can eat up. For example, he should take a little bit of food at first and then if he finishes his food, he can go back and take more food. (Child 6 & Child 12).This rule means that you should fill your plate only with as much as you can eat and take food multiple times, rather than wasting it.

The next rule of the practice that I could identify is that food waste is weighed at the end of the day. The children said that they think *"it started because they were going to weigh their food"* (Child 1). Once the food is weighed the children get a colored, smiley face, which hangs in the cafeteria according to how much food was thrown away. This is another rule of this practice. The children explained what the colored, smiley faces (red, yellow, green) symbolize. For instance Child 10 said that *"red faces are really bad and if there are green faces than it's really good"*. From my participant observation in the cafeteria I could see the faces hanging on the wall. There was a face hanging on the wall representing every day in the school year since the beginning of January, when this sub-practice began. The

children showed me the faces in the cafeteria when we ate lunch together. The *rules* of this sub-practice all have to do with the main rule of minimizing food waste.

I determined that the (3) *teleoaffective structure* (goal) of this practice is to get as many green, smiley faces as possible by the means of minimizing food wastes. One child said that *"we throw away too much food in our school, but we are working on not doing that"* (Child 11). Other children agreed with this child that they throw away too much food. The children also said that *"we want to have the most green faces (hanging in the cafeteria)"* (Child 10). Child 4 said *"I would want to have green faces for a whole week"*. Then the other children in the group chimed in and said *"me too"* (Children 5-8). Consequently, the teleoaffective structure of the practice is to get more green, smiley faces by following the rules of the sub-practice.

Based on the children's explanation and reflections about their practice, I can identify the (4) *general understanding* in this sub-practice. One child reflected on the practice by saying that *"you always have to take a little bit because if you throw away (food) then you waste it"* (Child 5). Child 8 explained that "*for certain foods you have to do something that I do not think is fun or well no one thinks that, if you want ham (for example) you have to get it from the pig"*. The children in one of my focus groups reflected upon how much it costs to waste food. A child compared the food waste with material costs: *"we throw away an iPad everyday"* (Child 9).

The children also reflected on the placement of the faces in the cafeteria. One said that *"I think that everyone eats lunch in the cafeteria and then you walk by it (the wall where the faces are hanging) when you throw your food away so maybe you will see it and understand what it means (to throw away food)"* (Child 11). Another child said that *"I think that our teacher has always told us to not take more food than we can eat up, but we did not listen until this started"* (Child 10). She also said that *"the first weeks that they (the teachers) introduced these things then I did not care, but when people started to say that it is not good to throw away a lot of food and tell me about it then I started to think more about, but before I could have thrown some garbage on the school yard or have taken more food than I could eat up and not think much about it"* (Child 10). In addition the children reflected about how they throw away food now. They said that *"before we used to throw everything together, but now we throw away food and other waste separately, so the food waste can be used for the environment"* and *"food waste can be turned in biogas"* (Child 9 & 10). These reflections show that the children were aware of how this sub-practice has changed and how their attitudes and behaviors changed as well.

6.1.4   Structure and Agency in School A

Through the focus group interviews it became clear that the character of agency that the children have seem to include a strong mandate. This makes them feel like they can make a difference and influence the practice to make it better. They children told me that there are often competitions to see who can eat the most, but that these often result in more food being thrown away. I asked the children if they ever competed about who could throw away the least. The children said no, but they were excited about the idea. One child said *"can't all five of us tell our classmates that we are going to have a competition to see who can throw away the least?"* (Child 11). The other children responded by saying *"yes we can do that"* (Children 9-12). Another child said that "*it is maybe good to do it today* (the competition to throw away the least amount of food)" (Child 10). Another group thought that they should have the competition "*in the whole school*" (Child 4). Furthermore, one group even wanted to get the food council involved. They said "*we can maybe tell the food council about this*" and *"tell our whole class"* (Child 11 and Child 12). This shows that the children act within the pre-existing structure of the practice, but that they are engaged in the practice with its goals and they perceive themselves as participants with mandate to change and improve it. That want to improve to increase the opportunities to reach the aforementioned goal, of getting more green, smiley faces, but by attempting to improve the

opportunities they may also alter the rules and norms of the practice. They want to do this by changing from competitions to see who can eat the most to see who can throw away the least.

The strong mandate of agency that the children have in the environmental practice can also be seen when one child said "*I wish we could have green faces for a whole week*" (Child 4). Other children in the focus group also agreed and said *"yes me too!"* (Children 5-8). This shows that the children want to improve the practice because currently, the children do not get a lot of green faces, but primarily red and yellow faces. This means that the children are aware of the structures in place, but hope to improve. In this practices, the structures enable the children to act. The children follow the rules and the norms of the practice, until they realize that they want to change and improve it. Then the norms and rules of the practice will be altered. Thus, the children in school A are aware of their mandate and hence feel that they have agency, and the structures in place enabled the children to act and to ultimately alter the structures of the practice.

6.1.5 Overall Meaning of the Practice in School A

From the focus group interviews the children were able to reflect on the meaning of their environmental practices in place at the school. The children primarily talked about the three previously mentioned sub-practices of the environmental practice. They reflected upon these and the meaning of the practice. The children concluded that "*we do this for the environment to feel good and that it is really fun when we have done something good for the environment*" (Child 1). They also stated the meaning of the practice by saying *"we only have one world and we have to take care of it to ensure that it is still here"* (Child 12). Lastly, one child said that *"the environment is like a body just like ours and part of our world and we have to take care of it just like we would with our own bodies"* (Child 2). Therefore, the meaning of the environmental practice in school A comes into account through the three main practices of picking up litter, minimizing paper waste, and minimizing food waste. In addition, the purpose of the practice for the children it to make the environment feel good.

The environmental practice in school A is an integrated practice. This is because I could identify all four of Schatzki's criteria for linking a practice together. I could determine that the children have know-how of the practice, they understand and follow the rules, they aim to meet the goals, and they are able to reflect upon the practice. An integrated practice is also characterized by knowledge and engagement (Gram-Hanssen 2010). The children were able to show that they were knowledgeable about the practice. They were also highly engaged in the practice. This engagement can also be linked to the strong mandate of agency the children showed in the environmental practice in this school.

6.2   The Practice in School B

The overall meaning of the environmental practice in school B is to *"listen to nature"* and to be outside in nature. It is important for the children in school B to be outside. Every child that I spoke with mentioned the outdoors multiple times.

The practice in school B also incorporates the four criteria of linking doings and sayings together. However, I could not define the linkages as clearly as in the case with the school A. First, I assume that the children have (1) *practical understanding*. I assume this because I was not able to observe the children outside, but it became clear the way the children spoke about the outdoors. Second, the children are outside at least once a day and spend longer periods of time outside at least once a week. This information further leads me to assume that the practical understanding of the children concerns their daily activities and being outside frequently.

There are several (2) *rules* that are apparent in the environmental practice in school B. First of all they are outside a lot. One of the students said that they "*hang out in nature*" and another said it is important to be "*in the woods and to be outside*" (Child 1 and Child 3). I could also identify rules about what one should and should not do in the woods. Child 6 said "*you are allowed to be in nature and you can pick up branches that are already laying on the ground, but you are not allowed to break branches off trees or wake animals in the spring*". Another child said that "*you should not ruin anything outside and that you should follow the right to public access (allemansrätten)*" (Child 1). Other rules that I could discern were to "*not throw garbage outside*" and "*clean up in nature*" (Child 3 and Child 1).

There were also some more formal rules in place. For example, there is an environmental council in school B. The council is made up of four students and two teachers. The council decides on what activities will be planned during their environmental days in the spring. Two of the rules of the environmental council that I could identify is that the council votes on the activities and that the activities should take place outside. This falls in line with the significance the school places on being outside.

Rules and norms regarding transportation also had importance in school B. Most of the students I talked to walk to school. They also said that one "*should not drive a lot*" (to help the environment) (Child 4). That one "*should ride the metro more*" (Child 5). The environmental council also talked about transport during the environmental days. They agreed on biking and riding public transport to one of the activities. This further goes in line with the transportation norms in place. At this school I found that it is important to transport oneself in an environmentally friendly way such as walking, biking, or riding public transport, while driving was frowned upon.

The children could not explain the (3) *teleoaffective structure* (goal) of this practice in a clear way. The children had to guess what the goals were. The purpose of practice becomes quite vague without clear goals. When asked about why they are outside, one child said "*it's nice with fresh air and to be able to move about freely (in nature)*" (Child 1). Another possible goal of being outside is that there should not be a lot of garbage in nature. One child said it is important "*that there is not a lot of garbage in it (nature)*" (Child 7). After speaking with the several of the children, it became apparent that they could not describe the goals of the practice in a clear way or maybe they were not entirely aware of the goals of their outdoor practice, and thus had difficulty describing them. It seems like they think this is just the way it is, that they are outside a lot. They all seem to enjoy the outdoors, but it was difficult for them to reflect on the purpose of it.

The rules of the practice on the other hand show the children how they should behave in nature. The children in this school all seem to think that the rules are important to follow and by following the rules of the practice they may be fulfilling the teleoaffective structure of the practice as well.

In the interviews, the children did reflect upon what they were doing, which I interpret as the (4) *general understanding* of the practice. One child reflected "*we are outside in the woods quite often and then we turn off the lights when we go out and save energy*" (Child 5). Child 6 said that "*you do not just do what you want to do (in nature) for example you just do not just make a fire on a mountain because you do not care because you are not the mountain, but it's important to listen (to nature and not do that)*". Another child said that "*it feels good when you have done something good for the environment*" (Child 5).

6.2.1 Structure and Agency in School B

I could not identify a strong mandate of agency in the children in school B. This is because they found it hard to discuss what they could do for the practice or come up with ways that other people could help protect the environment. One reason for this could possibly be because that the structures in place constrain the children rather than enable the children to

act. This could be due to the fact that this is an outdoor school and the structures of the school have been in place for quite a long time and the children do not feel like that they can change or affect the structures. Accordingly, the children in this practice think it is quite important to follow the rules in place, which in turn also represent the structures of the practice, but they feel like they cannot question or influence it.

6.2.2   Overall Meaning of the Practice in School B

Through speaking with the children it became clear that the overall meaning of the practice was to be outside, listen to nature, and respect it. The practice in school B has a well-defined structure, which is much harder for the children to influence. This is apparent by the way the children talk extensively about the rules and the norms of the practice. However, the practice does not have a clear teleoaffective structure (goal). It was more difficult for the children to discuss this. I do feel that the children could reflect on the practice and the overall meaning of it and what it means for the environment.

   Consequently, this practice is not a completely integrated practice because it does not have all four of Schatzki's criteria for linking a practice together. In addition, Gram-Hanssen states that integrated practice is exemplified by knowledge and engagement (2010). In this case, the children have extensive knowledge about the outdoors, but do not seem to be very engaged, for they found it difficult to discuss how they could help the environment. Lastly, I may have gathered much more concrete data from the children in this school by joining in on one of the outdoor activities. It may be that the children could not speak openly about it, but that this practice would be better to be observed.

7 Comparison of the Two Schools

The two schools differ in many regards such as in their size, what the practices look like, and how engaged the students are in the practices. First of all, school A has not been a Green Flag school for as long as school B. Also, school B is an outdoor school, which further blurs the lines between their Green Flag practice and their general outdoor practice. In school B, the students were not as aware of the Green Flag program as the students in school A. To the children in the school B, their environmental practice is being outdoors which may not have to do with the actual Green Flag program in place at the school. However, this is the information that I gathered and this is what the data has presented.

School A clearly changed from a dispersed practice into an integrated practice with regards to the cafeteria routines. Before the practice of decreasing food waste was introduced, the cafeteria practice was simply dispersed. The children would not have reflected so much upon what their food waste meant. Moreover, since becoming an integrated practice the children have gained new knowledge about minimizing their food waste. They can express the goals of the practice and why they are doing what they are doing. Further, the children are also quite engaged in this practice. They want to meet the goals of the practice and to continue to improve the practice and lower their food waste and get more green, smiley faces.

In order for the environmental practice to have a greater meaning for the children beyond the activity itself, the children need to be able to have general understanding of the practice and thus be able to reflect upon it. In school A, the environmental practice has a greater meaning than just a school activity. The children can reflect upon the meaning of the practice and have also taken this meaning into other practices. For example, they also reflect upon how they get to school, the food wastes in their own home, picking up litter outside of school, and recycling outside of school.

In addition, the children are able to take the knowledge that they created in environmental practice with them to other practices. During the focus group interviews the children told me how they often pick up litter outside of the school. The children also reflected upon food waste in their own homes and many of them made the observation that they try not to waste food at home either because their parents often take the leftovers for lunch.

The practice in school B did not necessarily change from a dispersed practice to an integrated practice as in school A. The school has been an outdoor school since the start. Thus, with the implementation of the Green Flag program I assume there has not be a big change in the outdoor practice. The children have a lot of knowledge about this practice, which shows that it is simply not a dispersed practice. However, they do not have a high level of engagement in this practice, which could be due to the fact that practice is lacking clear goals, a teleoaffective structure.

Also, the children had a difficult time reflecting upon their practice and its general meaning. This is possibly why the children had a hard time taking the knowledge with them to practices outside of the school. However, the children may continue to act respectful to the natural environment outside of school, but this did not come up in discussion. Consequently, I am not entirely able to state whether the children in school B transfer the

knowledge that they have gained from the environmental practice in the school within them to other practices outside of the school.

In regards to structure and agency, it is clear that the children in school A have a strong feeling of agency. They feel that they can influence the practice and improve it. This could be due to the fact that the structure of this practice is relatively new. The practice began in January and I interviewed the children about the practice in March, and accordingly the structure of this practice was not clearly defined yet. This could have been a benefit to the children, for it enabled them to act rather than constrained them. So, in this case the children felt that they had a strong mandate of agency and could affect the practice and alter the structures of the practice to make it an even better practice.

The structure and agency in school B look quite differently. The structure of this practice has possibly been well-established and in place for a while. The children may even have attended the outdoor preschool before attending the outdoor grade school. Since, these structures may have been in place for a long time, they could possibly act as more of a constraint on the children. Ergo, the children do not feel like they can influence the practice to the same extent as the children in school A. Thus, the children in school B do not show a strong mandate of agency as the children in school A.

8 Recommendations for Environmental Education

Through this study, I have found that for Green Flag projects to have meaning beyond the classroom several things need to occur. First of all, the teachers need to be transparent with the children about the project(s), so that they understand what they are doing. There needs to be clear goals in place in the practice. This way the children know what they are aiming to achieve.

Secondly, the children have to be able to reflect upon the meaning of the practice in order to carry the knowledge from one practice to another. This can been seen in the practice with minimizing food waste in school A. The children reflected upon this practice and discussed how they also minimize food waste in their own home by eating leftovers or their parents taking the leftovers for lunch. Another example of this can be seen in their litter sub-practice. Several of the children told me that they often pick up litter outside of school and around their homes.

Thirdly, environmental projects are more successful when a dispersed practice is transformed into an integrative practice. This is because the children are then made aware of a practice that they formerly did not have much knowledge about and were not necessarily engaged in. Additionally, this may also allow the children to feel like they can influence the practice to a greater extent, because they have been involved in changing the norms of the practice. Since the norms, or structure, of the practice are not well-defined this can enable the children to feel a strong mandate of agency. This agency helps facilitate the children to act outside of this practice as well. They want to influence the existing practice, but they also want to improve other practices.

Lastly, the children discussed how their behaviors transformed into more environmentally friendly behaviors. This occurred primarily when the school practice changed from a dispersed to an integrated practice. The children clearly stated that before they did not care about how much food they threw away or if they threw garbage on the ground, but now they do care. They even went as far to say that they want to get even better at it, have more green, smiley faces, and even have competitions to throw away less food. Many of the children also went from mindlessly throwing garbage on the ground to picking up litter outside of the school in their own free time with friends. This shows that children ultimately adopted pro-environmental behaviors after/while participating in an integrated, environmental practice.

Therefore, for environmental education to be successful and for its participants to adopt pro-environmental behaviors several things need to happen. They need to be made aware of a possible environmental practice and transform it into an integrated practice with clear goals. There needs to be room for the participants to influence the practice and its norms and improve it. If this occurs, it is more likely that the participants will adopt pro-environmental behaviors and transfer these behaviors to areas outside of the school practice. This way the environmental practice will also have a greater meaning for the

children than simply a school activity and the children can begin to become agents for positive environmental change.

9 Conclusion

The aim of this study was to understand how children make sense of environmental education projects and to understand if these projects were meaningful to the children in that they were in engaged in them, felt that they had influence, and a mandate of agency. This aim has been met and the environmental education projects have been presented and understood from the perspective of children. It has become apparent that certain environmental education practices have been more successful in engaging children in environmental questions than others.

The first research question guiding this study was *what characterizes the environmental practices in the two schools respectively? What do the practices look like when it comes to their ability to make the students feel engaged in them, take ownership, and reflect upon these practices?* The environmental practices in each school are characterized quite differently, one school transformed a dispersed practice into an integrated practice, while the other school continued to operate within an existing integrated practice. The practice that transformed from a dispersed practice into an integrated practice was more successful at engaging children in an environmental practice. This could be due to the fact that the children feel like they can make a difference because they are included in the process, and this in turn also contributes to them taking ownership of the project. However, the children in both cases were able to reflect upon their environmental practices and what they mean.

The second research question was *how can the environmental practices at the schools influence the children's environmental behavior outside school?* It is clear that simply knowledge acquisition about the environment is not enough to engage the children in environmental questions, but that actively participating in an environmental practice every day and allowing the children to take ownership in environmental questions, such as minimizing food waste, is more successful in engaging children in these questions. The practices that engaged the children where they felt that they had influence and a strong mandate of agency were successful in influencing the children's pro-environmental behaviors. These pro-environmental behaviors also carried over to practices outside of the school and influenced the children's environmental behaviors there. Hence, for the environmental practices to influence the children's behavior outside of school the children need to be engaged in the practice first and then this may lead to them feeling that they have influence and strong mandate of agency, which is what I have determined was the most successful in influencing the children to carry their pro-environmental behaviors to practices outside of school.

This study has touched upon important aspects of environmental education and its success of meeting the aim of influencing participants to adopt pro-environmental behaviors. Practice theory shined a spotlight on environmental practices and broke up the practices into smaller pieces to determine why some environmental education projects were more successful in meeting the aim of environmental education than others. Finally, by focusing on the participants of environmental education, this study brought children's perspectives to the forefront and made their perspectives heard.

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Appendix 1

Table 1: Interviewee Table. This table shows the age of the children interviewed and the school they attend.

Child	Age	School
1	7	A
2	7	A
3	7	A
4	7	A
5	7	A
6	7	A
7	7	A
8	7	A
9	10	A
10	10	A
11	10	A
12	10	A
1	10	B
2	9	B
3	9	B
4	10	B
5	8	B
6	9	B
7	6	B

Appendix 2

This is the nterview guide that I used for the focus group and individual interviews with the children.

Vad vill jag veta?
• Vill veta mer om Grön Flagg från elevernas perspektiv.
• Vill veta vad de tycker är viktigt att tänka på med miljön.
• Vill veta hur de fattar beslut och vem bestämmer.
• Vill veta vad de gör på skolan och/eller hemma för att hjälpa miljön.

Grön Flagg
• Vad är Grön Flagg?
• Vad gör ni med Grön Flagg?
• Vilken område har ni bestämt att jobba med?
• Varför det området?
• Hur bestämde ni er?
• Kan du berätta om några projekt ni jobbade med i det området?
• Vad det kul?
• Tycker du om att jobba med miljöprojekt?
• Är det kul?

Miljön
• Är miljön viktig? Varför är miljön viktig?
• Vad är viktigt att tänka på med miljön?
• Vad kan en vanlig person göra för att skydda miljön?
• Vad gör ni (i skolan/ hemma)?
• Hur tror du att projektet eller att jobba med Grön Flagg hjälper miljön?
• Minns du hur det var innan du jobbade med Grön Flagg? Vad förändrades?