



Høgskulen på Vestlandet

Masteroppgave

MACREL-OPG

Predefinert informasjon

Startdato:	25-05-2018 09:00	Termin:	2018 VÅR
Sluttdato:	01-06-2018 14:00	Vurderingsform:	Norsk 6-trinns skala (A-F)
Eksamensform:	Masteroppgave	Studiepoeng:	45
SIS-kode:	203 MACREL-OPG 1 OM-1 2018 VÅR		
Intern sensor:	(Anonymisert)		

Deltaker

Navn:	Sarah Kibler Livesay
Kandidatnr.:	16
HVL-id:	133419@hvl.no

Informasjon fra deltaker

Tittel *:	KEEPING IT REAL – Aesthetical exploration of the Straumøy model
Antall ord *:	29000
Navn på veileder *:	Kjetil Sømoe
Tro- og loverklæring *:	Ja

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KEEPING IT REAL –

Aesthetical exploration of the Straumøy model



“If we teach today’s students as we taught yesterday’s, we rob them of tomorrow.”

- John Dewey

Sarah Kibler Livesay

2018

A master-thesis in Creative Disciplines and Learning Processes
Western Norway University of Applied Sciences

Abstract

This project takes place on Straumøy Farm, a joint educational-agricultural arena fostering experiential learning through practical work on the farm. The school-farm cooperation stems from the Farm as an Educational Resource Program whose aim is to create sustainable educational learning environment for students and farmers (Jolly & Krogh, 2012). Today Straumøy farm provides an education program for special-needs students based on the theoretical guidelines of the school-farm coop (ibid). This project seeks to investigate if Straumøy's Experiential Education model also might foster aesthetical learning (Austring & Sørensen, 2006, p.77)? If so, how does aesthetical learning manifest itself during the project?

14 students from first and second grade are engaged in an impulse directed teaching scenario on the farm over the course of a year. All data is coded and analyzed based on Austring and Sørensen's Aesthetical Learning Theory, Malcolm Ross aesthetical impulse models and the collective theoretical guidelines for the School-Farm cooperation program (Austring & Sørensen, 2006 p. 155) (Jolly & Krogh, 2012). Through the development of our project we also include Gert Biesta to help explain the evident formative processes that clearly transpire within the student/teacher group during the visits (Biesta, 2013, p. 133).

The results show that aesthetical learning does transpire in the Straumøy learning model through Hansjörg Hohr's social learning model and the aesthetical impulse as defined by Malcolm Ross's Impulse model (Austring & Sørensen, 2006, p. 83 and p. 155). The farm allows for both collective and individual indirect impulses during the day. The indirect impulse allows the students to experience something unique and transcribe and communicate their experience collectively with their peers and teachers. The realness of the experience allows this communication of emotional and sensual experience to provide relevance and meaning to the student as they learn in a context that is real. It is the aesthetical learning method that connects the experiential learning (empirical learning) to the discursive learning method thus allowing our aesthetical mediation of the world to collect our otherwise fragmented emotional and sensual understanding of the world into a collective whole.

Acknowledgements

There are many people that have made this project possible, and each one has a special place in my heart. To keep it short, I want to thank the first and second grade, class teacher and assistant that made this project a beautiful experience. The students have taught me, and continue to teach me how to be a better educator and artist.

I own a huge amount of gratitude to the Grutle family. Anne and Leif let me invade their farm over the course of a year. They listened to my questions and frustration. They provided their time and guidance on every level of this process and supported me every step of the way. I am so proud of what they have accomplished at Straumøy Gard and feel lucky they gave me the chance to be a part of their farm.

My friends Kari Grutle Nappen and Janne Robberstad. These two bring new meaning to friendship. Kari was my interpreter and rock in this academic project. She helped me corral my wondering thoughts into something somewhat structured and pulled me down to earth when my mind began to fly off again. Janne Robberstad taught me that sometimes you need to stop thinking and start doing. She is a huge inspiration and meeting her might be the best part of this master's endeavor.

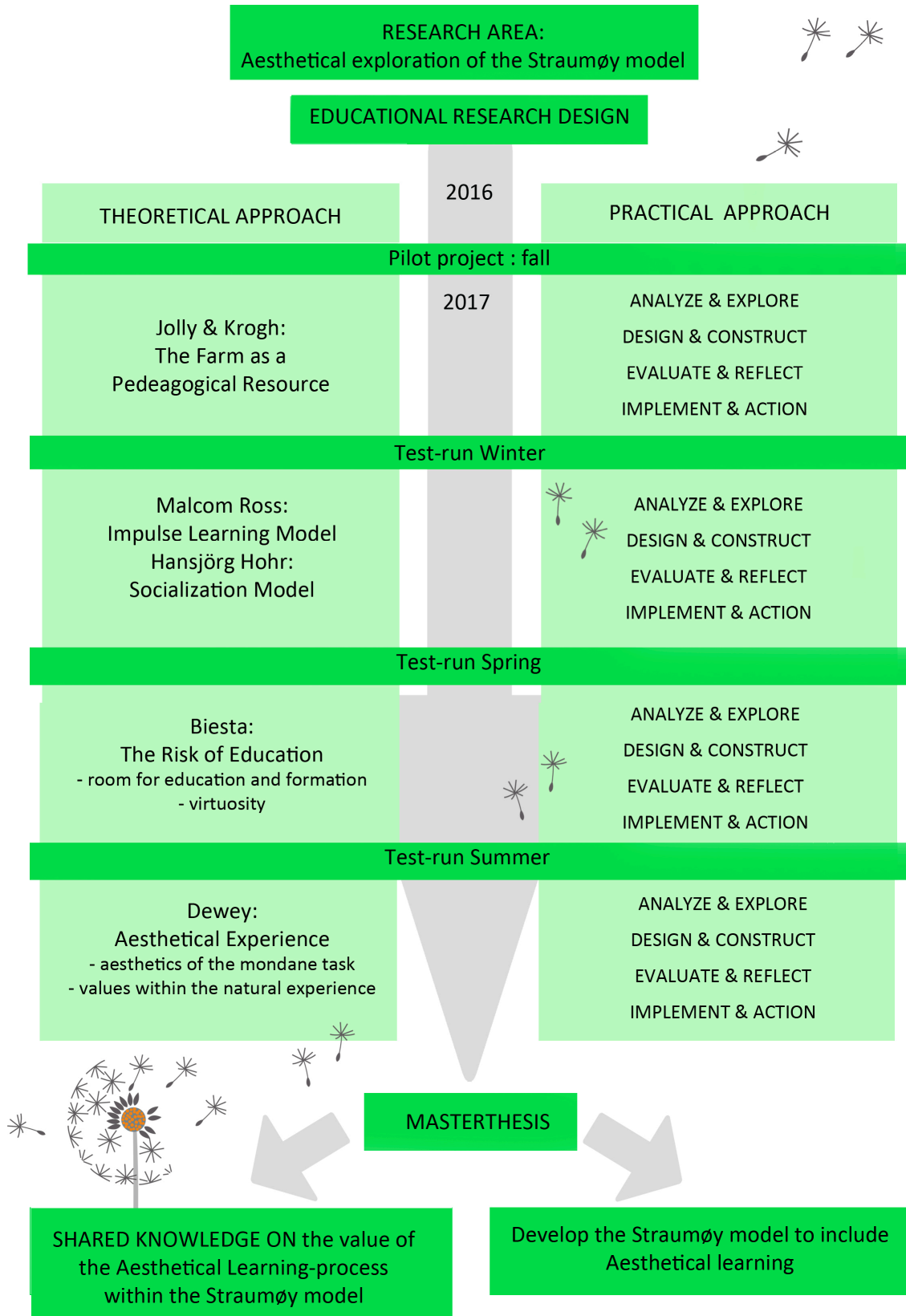
My advisers Kjetil Sømoe and Charlotte Tvedte, for their guidance, but also for their patients, and time. I'm a stubborn and slow student. I gave them a run for their money.

My family. My parents for editing and babysitting throughout these past three years. My husband for his endless support and acceptance and understating. He has sacrificed so much for me to write this paper and I am eternally grateful for his love and companionship. Lastly, my girls. They are the inspiration for the project and reason I care so much for education. They are the real teachers.

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ARBEIDSPLAN STRAUMØY GÅRD		VEKE 40 Oktober 2016	
Hjelp oss å kosta i fjøs og sauehus når me er ferdige med fjøsstellet. Det er så mykje trivelegare å komma tilbake til kveldstellet då!			
Tysdag 04.10.16		Fjøsstell:	Etter fjøsstell:
<i>Anne skal på vidare-utdanning, må gå kl. 13.00.</i>	LL	Laga saft og pakka koppar. Måla nedbør og temperatur. Laga pannekakerøre. Pakka det som trengs for å steika dei i skogen. O	MAT Me går ut i skogen og jobbar der. Undervegs går me og sjekkar om det er hasselnøtter. Me steiker pannekaker på skift på bål. Alle steiker si pannekake. Me gjennomfører prosedyren for kva me gjer dersom ein skadar seg. Ved steiking av pannekaker i skogen treng me: Pannekakerøre på flaske Steikespade Smørekniv Litt aluminiumsfolie To papptallerkar Litt margarin Sukker Fyrstikker Tennbrikker Litt tørr ved Øks I tillegg må me sitjeunderlag, førstehjelpsutstyr og brannteppe i sekken.
	SV	Kosta og rydda på Gamlelåven. V	
	NLH	Jobba med matematikkoppg Anne	
	EVL	Gi hønsa kraftfôr og vatn, henta egg. Gi alelamma og lamaene kraftfôr. Leif	
	NTG	Gi hestane litt kraftfôr. Gi kanina kraftfôr og vatn. Klyppa greiner til kanina. R	
	AB VHB	Gi grisene kraftfôr og vatn. Gi kyrne litt kraftfôr. Vaska melkerommet. assistent, assistent	

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Abbreviations

EDR: Educational Design Research

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Credits

Photos taken by Anne, the class teacher, the class assistant and myself.

Introduction

Shortly after my husband and I moved to a small homestead on the western coast of Norway we met a neighboring family that owned and operated “Straumøy Gard”. This farm had been operated traditionally for generations until Anne and Leif Grutle inherited the property and turned it into a joint farm/educational facility. Anne and Leif were looking for income alternatives to supplement the farm income. Anne had a degree in special education and saw the possibility to offer unconventional learning opportunities for students in the area with special educational needs. In collaboration with her husband's agricultural knowledge, Straumøy Gard thus became part of the “Farm as a pedagogical resource program”. The program focuses on the experiential learning that occurs on farms through practical involvement. The project was started in 1995 at the Norwegian University of Life Sciences amongst a group of pedagogues and agriculturalists wanting to foster sustainable education. They recognized a potential benefit farmers and students might generate in collaboration (Jolly & Krogh, 2011).

For over a decade Anne and her husband Leif have been teaching students successfully on the farm through the experience learning method. The method was developed in collaboration with “The Farm as a Pedagogical Resource” project in which Straumøy Gard participated (Jolly & Krogh, 2011). The experiential method implies that all learning on the farm is acquired through hands-on experience while accompanying the farmer on daily chores, routine repairs and other seasonal activities that one might expect on a farm.



Photo 1: Straumøy Gard

After my numerous visits to Straumøy, Anne, Leif and I would have conversations about their educational model. Through Anne and Leif, I was also fortunate to meet and visit with Linda Jolly. Jolly is one of the founding contributors to the school-farm cooperative in Norway, and who also runs her own school-garden on Bygdøy. In consultation we discussed how, and why this model was successful, and how we could expose more students to this method of learning.

The experiential method continued to intrigue me. There seemed to be more going on with the experiential learning model developed by The Farm as a Pedagogical Resource project, than was explained by its theoretical basis (Jolly & Krogh, 2010). (I have called Anne's and Leif's experiential learning model the "Straumøy Model" since they have tailored it to fit their farming and personal circumstances, and it is uniquely suited to their farm.) What I found interesting while observing the students engaged in the Straumøy Model was not only how the students learned through the experience and guidance provided; but that the students went beyond immediate experience to apply concepts related to immediate experience such as creating huts, refining food, helping with additions to the barn, and using wool from the sheep or sap from the trees to create and learn. Regardless of a students' age, most everything they did had a creative/aesthetic quality. While the educational program was grounded in experiential learning theory (ibid.) was there aesthetical learning generated also? Through our conversations, my enthusiasm to determine if aesthetical learning theory could explain how the creative tasks on the farm helped the students process their experience grew. Furthermore, aesthetical learning might also contribute to the further development of the Straumøy model's theoretical foundation. Consequently, my curiosity rubbed-off on Anne and Leif who were now equally intrigued to further investigate the innate possibilities in their educational practice. As a result, Anne and Leif wholeheartedly offered to let me investigate this possibility on their farm and to assist in the teaching throughout my research project.

Background

My family and I have benefitted greatly from living and learning on a farm, however interest in this area of research also stems from both my background as a student with learning disabilities, and as a student who grew up abroad. Having struggled in traditional school settings due to Dysgraphia and ADHD I saw advantages in the alternative methods practiced by Anne and Leif Grutle's learning model that appealed to students like myself, who did better with more practical learning styles. Moreover, when I was nine my family moved from Texas to Norway. My parents placed me and my siblings in Norwegian schools. We learned the language and culture of Norway only to move back to the United States after nine years. What intrigues me now as an adult and student of education is how schools in the USA and Norway met my learning needs in different ways, and how, more broadly, education manifests itself variously around the globe. My disability has never hindered me in everyday life, but in Norwegian and American schools it has forced me to find, more visually-based practical ways to learn standard material. It wasn't until I pursued a degree in visual art that I found a way to express myself in ways that were both acknowledged by the university and emphasized my need for more aesthetical opportunities in learning methodology. This master's thesis in aesthetical learning has, ironically, forced me back to traditional language –centric learning in which I really struggle. Tackling this challenge made me only keener to explore if and how aesthetical learning can contribute to education and still address our diverse individual learning needs. However, this paper is not intended to dwell on learning disabilities, rather the possibilities that lie within aesthetical learning on the farm. I wondered if other students, regardless of ability might benefit from learning on a farm?

Based on my observation experiential learning created a sensory experience-framework from which the students synthesized aesthetically. This seemed to be what Anne and Leif were doing. Yet I wanted to understand if and how aesthetical learning contributed to the experiential learning already defined. Hopefully this investigation sheds light on the complexities of Straumøy Gard's experiential learning model and how it might also benefit students regardless of learning ability. The analysis of the Straumøy Model, and exploration of potential aesthetical learning processes possibly also contribute to further development

of their pedagogy. The research project is based on the hypothesis that aesthetical learning processes should appear within the experiential Straumøy model. With Anne and Leif backing me up, my master's project was born and the planning began.

Scope of Thesis

The most difficult aspect of this study has been to narrow its scope to the limits of a master's thesis. The project will therefore investigate if aesthetical learning processes are present in the Straumøy learning model and how such aesthetical learning manifests itself during the four class visits forming the basis of my research. As outlined in the EDR method this research strives to provide both a practical and theoretical contribution to the field of pedagogy (McKinney & Reeves, 2013, p. 19). Hence this research seeks:

To investigate and identify if and how aesthetical learning processes can be used to understand and develop the Straumøy education model.

If we conclude that aesthetical learning occurs within the Straumøy model, then add a practical and theoretical contribution to Straumøy's experiential learning model grounded in this research and existing theory as to how students can learn aesthetically from the farm as a pedagogical resource.

Current research

The Farm as a Pedagogical Resource

The following segment will present The Living School study. The Living School Study is a developmental study that investigates the potential didactic benefits of a school-farm cooperation in Norway (Jolly & Krogh, 2012). The didactic model used in the Living School Study is called the Experiential Educational Model. The background ideas for the Experiential Educational Model is also explained. Straumøy Gard uses the Experiential Model in their didactic practice and partake in this study.

“How can we contribute to foster hope, courage and resolve in children so that they may participate in a productive way in shaping their surroundings” (Jolly & Krogh, 2012)? This question instigated the investigation of the farm-school cooperation as a possible educational alternative (ibid.). Their goal was to “create pedagogical arenas that facilitated committed, caring and continuous work with nature, enabling an experience of connection and belonging which can serve as a foundation for sustainable education” (Jolly & Krogh, 2012). The “Living School” project (1995 - 2000) had two goals. The first was to extend the classroom to incorporate the school grounds as an extension of the classroom with a focus on the school gardens. The second goal was to establish cooperation between farms and neighboring schools such that they could experience the responsibility for nature on a larger scale (ibid. 2012). This cooperation became the foundation for “The Farm as a Pedagogical Resource”. The driving ideology behind the Living School project was that the students are given tasks that foster holistic, sustainable learning. The task itself provides a catalyst for social relationships between fellow students, teachers and instructors. It provides an understanding of tools and development of physical skills, and builds relationships to the elements of nature such as soil, plants, animals, minerals and weather. These components together provide context for the tasks executed on the farm, and invite the students to have a first-hand understanding of theoretical application and relevance (ibid.).

The evaluation of the Living School study shows developmental benefits for both schools and farms. The farmers saw many positive contributions to their farm. They also voiced how aspects of school-farm cooperation can shed new light on the current agricultural situation (Jolly & Krogh, 2012). In discussion with Anne and Leif the developmental benefits of school farm cooperation became apparent in our conversations leading up to this study. Joining the two professions resulted in the farmers and teachers becoming more aware of their current practices positive and negative aspects. This awareness opened for the possibility to develop their practice which might have otherwise gone unaltered due to routine or tradition. By merging the two professions the farmers and teachers both may become more aware of their own profession and how it might be used in a didactic context and towards improving or innovating current practice. This was especially true for both the teaching and farming professions where much of the knowledge is tacit. Many of the teachers that

participated in the project have connections to farms or farm life in some way (Spouse, parent, friend). These teachers are motivated to see the educational possibilities in the farm both for the farmer and the student. Furthermore, they believe that it is important for students to understand and experience nature and animals as well as the cycles of life (ibid.).

Relationship-based experiential education model

*“Tell me and I will forget.
Show me and I will remember.
Involve me and I will understand.
Step back and I will act.”*
-Old Chinese proverb

The Farm as a Pedagogical Resource model is created to facilitate relationship-based experiential learning and promote the ideas presented in the quote above (Jolly & Krogh, 2012). This educational model sets out to create meaningful educational context that allows for relationship based learning (ibid.).

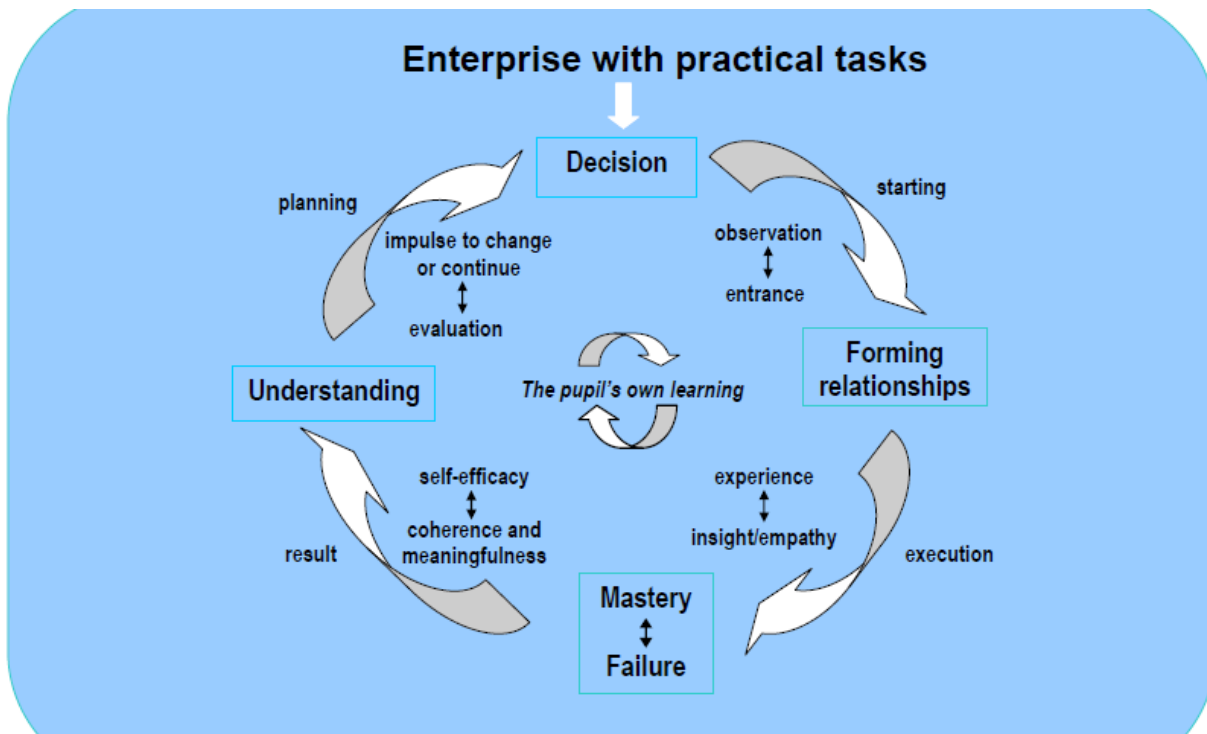


Fig. 1. Relationship-based experiential learning model (Jolly & Krogh, 2010, p. 4)

The model provides a visual understanding of the process that occurs within the student as they continuously meet with the world. The real experience with the world provides meaningful reflections in a meaningful context. According to Aaron Antonovsky (1987) a meaningful learning context offers coherence to concepts that can otherwise become fragmented and abstract (Jolly & Krogh, 2012). Coherence is not only an intellectual endeavor, but the experience allows the learner to both contribute and make a difference from their actions. Through their participation in tasks on the farm, garden or nature the students become motivated in interaction with animals and plants. This motivation propels them to pursue further knowledge while they become aware of, and nurture tasks that go beyond self-satisfaction (ibid.). Allowing the students to become more aware of their participatory role within a larger whole. The students practice judgment making in real contexts that cultivate sustenance for tasks over a longer period. The students actively practice co-operation with their peers and teachers during their work practicing how to work together and communicate actively. They master skills and tasks that give meaningful results in a concrete environment. The student's mastery of their experience creates further motivation to develop their skills and knowledge of any given task building upon their previous experience (ibid.). The model promotes reflection, cooperation development, self-efficacy, and empowerment of self that are the four components towards sustainable development from a learning perspective (ibid.). In a time where educational institutions are reevaluating their practices on a global scale, The Living School project offers a practical hands-on didactic method that encourages students to practice decision making skills in realistic learning scenarios that are meaningful and coherent. This gives the student the opportunity to develop a critical sense of judgment. However, judgment alone is not sufficient, the students must also know how to make good judgments. The Living School program believes that by fostering meaningful relationships with people, animals and nature the student become aware of their responsibility on a global level and the consequence of their actions on a deeper emotional level (ibid.).

There are several theoretical links within The School-Farm Cooperation and aesthetical learning that will be explained in more detail as this paper progresses. What is noteworthy in the planning stage of this project is the experiential learning methods use of art and

creative expression (such as singing, drawing, painting or other craftsmanship such as extraction of tar, binding of wreaths etc.) as a method to work and reflect on the children's experiences on the farm (Jolly & Krogh, 2012). This active use of creation was one reason Anne and I maintained the hypothesis that there was aesthetical learning present in the Straumøy model.

Method and Research Design

The following chapter will illuminate the project's method and design. I begin by defining the qualitative nature of the project before I explain how the Educational Design Research approach functions both as method and design for this project. Furthermore, I will account for the ethical considerations surrounding the project, the participant group and data collection. The iterative nature of the Educational Design Research method establishes the project's development and layout. Therefore, the method and design chapter precedes the theory chapter as otherwise expected in a traditional outline. The project is developed from a pilot visit. I have also included a separate chapter on the pilot development, planning results and analysis to best illustrate the developmental considerations for the successive visits. I have chosen to structure the paper in this manner so the reader will be able to follow the theoretical and practical development and evaluation considerations that emerged during and after the pilot visit, thus obtaining a developmental understanding for the remaining visits. To supplement the results and analysis chapter I will present an exhibition accompanying this research displaying a selection of photographs and film from my empirical data. The exhibition will coincide with the results, analysis and discussion chapters respectively. This is to best illustrate to the reader the visual dimension of this project that emerged through the Educational Design Research method.

Qualitative Approach

To best capture the social complexities of data in this research I have chosen a qualitative approach (Saldaña, 2015). Qualitative data allows me to gather a wide spectrum of input that will best document the complexity of the study. The project will illuminate and reflect over the creative interaction the students and teachers engage in during their visit on the

farm. I will explore and document how the creative interaction manifests itself and what we can do as teachers to promote creative-aesthetical learning processes as laid out in the experiential and aesthetical learning theories. The metacognitive potential of qualitative research allows the researcher to become aware within the given social environment for observing sensory details systematically, as well as understanding the “unsaid information” present in human interaction (ibid. p. 5).

The tacit dimension of my field work is of great importance and can be subtle to detect. It is vital that my research design is organic yet systematic. The qualitative approach will allow me to gather data as it unfolds on the farm. The subtle nuances of practical imaginative learning are key in my study. Ultimately, qualitative methods will allow me to have a holistic methodological approach during the documentation while also accommodating the dynamic and varied settings of the project’s framework and the individuals involved.

Educational Design Research Methodology

The Educational Design Research (EDR) method allows for an innovative and creative exploration of the Straumøy model. As this research endeavor is both pedagogic and aesthetic, the Educational Design Method provides an analytical and systematic approach for reflection, analysis and design of the Straumøy practice. The EDR method has built in strategies to preserve and promote a creative research approach both in design and method. The exploration phase promotes the open-minded and creative mindset while the analysis mode maintains the critical and systematic approach necessary for research (McKenney & Reeves, 2013, p. 81). These phases have been actively used throughout the course of this project.

EDR is interested to develop and innovate pedagogical theory. EDR is also concerned with creating a *robust* teaching design. To achieve this EDR works toward change through a series of reiterative educational interventions. An intervention is then evaluated and adjusted to better the learning outcome in the dynamic learning environment (McKenney & Reeves, 2013, p. 77). The goal of the study is to accommodate the variety of challenges that

might occur in a complex and diverse practical learning environment through repeated interventions and evaluation.

The EDR research method can account understating phenomena *through* interventions and *on* interventions (McKenney & Reeves, 2013, p. 23). This study is focusing *on* the intervention. We will explore features and characteristics of the intervention as presented in the pilot. We will then conduct a series of three test runs that allow us to better explore how the intervention design works within the farm setting considering the aesthetical component where we focus on the intervention design and consider the many didactic variable that we might encounter in a real teaching situation towards a more robust didactic model.

The data obtained throughout the study contributes to the continuous ratification of both design and theoretical foundation of the Straumøy model. The goal is to better understand qualities that lie within the Straumøy model and possibly develop the educational design towards a more complex understanding of the Straumøy models innate qualities while applying them didactically in a meaningful way.

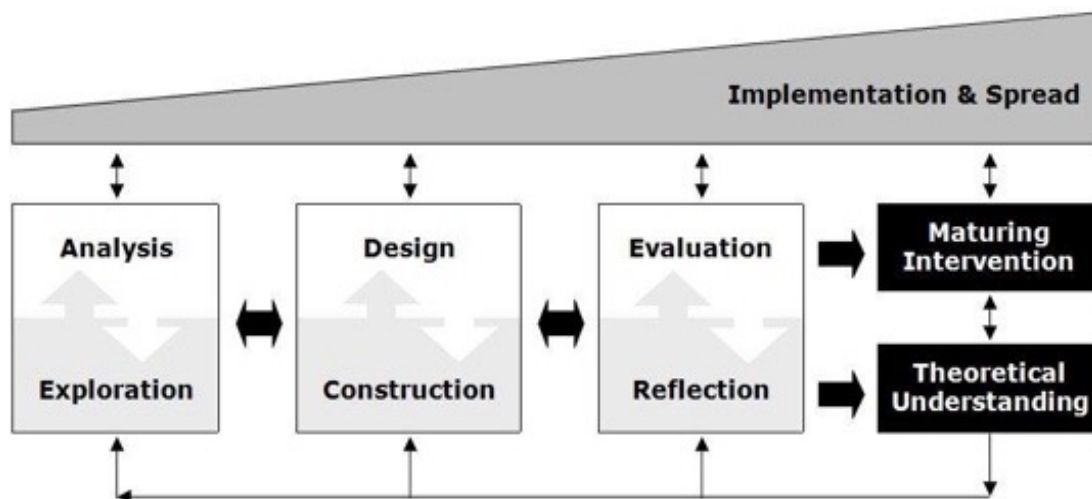


Fig 2. Model illustrating Educational Research Design by S. McKinney and Reeves, 2012, p.77

The above model illustrates the Educational Design Research method. Following the model's development, each farm visit is continually analysed, designed and developed towards a mature and robust educational design (McKenney & Reeves, 2013, p. 10). The EDR

method is reliant on continuous reflection, construction and exploration of the development.

My contribution in this design process will first and foremost explore and document the existing educational practice at Straumøy. Rooted in the Straumøy model, create a pilot design (McKenney & Reeves, 2013, p. 145) implementing a conscious aesthetical experience within the Straumøy model. The pilot will be tested and evaluated and designed by the resource team¹. Based in the pilot evaluation, the team will continue to refine and ratify the model to better facilitate for aesthetical learning in various scenarios on the farm over a year. The farm visits following the pilot will contribute to the continuous theoretical didactic development of the Straumøy model and solidify our results. The educational design proposed in this project will closely correlate with the existing didactical practice at Straumøy farm which is rooted in the experiential learning model presented by The Farm as a Pedagogical Resource project (Jolly & Krogh, 2012). In my analysis, I will try to identify if and how aesthetical learning manifests itself within the Straumøy model considering Austring and Sørensen's Aesthetical Learning Theory and Malcolm Ross's Impulse Learning Model (Austring & Sørensen, 2006, p. 154). This investigation is based on my hypothesis substantiated by the impulse learning model as defined by Malcolm Ross and the Experiential Learning Method used by The Farm as a Pedagogical Resource have intersecting qualities worth exploring (ibid p. 155; Jolly & Krogh, 2012).

Accountability

All academic studies have strengths and weaknesses. This section will account for the considerations, both positive and negative, that might affect the validity of this study. In this case, the research design helped validate the considerations taken through the course of this research project. Susan McKinney explains how the EDR process helps provide a built-in check and balance towards a robust research design (McKenney & Reeves, 2013, p. 10).

¹ The resource team is comprised of Anne, the class teacher, an assistant and myself. The team and its function is explained in depth in the accountability sub-chapter.

The interdisciplinary team (resource team) working on an EDR project can lessen the threat of multiple roles effecting the design results and strengthen the accountability of the projects results. McKinney claims that working in collaboration with the other team members creates a diversity amongst the team's perspective and approach to the project. The team members having to present and legitimize their thinking, continually making the possibility for bias, objectivity or ascendancy less invasive (McKenney & Reeves, 2013, p. 14).

The resource team for this study consists of three teachers, farm owner and class assistant. The team was formed based on my subsequent choice of farm and class and is comprised of **the class teacher** for first and second grade, **Anne** who is also a teacher specialized in special education, **Leif**, farm owner, **Myself**, trained artist, teacher and farmer as project administrator, and lastly the **class assistant**, social worker, project photographer and added perspective in meetings and in the field.

The collaborative aspect of the project became clear early in the design phase. Each member of the resource team provided an important contribution to the overall project. It was the diversity of the group that ultimately provided the unity of the project. Anne contributed with her extensive knowledge of the farm and how to pedagogically exploit every aspect of the farm in terms of weather, season and thematic focus. Leif was present as a resource during the day, helping with practical farm tasks and contributed in discussions during my exploration phase through conversations about the farm and how their pedagogy has developed. The class teacher provided the logistical communication to the student's homes and arranged transportation to and from the farm. The class teacher was well aquatinted with each student both individually and as a class. She provided support and stability to the class during their visit and kept the needs of the students met throughout the project. My role in the team was project administrator and instigator. I added the aesthetical dimension to the model in consultation with the other team members. The team benefitted and learned from each other's perspective throughout the project's development. The assistant was a wonderful recourse for seeing incidents that the other teachers did not. She provided some very important insight in the meetings as well as taking pictures for the project. The quality of our work together was dependent on maintaining reliance and trust in each other.

In the collective working environment, the team had to promote open dialog and room to both agree and disagree. Without respect and trust within the group the nuances of both ideas and could be affected. The team helped each other understand situations, identify problems, or find solutions though EDR's iterative nature and design (McKinney & Reeves, 2013, p. 112). The team developed a solid communication. This made our meetings and problem solving flow quickly and effectively in the evaluation of each farm visit. In addition to the resource team I had additional guidance from my thesis supervisors. My supervisors provided an external perspective and support throughout the projects development by validating or questioning our theoretical design decisions underway.

My goal throughout the project is to maintain a transparent trail of information. The open and inclusive dialog in the team was one method of achieving transparency. However, making the extra effort to keep a clean and reliable paper trail of all communication, thought processes, visual and audio documentation will be important to expose any inconsistencies (Prosthlm & Jacobsen, 2011. p. 44) and solidify developmental considerations throughout the project. Although I felt that the group dynamics were solid I can only account for my interpretations of the information and group dynamics.

Research participants

Straumøy Gard

Straumøy Gard is owned and run by Leif and Anne Grutle. The farm has been in Leif's family for generations but in 1997 Anne and Leif decided to invite students to participate in the daily activity. Anne has specialized in special education and is employed at the local middle school alongside the farm. The farm supplements their income by providing a living facility for handicap children. These children live on the farm and partake in chores and activities. The farm also offers alternative education activities for special need students from the surrounding schools and colleges. Straumøy Gard also hosts a vast number of students either through extracurricular activities or private functions. The students range in age from kindergarten to university. Straumøy Gard is funded in part by yearly contracts from the municipality, and the welfare department that rents house and services. Straumøy Gard is an organically driven on the west coast of Norway, north of Haugesund. The farm relies

primarily on the production of grazing animals. They have cows, sheep, goats, pigs, horses, lamas, chickens, sheep dogs and rabbits. There is a large vegetable garden and potato field. The farm harvests and cultivates the surrounding forest plots, and use the sea to fish. The farm is a resource in the local community offering a student run café and other community functions.

Student participants

I had the privilege to invite a first and second grade class to attend Straumøy Gard for four visits. A total of 16 students, six girls and ten boys, the class teacher and an assistant. The students attend a small country school. This class differs slightly from a regular first and second grade as the two grades are taught combined. Most subjects are taught jointly, only splitting the first and second grades when teaching core subjects such as language and math. Several benefits have been considered for this test group. The school's location relative to the farm needed to be relatively short for practical reasons. The students understanding and involvement in the local community is important when using a farm as a pedagogical resource, a topic that is further explained in the theory chapter. Some of the students had also visited Straumøy previously. In Anne's experience, it is important for the students to have some farm familiarity. Anne's reasoning become relevant during the discussion chapter. I had a wide range of participants to choose from based on age, however, my interest in developmental/educational play became a determining factor in choosing younger participants. It was also easier for the younger students to validate participating in a long-term research project with four farm visits.

After several rounds of elimination based on age, distance from farm and class size, the student body that best suited this study happened to be my daughters. My daughter's presence in the study could disrupt my judgment as a researcher. However, the resource team discussed how her presence might disrupt the project. Jointly we decided to see how both she and I interacted and effected the pilot. The pilot would then give us an indication if the team would need to reevaluate and decide if our relationship would disrupt the project, and if we needed to find another class to finish the project. The pilot visit revealed that our relationship was not going to be a problem for the study. My daughter paid no attention to

my presences during the visit. On the contrary, she was completely engulfed in the visit, which was interesting in and of itself. The video recordings show my daughter addressing me by my first name rather than “mom” in some instances demonstrating her understanding to not impede my role as researcher. Her presence did not knowingly affect my perspective or interrupt my field work other than that I was included in the parental information emails. It was interesting for me to experience the parent perspective when away from the field. I consciously used any information from the parental channels to strengthen the project rather than compromise the results. My daughter was included in the information emails so I could experience how the farm information was communicated to the parents. This gave me an indication as to how I could continuously clarify the information flow from school to home. I could consider what information would I want to have as a parent before a field trip. It was also interesting to hear my daughter’s experiences from her day at the farm and how the field trip wore her out. All information or stories/feedback from my daughter is not considered data for this project as it was not gathered at the farm. However, several parents sent the class teacher messages following the farm visit. The class teacher responded by sending a follow up message to all parents summing up the days at the farm and how the students all would sleep well that night, they had all experienced an exciting day together.

Data Collection

In total, there are about 5 hours of film. Ca. 500 pictures, four meeting notes, four hours of team reflection recordings and planning before and after each farm visit as well as personal field notes and recorded open-ended interviews with the students.

Data collection was a learning process throughout the project. Knowing where and how to start collecting data and what kind of data became more evident as the project progressed and the focus of the study narrowed. The open-ended interviews were my first attempt collecting data. The interviews were long and unfocused and I had not considered that the young students would easily tire from the questioning process. Once I started my questions I quickly realized that I had to change my strategy to better accommodate the younger students. We began the interview sitting across each other at a table. It did not take me long to move the interview to the floor with a box of blocks. Once we began building blocks

together the dialog flowed naturally and we managed longer conversations about the farm and their expectations for the visit. Initially I was worried that the interviews were not going to be of use. However, I used the interviews to create a base-line of knowledge and information from the students and the class teacher. This helped me build up background knowledge around my research participants before the farm visit from which I ultimately defined my thesis question. The interviews did however prove useful in the analysis phase of the project. I was not able to interview the class teacher prior to the project. We had agreed that she could answer the interview in her own time. Regrettably, the interview questions I sent to the class teacher were never answered.

All data was collected by me and students and teachers within my project (Postholm & Jacobsen, 2011, p. 45). Some results differ from our expected outcome, especially in the pilot intervention. In the field, I am active both teaching and observing (ibid. p. 52). Because of my multiple roles in the field all my observations are logged in field notes after each visit. I have cross referenced all field notes with the action camera footage and resource team audio recordings to triangulate my own reflections I also send my field notes to the teachers for review. (ibid. p. 130).

Planning and Evaluation

The planning and evaluation documents from meetings as well as logistical information and lesson plans for each visit are included in the data collection. These documents provide the theoretical framework that is proposed and evaluated after each practical implementation. The evaluation meetings were audio recorded. The resource team assessed what worked and what needed to be changed for the next visit. This was a good solution for me as I was also in charge of the evaluation and planning meetings and it was hard for me to keep notes. These meetings could last for an hour or two. The downside of the audio recordings are their length and transcription. I ended up manually categorizing all relevant findings by hand and in iPhoto. This worked very well for me. Despite the extra work, the audio recordings provide fruitful pedagogical discussions within the resource team based on the experiences

we had on the farm which I refer to in the evaluation and use to cross check and triangulate my other data.

Action camera

The farm visits were documented with two action-camera's mounted on the children's chest. The action-camera proved to be a resourceful research tool for this project. It revealed the child's perspective in terms of physical view point and presence in situations otherwise impermeable for adults. It also allowed the child to explore the farm surroundings, freely. The action cameras strengths are also the action-camera's greatest weakness as a research tool where children are involved. The ethical considerations are not to be taken lightly. (Frøyland, Mork, Remmen, Ødegård & Christiansen, 2015, p. 262). The action camera captures instanced adults might not be around to see or assist. The researcher might not always be present to redirect a fight, or answer questions when needed. One occasion in our data revealed a few students alone in the cattle barn. The rules were clear, they were supposed to be accompanied by an adult. One student was frightened by the cattle and froze in fear until a fellow student happened to walk past and assist him and call for a teacher. The immediacy of the student's fear is hard to watch in hindsight. How could we have assisted the student better in this instance? On the other hand, this direct insight into the students understanding of the situation is an extremely powerful resource for understanding the emotional experience of the students, and possibly how that emotional interaction effects learning and teaching. This paper seeks to identify how our senses contribute to the aesthetical learning process and documenting the range of feelings a student encounters is an important aspect in our sensory awareness. All within a safe range of course. Not only did we experience this child's fright, but how the other student assisted the student in need. These moments exemplify how the action camera can document the vulnerability of teaching, those moments when we have no control over the situation and the students are left alone to decide what is wrong and what is right. As a researcher, the moments the action camera documents can raise a new awareness to the complexity of the didactic context.

There are some practical implications to consider when using a Go-Pro with children. We ran into some technical problems with the action-camera during the pilot and had recurring problems with battery life throughout the course of the study. Although I had two action-cameras I ended up having to use the second one for battery backup. I also ran into some programming problems. Instead of filming the camera snapped a picture every second. The camera also has shortcut functions for extreme use. Some of the students managed to turn the camera on and off without using their hands. In the field, I had to keep an eye on who was filming at any given time to make sure the camera was on and filming this was easier said than done. As a result, there were some wonderful incidents that I did not get on film. Like the audio recordings, I spent time navigating through what was applicable to my study, the film captures every aspect of our visit, also those who have not signed confidentiality waivers. The film clips containing individuals outside of the project have not been included in the data presentation (Frøyland, et al. 2015, p. 264). The action camera is a powerful and exciting research tool in many ways capturing relevant and rare details for a study as well as details that might also need to be addressed with caution (ibid. p. 264).

Photographic data

The visual documentation for this project is significant. Both in terms of documentation, but also interpretation. Each member of the research team has contributed to the photographic documentation of the farm visit. The ethical dimension should be noted when analyzing and interpreting photographs or taking a photograph. The photographic image is in many ways false. When deciphering a picture, we should be aware of 3 practices Roland Barthes claim exist within the photographic moment: The operators' vision, those who take the picture. The spectator's vision, those who experience the photo (Barthes, 2000, p. 26). And lastly, the spectrum, or unrepeatable moment frozen in time. Barthes' observations are interesting as they limit the photos discourse through what is observed from the viewpoint of the spectator and the spectrum of the photo (ibid. p. 32). As a researcher, we must be aware that there is not one universal understanding of an image, but an individual understanding. In our analysis, we must ask ourselves if the images are actual reality, or our interpretation or desire of what we want it to be (Sontag, 1977). Each team member took pictures for my data collection. Everyone portrays a unique point of view. After the second intervention, I

gave my camera to the class assistant. I wanted to make sure the pictures that were collected were not colored by my investment in the project. The pictures provided a source for pedagogic discussions during the evaluation meetings. Each member could present their interpretation of the moment portrayed in the pictures. The audio recordings from the evaluation meetings also document the discussions surrounding the photographic data. The evaluation meetings helped validate our individual and collective interpretation of the pictures. What became apparent during our field work was the assistants interest in the picture task. She enjoyed taking the pictures and claimed that taking pictures helped her see the student's behavior in a new light.

Theory

The following chapter will account for the theoretical foundation for this project. Having the possibility to test our iteration design three times, the resource team could develop the theoretical foundation to account for the development of our analysis of the teaching context. Hence, this chapter is organized by presenting the theory as it presented itself chronologically, beginning with exploration then design, and analysis. The theoretical guidelines from The Farm as a Pedagogical Resource are also considered in the iteration design process as stated in the current research chapter.

Dewey

In terms of understanding how we define the aesthetic in respect to the Farm as a Pedagogical Resource John Dewey provides an important connection. Dewey (1934) claims:

“To understand the esthetic in its ultimate and approved forms, one must begin in the raw: in the events and scenes that hold the attentive eye and ear of man, arousing his interest and affording him enjoyment as he looks and listens... The sources of art in human experience will be learned by him who sees how the tense grace of the ball player infects the on looking crowd; who notes the delight of the housewife in tending her plants.” (Dewey, 1934, p.3)

Dewey is concerned with the esthetical opportunities that lie in the mundane human experience. This according to Dewey, propels us to seek fulfillment in our actions. Dewey claims that our direct experience occurs in the interaction of nature and social interaction. It is this interaction that creates the rhythmic force that spans the emotional spectrum of frustration and triumph making the aesthetical experience relevant for this research which seeks to understand how aesthetical learning can be found within the farm (Dewey, 1934. p. 15).

Our immediate interaction with natural surroundings triggers an inner force that propels an individual into a rhythm of comfort and discomfort. As we adjust ourselves to accommodate our feelings of comfort and discomfort we change and learn. We also develop our emotional intelligence as we become accustomed to existing in the perpetual rhythm of comfort and discomfort.

“Understanding art and its role in civilization is not furthered by setting out with eulogies of it nor by occupying ourselves exclusively at the onset with great works of art recognized as such. The comprehension which theory essays will arrive at by detour; by going back to experience of the common mill run of things to discover the esthetic quality such experience possesses.” (Dewey, 1934, p.9)

Dewey’s outlook on reestablishing the value in common experience is essential. When considering what we will be investigating specifically as aesthetical learning on the farm. We are not attempting to make every student become an artist and create works of art. Instead we will be looking at nature in its raw form as it is represented on a farm. By illuminating the value the experience has for the students we provide an arena where they can develop their intrinsic qualities the raw mundane experience might provide. The experience becomes a sensuous synthesis of phenomena rooted in the natural world. How the students take their experience and turn it into understating. According to Dewey, we must be willing to “find the germs and roots in matters of experience that we do not currently regard as esthetic. Only when we discover “these active seeds” (ibid. p. 11) as he calls them “may follow their growth into the highest forms of finished and refined art” (ibid.

p.11). In the context of this project art is not defined as a picture on a wall or a sculpture on a pedestal. Rather, the experience behind the creation of art and its didactic value for both the individual and as Dewey claims, civilization (ibid. p. 11). Dewey provides the esthetic interpretation for this project.

Dewey's aesthetic understanding differs from sheer personal enjoyment. A trip to the farm is not just fun. Learning must begin with "the soil, air, and light out of which things esthetically admirable arise" (ibid. p. 11). We must grasp basic earthly ideas on an experiential level before we can relate to abstract phenomena. "And these conditions are the conditions and factors that make an ordinary experience complete" (ibid. p. 11). It is however the realness of the experience that resonates with the students and propels their enthusiasm.

Aesthetic proficiency within a didactic framework

"Not everything that can be counted counts, and not everything that counts can be counted."

-Albert Einstein

Dewey maintains that our aesthetic interaction with the world has an impact on how we develop as individuals both in and about the world around us (Dewey, 1934). What is important to keep in mind is how to provide effective learning strategies for aesthetic learning. This paper sets out to understand how our creative mastery of the aesthetic language is developed in conjunction with a sensual experience. How one best communicates those feelings and experiences towards didactic and pedagogical means is an important aspect to mention in this context. Just as we develop and expand our understanding of verbal language we can also develop our aesthetic proficiency. As our aesthetical language develops so does our reflective potential. For the optimal development of aesthetical learning we must create a didactic structure that provides a consistent and safe framework for creativity (Austring & Sørensen, 2006 p. 155). The structure needed to promote aesthetical learning is rooted in our culturally coded understanding of feelings and experiences being necessary such that we can communicate via our senses and vice versa. Austring and Sørensen attempt to define the term aesthetics towards a providing a didactic

framework for aesthetical learning. “Aesthetics are a sensuous form that contains an interpretation of ourselves and the world and which is particularly capable of communicating from, to and about emotions” (Austring & Sørensen, 2006. p. 68). In other words, humans are sensual beings. We interact with the world through our sensuous and learn a communicative pattern based on how the world reacts in return. We then learn about our self (because this relational experience is unique to the individual) in relationship to the world through our emotional understanding. Our innate desire to communicate our reactions to said experience then leads to reflection.

Hansjörg Hohr Holistic Socialization Theory

Hansjörg Hohr has created a holistic socialization theory which demonstrates how the aesthetical learning phases can be identified and used systematically towards teaching when considering our need to communicate our experiences to others. Aesthetical learning is one of many learning styles that we use in our developmental process. Hohr’s model attempts to narrow and define what constitutes the aesthetical learning process and how we can analyze the process educational use. Hohr’s model is divided into three stages. These stages are interrelated and dependent on each other (Austring & Sørensen, 2006, p. 83).

The first stage is **basic empirical learning**. As humans, this is our direct sensual meeting with the world through our sight, smell, touch, and hearing. As we explore the world through our senses we gather an imperial understanding of phenomena and contexts exist in the world and how we respond to these sensuous emotionally and reflectively. These experiences are rooted in our physical being. This can also be understood as a phonological approach from an epistemological perspective (Austring & Sørensen, 2006, p. 83). As a child begins to experiment with water its understating of water expands beyond the immediate sensual understanding to the cognitive. The empirical learning phase is also relational and cultural. As we develop our sensual understand we do so in interaction with others. It is the adults that present the world to the child. The adults also connect emotions to the actions. A mother’s kiss at bedtime will then be connected to the child’s emotional understanding of bedtime. Culturally we color how our children perceive the world. While American children might play baseball, Norwegian children play soccer. Culturally, American children are

introduced to baseball as a rite of passage. American children collect baseball cards and look up to great players, they play catch with their parents. Baseball in Norway on the other hand has no cultural relevance, and is therefore not promoted by the parents or teachers as in the U.S. Few children in Norway even know how to play the game. What is important to keep in mind is in our development our experiences are both individual and collective as all our experiences occur within a social, cultural and biological framework that provides meaning to the experience (ibid. p. 89)

The second level of aesthetical learning is defined as **aesthetic symbolism**. Aesthetic symbolism is unique in that it allows a child to express something that they feel and know do not have the words to express. By means of a symbolic communication the child can collect sensual impressions of the world by which turns into embodied expressions. This is an innate human desire within everyone to both understand and communicate ones understanding of the world. One facet of the aesthetical symbolic expressive form of communication is its ability to communicate the tacit dimension of our understanding of the world. The small nuances from a facial expression that might imply that a child should not behave in a certain manner, or the farmer who uses his tool in a way that is not easy to explain but can easily be demonstrated. The aesthetical learning method is transcendent. The child can take his understating of reality out of a realistic context into the fictive. A child can take a song or story about an animal that they have heard and act out how they believe that animal might behave. The behavior might stem from the factual reality but the aesthetical learning poses the factual reality is given an added dimension where the children collectively create their own perception of how that animal might behave. This is an important developmental phase it allows the children to step outside of their own reality and testing their perceptions in a different context (Austring & Sørensen, 2006, p. 95). Through the child's ability to explore the transcendent nature of their worldly understanding they obtain the ability to develop abstract thought. This poses entails that the child can analyze, and react to their impressions of the world symbolically (ibid. p. 95). The inter-subjective of the aesthetical learning poses allows the child to mirror and provide perspective for their own conceptions and the responses they receive from their surroundings (ibid. p. 95).

Hansjörg Hohn has called an individual's understanding of self in relation to the world subject-in-the-world-knowledge (own translation) (Austring & Sørensen, 2006, p. 96). This is a unique perspective an individual developed contingent on a specific society within a specific time where the individual is aware of their own individual existence within a larger whole. In a group scenario, everyone has their unique perspective and will therefore interpret that situation differently from the next. One can never understand fully the others perspective as it is uniquely theirs. We can however empathize with our neighbor and in the process also learn more about ourselves.

The aesthetical learning method is relational. As all our experiences occur in relations to something or someone it is the individual's job to create context and understanding. As each experience is presented to a child its quality colors the way that child responds to the situation. If you are afraid of spiders and dance around and cause a scene each time you see a spider a child will assume that that is the way one reacts to a spider. A mother in Africa might not even flinch in the presence of a spider what also makes the aesthetical learning process culturally coded. With each response, a child received from the world it is a part of they begin to fit into the culture they are a part of. We might see this in how we raise boys and girls. The girls are traditionally dressed in pink and given dolls to play with, while boys are dressed in blue and play with trucks. The differences in how we treat genders becomes relatively clear if you are in a shop selling clothes for girls and boys or watch cartoons. When a girl from the western world gravitates towards the pink ponies' outfits and Disney princess's nightgowns they fall victim to a "proto-symbol" from her cultural understanding of experience (Austring & Sørensen, 2006, p. 99). The girl begins to believe that pink pony outfits are aesthetically pleasing because they are being culturally promoted through television or otherwise. What is interesting to consider is this process of cultural identification a child is developing understanding of oneself in relation to the world. This identity is the development of one's cultural identity (ibid. p. 99).

The **discursive learning process** is the final phase in Hohn's social educational model. Like the other two stages the discursive learning stage develops in concurrence with our

surroundings. A child will begin to connect lexical terms to their experiences which in turn allow them to communicate in a discursive manner (Austring & Sørensen, 2006, p. 105). What constitutes the discursive phase is the ability to analyze and categorize an experience verbally. Unlike the aesthetical learning process the discursive phase is linked to one's sensual experiences, but is in its self an emotionally neutral and abstract cognitive framework (ibid. p. 105). It is however developed in conjunction with one's emotional experience on one side and the aesthetical mediation on the other. The three-part model is relatively complex in action. What is interesting in relation to this research project is to see how the aesthetical learning method can be understood at the binding element between one's empirical understanding of the world together with the discursive (ibid. p. 106). The aesthetical learning element not only links the experiential and discursive learning but seems to enrich them.

The Impulse Learning Theory

Considering the theoretical definition of aesthetical learning as explained above, Malcolm Ross provides a didactic model that constitutes the creative nuances needed to instigate an esthetical learning process (Austring & Sørensen, 2006, p. 155). His model allows us to identify the concrete components that together promote the aesthetical learning process in action starting with the impulse (ibid. p. 155). These components take the aesthetical experience and provide a didactic framework to understand and direct the students' didactic energy. Rosses model is unique as it allows for the organic process of learning that Dewey alludes to in the quest for fulfillment. There is no direct path to this means, but rather a "temporal pattern" echoing that of the rhythm of "the waves of the sea" (Dewey, 1934, p. 15). The organic rhythm of the aesthetical experience exists in the balance and counterbalance of resistance. "The drama in which the action, feeling, and meaning are one" (ibid. p. 15). The drama that Dewey alluded to is this force instigated by the sensual impulse.

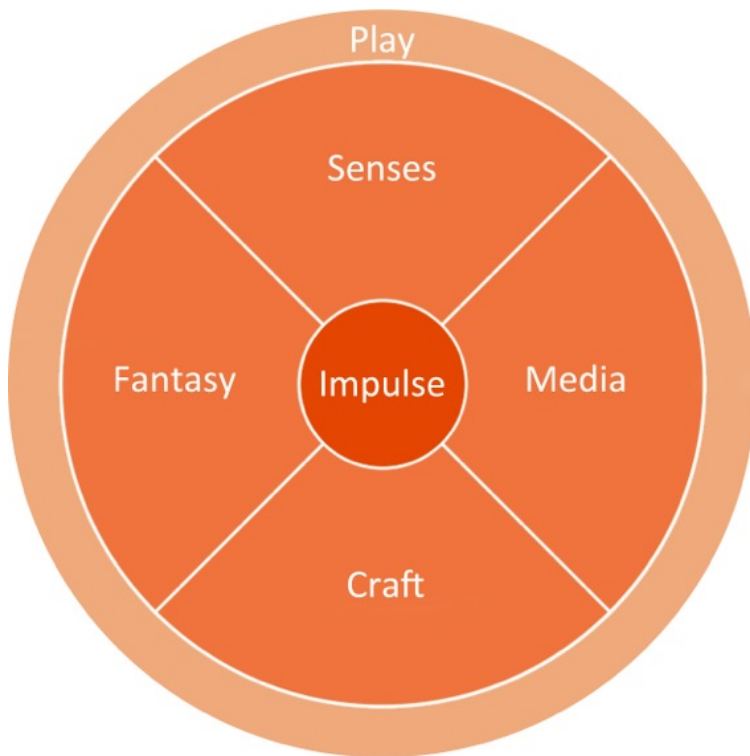


Figure 3: Illustration of Malcolm Ross' Impulse Learning Theory, (own translation) from Austring & Sørensen, 2006, p. 155

Play

Play is the foundation for all creative acts in both children and adults (Austring & Sørensen, 2006 p. 155). Play is defined by a voluntary care-free playful mind-set that often results in a creative behavior we call flow (ibid. p. 156). When engulfed in play everything is possible. Play allows us to combine our perceived reality with our imaginative creating a creating a representational relationship to the world (ibid. p. 155). Play is the transcendent phase in Hohn's model in action and links the two models as such. According to Malcolm Ross play is foundational in the realization of aesthetical learning. Children and adults alike are dependent on the playful experimentation of the world to develop aesthetically. Free play is how we relate the experiential to the theoretical, the abstract to the concrete. It is necessary to allow for participants to partake in uninterrupted, unscripted play. Time allowed for experiential play is pivotal for the development of creative process (ibid. p 156). For play and creative experimentation to be successful the activity goal should be open-ended such that the individual or group can develop freely uninhibited by outer constraints.

The goal should be the proses of play itself where the individual can live nurture the spontaneity of thought and imagination (ibid. p. 158).

Impulse

The Impulse is at the heart of Malcolm Rosses model. The impulse is the motion/beat that triggers the aesthetical learning proses and results in the need to create (Austring & Sørensen, 2006 p. 155). In an aesthetical learning situation, the teacher must structure the lesson/plan such that they initiate and direct the creative process. The student/individual is then given the opportunity to freely explore their emotional/sensual response to the impulse based on their personal emotional/sensual schemata. The aim of the impulse is to create a dissonance between the individual's current aesthetical vocabulary such that they desire the need to express themselves creatively and fill in the gaps of their existing sensual understanding. The desire to expresses themselves creatively is how they begin to expand their aesthetic understanding towards deeper learning. An impulse can be most anything that arouses a sensual reaction. It can range from everyday experiences, nature, culture, the media, or one's inner being (ibid. p. 156).

Surrounding the Impulse are four sub-categories that together provide the individual with important tools to decode the impulses such that they might learn more about themselves and the world around them (Austring & Sørensen, 2006 p. 157). The four sub-categories include:

- Fantasy
- Senses
- Literacy of media
- Craft mastery

All four of these categorical elements are organically connected such that they complement each other in the learning proses. Ross claims that one can use any of the four elements as a starting point for experience under one condition: that the task has a sensual quality and that it is enjoyable on some level such that the individual can process the moment in a playful manner (ibid p. 157).

Senses

We experience the world via our senses. What we here, taste, touch, feel and smell. From the beginning of life, we start to distinguish how our sensual relationship with the world build upon or understanding of self. We connect feeling to our experience which become lasting memories (Austring & Sørensen, 2006 p. 157) It is these sensual impressions that become the catalysts for our sensual expression which in turn develops out emotional intelligence (ibid. p. 157). From a pedagogical perspective, it is important to stimulate and develop the senses such that we equip our children with the vocabulary and tools to meet the natural and cultural world (ibid. p. 161).

Fantasy

Fantasy and creativity allow for abstract thinking. It is through creative expression we can experiment with symbolic form which develop our inner representation of reality. Without our reconstructive fantasy of the world around us we would lose our ability to think (Austring and Sørensen, 2006, p. 158). From a didactic and pedagogical perspective, it is important to understand the various manifestations of fantasy. Reconstructive fantasy exists when we imitate or reconstruct our experiences to create concrete symbolic understanding. Children learn about cooking when they pretend to make mud soup on the playground with dirt and water. Although they cannot eat the soup they begin to experiment and expand their personal understanding with the concept of cooking science through their experimental recreation. Once they have established reconstructive fantasy we begin to develop our constructive fantasy. Constructive fantasy is the creative act or process that brings our concrete reality to new heights, ground-breaking in the sense that the individual can creatively surpass their perceived reality. In a constructive state of fantasy or creativity an individual can fantasize and visualize problems without the boundaries and constraints that we might otherwise constrain us culturally (ibid. p. 158). This is the state of mind that Hannah Arendt believes we have neglected to develop in our current materialistic culture (Arendt, 1954). Our fantasy can also serve as a compensation for what we do not understand, but strive to explore through our imagination. What is common for all manifestations of fantasy however is the realization of ideas from which we act upon (Austring and Sørensen, 2006 p. 159). Without creativity, our fantasy remains within the

individual. Our creativity changes our inner representation to a communicative outer representation reality. Creativity then serves as a communicative tool connecting the inner and outer world of the individual (ibid. p. 159).

Ross emphasizes that imagination and creativity cannot lead an individual to reconstructive or constructive states of mind if the idea that initiates the process does not personally resonate sensually within the individual (Austring & Sørensen, 2006) This is a quality of the aesthetic experience that teaching artist Eric Booth identified in his book “The Music Teaching Artist’s Bible” (Booth, 2009). Booth identified how “personal relevance” is the number one priority when supporting creative capacity. He claims that making personally relevant connections is the world’s smallest creative act. Regarding education Booth rates “personal engagement relevance” *higher* than the information that you deliver (ibid. p. 27). It is only after personal relevance is obtained as an entry point for the individual or group that relevant and important information becomes clear to the learner, not before (ibid. p. 27).

Development of media

A natural progression of expression would require methods for which we might be able to express ourselves and our aesthetic vocabulary. The purpose of the aesthetic learning process is to equip individuals with the means to communicate effectively through their aesthetic language. To optimize this, we must also be aware of the cultural context in which we communicate to understand how our they might be received as well as their impact. There are endless channels of media through which we can communicate our sensuous. They vary as to which of our senses they trigger. As a pedagogue, it is implicit that we make our students aware of the diversity of aesthetic communication forms such that they might better grasp how to both use and comprehend the possibilities and limitations of each media (Austring & Sørensen, 2006, p. 159).



Photo2: Found acorns becomes a treasure. Found stick becomes a tool and a fantasy-object.

Development of Craft

Once one has an idea of the various channels of media through which we can communicate aesthetically we must begin to perfect our communication skills. Whether it be music or drama it is important that the individual can exploit the various nuances of meaning within their craft (Austring & Sørensen, 2006, p. 160). If we do not develop our student's aesthetic language their fantasy will not find the means to escape the inner world of the individual stopping the aesthetical learning process.

Virtuosity

This research project sets out to initiate the aesthetical learning process. As mentioned in Hohr's model above, one aspect in aesthetical learning is transcends. As educators, we must not only provide the impulse for aesthetical transcendence to transpire, but be aware of what it requires of the teacher and the room aesthetical learning requires to "create". This project also seeks to develop an educational practice. It seems natural then to consider the purpose of education. Biesta provides insight on this topic in his subjectivity of education. He claims that if we try to produce subjectivity and control the emergence of it that subjectivity will not happen at all (Biesta, 2015, p. 25). He goes further however, entertaining the idea that teaching has become what he has coined as "learnification". This term entails that today's teaching can become overshadowed by the competencies and qualifications that we need to teach. Biesta reflects on the fact that we should instead focus on becoming educationally wise. If we view teaching in terms of and competencies one might have ever so many qualifications and still be a bad teacher. A teacher develops though experience. Their experience allows them to practice judgment needed in situations

where one's book smarts do not suffice. Biesta claims that for us to become "educationally wise" we need to concern ourselves with the formation of the whole person. Educational wisdom is the ability to make wise educational decisions. Biesta associates being educationally wise with what he calls a "virtue-based" approach in teaching (ibid. p. 137). Teachers are continuously practicing judgment based on their actions. Biesta is clear to differentiate judgment as a skill or competence, but rather a virtuosity that embodies the whole educational profession. Biesta believes teaching virtuosity allows us to become aware of our educational actions such that we do not repeat the mistakes we made in the past while maintaining an openness toward the future. As teachers, we need to teach judgment rather than scripted learning that provides predictable results (ibid. p. 137). The way I understand becoming educationally wise is going from "do as I say, don't do as I do" to "practice what you preach". In as such, students will benefit from the continuous practice of becoming educationally-wise while they embark on their own judgment journeys. While the students learn from the teachers' judgments they can concurrently test their own.

Lastly, Biesta provides an important supplement to both Malcolm Ross's impulse learning model and Hansjörg Hohr's aesthetical learning model. Both models above explain the process and importance of sensual and social learning. What they seem to lack however is the educators' role of providing the student with interruption, suspension and sustenance to make grown up choices through their experiences with the world. It is the educators' role to be aware of what is desirable development to promote in our students. Biesta believes it is the educators' role to question the child's development through the process of arousing their desire to exist in a grown-up way (Biesta, 2017, p. 20). Biesta defines grown-up-ness as the middle ground between what he calls world-destruction and self-destruction. It is in this difficult middle ground, where the student becomes aware of their desires and if their desires are desirable. What Biesta says is to allow the student to dare to linger in this middle ground of self-realization in relation to the world (ibid. p. 20). If we do not take risks as teachers we do not allow our students to exist in this middle ground of self-destruction and world-destruction. If we do take the risk as educators, we must accept that ultimately our job as teachers is to provide experiences where the student can decide how to behave in a grown-up way. We can only assist them in their judgment making. We are not able to

expect the outcome, but rely on their experience and continuous practice of virtue development. Biesta urges us to give orient our teaching towards the freedom of the student, nurturing their subject-ness (ibid. p. 97). Subject-ness is Biesta's term for teaching the student as subject. This entails looking past the here and now and allowing the student to in what might be. By focusing on the here and now when teaching Biesta claims that we tie the student to the past and everything that is known, disabling their possibility of a different future (ibid. p. 94).

Pilot Design and Implementation

Pilot Design: a collaborative investigation towards aesthetical learning

This chapter presents the creative collaborative design segment where Straumøy Gard's experiential learning model is explored and developed in consideration to the aesthetical learning theories presented above. It is collaborative because I developed the design in collaboration with Anne's experience and insight towards a pilot design with a focus on aesthetical learning. The chapter accounts for the planning, execution and evaluation elements for the pilot intervention. The pilot design, once implemented is then ratified and reevaluated through the seasonal changes on the farm to understand how the seasonal changes might affect the design. The three successive test runs winter, spring, and summer are accounted for in the findings and analysis chapter. I will begin by presenting my observation of the current Straumøy practice before I consider the Straumøy didactic model. I will mention specific background ideologies Anne uses in her practice we contemplated towards the final pilot design and throughout development of this project. Once the background of the Straumøy Model is established, I will present the segments we found interesting for this project and explain how these segments constitute and contribute to the ratified Straumøy model. Conclusively, I will account for fundamental findings from the pilot implementation and explain how the finding shaped the development and design of subsequent test visits changing minor details within the aesthetical impulse, location or season.

Investigation of practice at Straumøy

Prior to the pilot design the didactic practice at Straumøy was observed and reviewed together with Anne and Leif. They provided insight to both practical and didactic considerations they had encountered during their experience running a teaching farm.

Rooted in their extensive knowledge of their natural surroundings Anne and Leif have developed a daily teaching method that harmonizes with their capacities and recourses available on their farm and its surroundings. While they are synchronized with the experiential learning method and values outlined in *The Farm as a Pedagogical Resource* guidelines.

The Straumøy-model

The Straumøy model is not only a didactic framework but also a didactic philosophy. The following gives an account of Anne Grutle's ideology that are important factors in the design of the Straumøy model. The segment presents the Straumøy model and other ideologies that constitute the model design². Anne and I spent some time breaking down the Straumøy model. We wanted to identify all elements both structural and theoretical that fostered experiential learning and possibly also aesthetical learning. The deconstruction of the Straumøy model also allowed us to understand how we might apply an aesthetical impulse within the didactic framework.

Breaking down the model allowed us to understand how the three different segments farm chores, lunch, and activity (freedom/play) worked in relationship to one another. Our goal in planning the pilot was to add a *conscious* aesthetical component to the model. Based on Anne's experience and our theoretical foundation from both *Aesthetical Learning* and *The Farm as a Pedagogical Resource* we recognized the triptych division of the Straumøy model as relevant as a design model for use in this project. The three main activity segments we identified as important were: 1) Chores 2) Lunch/bonfire 3) Forrest/garden project/play, in that order. There were shorter meetings both before and after the day to welcome the students and wish them farewell, but these were not included in the main didactic

² The original Straumøy didactic model is listed in attachments.

framework. They do however contribute to a coherent framework of community around the educative segments as explained by Farm Cooperation study (Jolly & Krogh, 2012).

The Circus Effect

A holistic understanding of the farm's annual life cycle is, according to Anne, an integral part of the program's success. The pilot was the students' first visit to the farm. Anne believed that we should not over-stimulate the students with learning goals during the first visit. In her experience a child's first visit to the farm is often chaotic. Anne called this the "circus effect". During the first visit the students are not able to grasp the overview of how the farm operates while simultaneously taking in the general experience of sound, smell and touch. As a result, it is hard give the students direction. In Anne's experience, it takes the students about six visits before they settle into the routine and novelty of being around the animals and outside the classroom. Once the students settled into the outdoor learning environment, the resource team could focus on how the students experienced the project design without being overwhelmed by the experience itself. This is also why Anne wanted to have the students experience the farm through multiple visits. Keeping the first visit "open" for experience yet providing enough didactic substance to evaluate for the development of the study was a balancing act described in more detail in the pilot design.

Rhythm of life is pivotal for a holistic understanding of the farm

Anne was adamant that the students experience a holistic overview of seasonal events on the farm even though we could not follow up or document the long-term learning value of the annual understanding. Exposing students to experience the annual life cycle would establish an experience base for students to understand the phenomena on the farm. Furthermore, it offered the resource team reference points to use in discussion with the students throughout the project. Ultimately, the seasons also determined how we designed the experiential activities for each seasonal visit. Rather than compromising Anne's belief in the annual understanding as part of the foundation for the project, we would have to find a class that was willing to commit to a yearlong project. Luckily, the class teacher I approached was willing to make this commitment, and we could collectively move forward with the project design.

Pilot Design

Once Anne and myself had thoroughly dissected the Straumøy Model we proposed a draft to the class teacher. At this stage in the project I did not want the class teacher to have to spend more time than necessary on meetings and extra work or for her to feel that this project was going to create more work for her on top of her regular teaching hours. However, we quickly realized the teacher provided meaningful insight to our planning phases. She also voiced once the project started that she enjoyed the pedagogic and didactic discussions and planning and evaluation meetings despite the extra time it cost her. All subsequent resource team meetings included the class teacher.

The pilot was challenging to plan. The resource team could only predict a hypothetical outcome based upon the theoretical understanding of aesthetical learning processes. At this point in the process *how* the aesthetical learning theory would behave practically within the Straumøy model was yet to be understood.

Curricular relevance

Linking this project to the curriculum was important for planning reasons, not the learning outcome. This paper does not explore the learning values of the farm in respect to the curricula. The curricula is a natural starting point to plan our didactic activity, from which we investigated through the aesthetical learning process. Planning the project rooted in the curricula provide the added value of “didactic security” for the class teacher. Validating the four farm visits within the curricula provided the teacher with a concrete experience base within core curricula subjects she could use with her students in further classroom teaching, if applicable. How the farm visits were used in the classroom was, regrettably, not followed up due to the scope of this thesis. Our pilot visit was about finding a balance between experience and didactic contribution within the Straumøy model. The resource team envisioned how it could link any experience to the curriculum. But ultimately that did not narrow down the focus of the project, only enlarge it and take the focus away from the task at hand. For the project to maintain a specific focus of investigating the aesthetical potential

within the Straumøy Model the team decided to keep one curricular subject in focus rather than focusing on a new subject each visit.

It is also important to note that the resource team had not identified the aesthetic *impulse, per se*, during this phase of the planning. We understood the impulse in theory, but did not understand how this might constitute itself in the Straumøy Model practically. It was not until we had evaluated the pilot that we began to see the impulse emerge as an important didactic component in relationship to our empirical findings. Ultimately, Anne and I concluded that the best segments to apply an aesthetic activity is: 2) lunch and 3) Forrest project/play. Below is a brief explanation of the three didactic segments from the Straumøy Model we found important in the development of our design structure and a brief account of why we made these choices. The following sections provide the background thinking for each of the three segments we found important in the Straumøy Model. The first segment chores, followed by teepee, then the forest/garden segment. Note that this is just planning considerations, not the actual implementation. All reflections are based on our reflections on Anne's experience teaching on the farm.

Chores

As described the Straumøy model is comprised of three segments. The first segment, *Chores*, is already overflowing with sensory stimuli through interaction with animals and learning farm chores. The resource team felt that it was important the students had their full focus on the chores and interaction with animals, rather than being distracted by adults. The chore segment was then divided into sub-groups that pertained to the various farm animals. The four groups were comprised of four or five students. The chore responsibilities were:

- Cattle barn
- Sheep and goat barn
- Horses/lamas/rabbits
- Hay/pigs.

Anne wanted the students and teachers to stay in their appointed group throughout the project. Anne argued that the students would gain a better understanding of their role on the farm by learning one job well rather than having to learn new chores each visit. This was

an adaptation we made for this project. In a regular scenario at Straumøy the students would gradually learn all the chores on the farm, expanding their understanding of the farm one chore at a time. The students who attend Straumøy Gard fulltime have weekly visits over the course of a year, so it is natural for them to become integrated in all aspects of the farm. In our case, we were continually evaluating and extracting important elements of the Straumøy model which we then consolidated into our four visits. Our students did not have time to become acquainted with all features of the farm. Rather their focus was on learning one aspect of the farm well. Anne provided each teacher with a detailed list of chores for her group that helped tremendously. Anne was the only teacher in the resource team that knew the chores. The barn chore segment will be a new experience for the teachers and students. The fact that the teachers and students will be learning together is another detail that constituted the experiential learning ideology from The Farm as a Pedagogical Resource program (Jolly & Krogh, 2012).

Tepee

The second subdivision during our day was gathering in the tepee. During this segment, the students collectively sat around the bonfire to eat lunch. Other than regular conversation with the students over lunch, the lunch segment provided a window that allowed the resource team to introduce impulse A. Considering the atmosphere and facility it seemed a natural setting to provide a story of some kind. Now that the resource team had chosen the core subject “Norwegian” as a focus for the project the team could narrow down on a story or fairy tale that related to the theme of the visit.



Photo 3: Impulse-delivery, lunch and fellowship in tepee.

The consideration of both real-to-life story and a fairy-tale was a specific design choice. Our goal was to include all elements of farm life, not only the warm and cuddly moments but also the difficult and often dangerous elements. The team wanted to trigger the students' full emotive spectrum when understanding farm life, but in a balanced and cohesive manner. This was also the reason behind including a realistic story and a fairy-tale that corresponded to each other. We wanted students to experience how fiction had been used historically in narrative contexts to explore difficult ideas from real life. This idea was not introduced on an intellectual level, but rather an experiential one. Not only did we want to trigger their emotional responses through the plot of the story, but also to include the students in the activate the students within the ramification of the tepee. Songs were included as a variation so the children could participate actively in the group activity rather than sit and listen passively for the whole lunch/story segment, which was otherwise a physically passive segment of the day. Furthermore, the songs connected both the story/fairy-tale and the seasonal theme and illustrated how we also explore the world through song.

Forest & Garden

The third and final segment took place in the forest. The forest segment allowed the students to enjoy uninterrupted play. We had to adapt our teaching project to fit our narrow timeframe. Students attending Straumøy Gard full time would spend the time after lunch on a longer self-chosen project. The long-term project was important as it allowed the student to investigate a self-chosen aspect of the farm in-depth. Due to the time limitation in this study, the students participating in this master project would partake in a smaller project they could complete during their one or two-hour time frame in the forest. The resource team anticipated that this smaller project would provide some of the same innovative decision making interactions that occurred in the long-term projects. Anne had completed smaller day projects with school classes before our visit and believed it was possible to simulate a similar experience in smaller day projects.

Impulse A

In planning impulse A the resource team decided to focus on the animals and farm buildings so the students could get a better idea of who lives on the farm and how the farm works. To better illuminate the concept of livestock we also included livestock predators. Our first visit was in late fall. The harvest was over and the farm was getting ready for winter. We wanted to demonstrate how important it was for the farmers to care for their livestock now that winter was setting in.

Aesthetic impulse A was built around the three key didactic segments extracted from the Straumøy Model: Chores, Lunch and forest/play. We based the theme, Predators and Livestock, on the seasonal activities of the farm. The impulse was narrowed down by the curricular goals in verbal communication and language, literature, and culture through our presentation of a folktale/fairy-tale; a real story from farm life and songs. The team found a Norwegian folk tale that correlated with the fall visit theme: “fox as a herder”. We also had a few songs about farm animals and foxes on hand if we had time to sing together. This segment was open-ended allowing the students to contribute and suggest songs on their own accord. Additionally, Anne had prepared a story from her experience on the farm about livestock and predators. The team wanted to create a cozy atmosphere in the tepee and brought hot cocoa for the students to share during lunch.

Impulse B

Impulse B focused on the subject “Norwegian” presented in the Tepee more so than the theme of predators and livestock. Impulse B was designed as a hands-on activity where the students explored the forest in groups to find and/or create two letters from the alphabet. We wanted to create an impulse based on active investigation to contrast impulse A where the students largely sat passively and received the impulse. The class teacher would divide the students into pairs and each pair would be given two letters. As a team, they would have to find or create their letters with resources they found in the forest. Anne had a wheelbarrow of tools to assist the creation of letters. Anne also brought firewood to start a bonfire in the forest and tools to assist the students in making letters. We had planned once the alphabet activity was over we would let the students roam and play in the forest.

Results and analysis of pilot.

Important developmental findings arose during the pilot study. These findings and subsequent evaluation and analysis are presented in this section. The pivotal findings were identified by the resource team during an evaluation meeting following the pilot study. The results provided the foundation for the ratification and development of consecutive farm visits. Malcolm Ross's impulse learning model emerged as an important theoretical lens towards explaining, evaluating, and analyzing the pilot visit. Also applicable was Austring and Sørensen's aesthetical learning process and Hohl's holistic socialization theory. Ross's model highlights the sequence of events surrounding the aesthetic *impulse* that was seen to emerge in the pilot. As such, Ross's impulse model is beneficial in explaining the role of *free play* as experienced in the third (forest) segment of the pilot. I will also reflect over impulse A and impulse B and identify why impulse A was more effective in the pilot visit.

Impulse results

For the pilot visit we designed and delivered two different aesthetic segments: impulse A and B. Impulse A was introduced during lunch. Anne told the fairy-tale *Reven som gjeter*³. The group sang Mikkel Rev⁴ and Anne finished the segment with a real story about a fox visiting her farm and how they must catch or shoot them so they don't harm the livestock. Before the students left the tepee, I told them that we were going to have an activity (Impulse B) with letters once we reached the forest. The students were then free to play on the premises until we all finished lunch and gathered the tools and firewood to head into the forest. Once tested, the qualitative difference between impulse A and B became apparent. Impulse B was a scripted activity rather than a qualitative experience as provided in impulse A. Through the pilot study we see the aesthetic quality of impulse A surpassed the activity-centered impulse B. In evaluation, we realize that Impulse B is less of an aesthetic impulse and more of an activity.

³ "The fox as a herder" is the English translation. A Norwegian folktale by Asbjørnsen & Moe

⁴ "Mikkel fox" is the English translation. This Norwegian children's song has an unknown origin.

Impulse B was instigated as soon as all students had reached the forest. It was based on the curricular goal of writing proficiency. The students gathered on a hill while I explained how the students were going to divide into pairs and receive a letter to find or make in the forest. I had already divided the letters amongst the students randomly. The students were in pairs so they could help each other find or make the letters with the resources available in the forest. As I started assigning each student a letter I could tell that the students were not responsive to the project. After all the students had been assigned a letter, they looked blankly at each other. No one really knew what to do or where to go. The teachers immediately started assisting the students to understand the assignment by lifting twigs to see if they could see their letter. Despite the teachers' assistance the students did not engage in the activity. I helped a few students, but ended up making a letter for them. Once I had completed the letter they would look up at me and ask if they could go and play. I could tell the students were apprehensive about the task before I approached them to help. Many of the students hesitated before they answered, if they answered at all. The students' behavior was unlike what I had observed earlier in the day when they were actively engaged in the activity and their surroundings asking questions and helping each other. Some of the students said they did not understand the letter I had assigned them. I had not given them a visual of the letter, only assigned it verbally. It was clear some of the students needed a visual depiction of their letter. Some of the students were upset that I had not assigned them "their" letter and went about looking for "their" letter rather than the letter they had been assigned. After helping about five students I looked around the forest and realized that my assignment was failing. I no longer had the student's attention. Most of the students had run off in the forest playing. Some of them asked if it was ok to go play, while some just did it anyway.



Photo 4: Examples of letters made with skeleton bones found in forest.

I realized that I had to just let the students play. I wandered over to one section of the forest to find two groups of students in a heated discussion. Three of the students had found an uprooted tree they had turned into a fox den. They were furnishing it with leaves, branches and pinecones. There were three other students trying to be accepted into the fox den without success. The students who wanted to be included into the den had come across a bird skeleton in the forest. They had made camp around the dead birds bleached and cleaned bones. The students were collecting the bones and using them as weapons and bartering tools towards the students occupying the fox den. When I arrived both groups of students wanted my help. The fox den students wanted me to keep the others away from their home. The students bartering their way into the den wanted me to make the situation just. I tried to divert the bartering group by wanting to know where they found the bones. With their fists and pockets full of bones the students ran over to the spot where they found the dead bird. There were still bones left on the ground and I asked if they knew what animal it was? They were not sure what animal it was but gave me some interesting stories as to how it was killed by the fox.

I had not completely given up my goal of making letters. When the students brought me over to the dead bird I saw the opportunity to make letters with the bones. We worked together and shaped the alphabet with their findings on the ground. The students emptied their pockets to find bones that had curves for the letter D or B. I remember pleading with the students to stay and finish the whole alphabet even though I could tell the novelty of making letters began to wear off around the letter R. I challenged the group to see if they could make the whole alphabet from the bones. They were up to the challenge and we finished the alphabet. Immediately upon completion of the alphabet the group of students ran back to the fox den, continuing right where they had left off before I intervened.

I wandered over to the other side of the forest where another group of five students had congregated. As I approached, the students ran over to me wanting me to help them hang up a coil of barbed wire they had found in an old garbage pit in the forest. The students had been working on this project for a while. I had observed them working before I visited the students making the fox den. The students had a tree they wanted me to hang the coil of

wire in. They could not reach up high enough. They led me over to the tree. I asked the students why they wanted to hang the wire in the tree and they all at once began to explain that they were making a trap to catch the fox. They did not want the fox to harm the animals on the farm. I ask them how they were going to catch the fox with the wire and they began to act out a scenario where the fox would wander through the forest, under the tree. They would then release the barbed wire. The wire would fall over the fox and catch it. I helped the students hang the wire and left them to check-in with the other teachers who were tending the bonfire.



Photo 5: Boys trying to figure out how to catch fox with found barbed wire.

The above description exemplifies several sections in our pilot data the resource team extracted as significant during our evaluation meeting. The team was uncertain in the planning phase how much or what kind of aesthetical stimulation was necessary to activate an aesthetical learning process. The evaluation established three main themes that contributed to the theoretical and design ratification for the next visit:

- The sensory quality and constitution of the impulse
- Freedom and control: the educators' ability to instigate impulse and give the students
- The value of the students freedom to explore freely though the environment and social interaction and creative play.
- Personal relevance, in both the impulse delivery and reflection

Pilot discussion

Impulse identification

Ross's impulse learning model (Austring & Sørensen) explained the chain of events that happened in the forest, and illuminates the importance of the impulse. The impulse becomes a systematic tool through which the aesthetical learning process can both trigger aesthetical learning and direct the student's actions towards a concrete didactic direction. The impulse learning model explains how Impulse A ignited something within the students that they expanded upon through use of their senses, or fantasy and crafted or synthesized into play. The students explored the forest and what resources were available to them. The bones, sticks and barbed wire all played into the fantasy world where the students embodied their understanding of the fox as a predator. The student's activity in the forest was not random. Three groups of students each found different areas in the forest creating an arena to play out their understanding of the fox as a predator. They began acting out various scenarios about a fox in conjunction with each other, the environment and their tools. One group turned an uprooted tree into a fox den. They were embodying fox behavior to the best of their knowledge. What they did not know became a combination of fantasy mixed with known fox behavior. The other group strived to become included in the fox den. The students found artifacts in the forest that contributed them to their fantasy. The bird bones become tools and bartering objects. In our evaluation recordings Anne identified the almost missed opportunity in the forest and the play surrounding the fox theme. What is interesting to note is that Anne suggested that we build upon the fox theme in the next visit. Her words were: *"let present the students with an idea that makes them think and fantasize like they did with the fox. All we need to do differently is have a task, like felling trees. We go to the forest and fell the trees, but if the students start playing we let them develop that"*. What is interesting here is Anne already uses Ross's impulse model without knowing it. The impulse in her words is the "idea that makes them think and fantasize". By going out in the forest and having a project they use their tools and have a medium, in this case the tree which they are going to fell. Anne goes on to say in the review meeting "it's about a little bit a of work, if they have a little task we see them start to play, then they bring moments from the work into their play." What Anne has seen from experience is that just letting the students out into free play is not as effective as giving

them a simple task, in this case a job that needs done. The task instigates an interaction with the medium and the craft which they turned into fantasy and play. Anne goes on to say that “the students think they are working, right, but most of the time their play is an imitation of the work.” In a group interview after the project was over I ask the students “what did we do on the farm?” They replied, “we mostly worked and pet the animals.” Although the students thought that they were working they were infusing elements of fantasy and play into their work. What is also key here is the team is beginning to understand how the impulse works based on the impulse theme that was expanded in the forest.

Room to synthesize

Once we recognized that the students’ play in the forest was an active form of the synthesizing impulse A, the need to create a space for free play became apparent. The students needed to process their experience through play as described in Hohl’s model of aesthetic learning. During the forest segment students dispersed into groups. Some wanted to catch the fox, others wanted to be the fox. Their play was a method of transforming what they had learned into a personal understanding of their relationship to each other and their surroundings. Our experience in the forest made it clear to the resource team that free play permitted the students to implement the ideas we presented earlier in the day. Had we not given them the freedom to explore their own form of expression, the impulse topic might never have had the chance to develop in conjunction with their peers, and lost a meaningful opportunity to embody the empirical experience from earlier in the day.



Photo 6: First visit - children exploring frozen puddle through play.

Teachers' role in an aesthetical learning process

The teacher provides the initial impulse that supplies the students' thematic direction. It is equally important that the educator provides the freedom and means whereby students can explore the impulse through play. This interchange between freedom and control is also a central finding in the empirical data. Given the students have sufficient space, they will create their own thematic understanding through interaction with each other and their immediate environment. The educator's participation at this point can also be described as an impulse, but now through advice or assistance at the students' request. Anne had identified the usefulness of a parallel task that often instigated an aesthetical process by means of craft and media, or possibly cooperation. It becomes clear that once an impulse is instigated, the students create new impulses through play, propelling the initial impulse theme into a complex synthesis of personal relevance and thematic comprehension in action. In other words, not only does the student need freedom to synthesize personal relevance through play, but also the impulse itself should move the student in a personal way. The realization of how and when a teacher intervenes in the students play become a focus the resource team's awareness during the next visit. Our goal was to consciously facilitate the students' activity by being aware of their point of view when assisting, and knowing how and if we should intervene.

Quality of the impulse

Once we had identified how the impulse worked within the Straumøy model, we began to understand the room the impulse needed to develop. We also understood that impulse A was enough to trigger the students to play out various fox scenes in the forest. The students' actions were all rooted in the theme of Impulse A. Impulse B was in many ways superfluous to impulse A and qualitatively very different. A small group of students and I managed to complete the task presented in impulse B in the forest with the bones. But it was not a project the students owned, or were particularly interested in. It became clear that the activity based Impulse B was a "task" rather than an aesthetical experience. Impulse B is therefore redefined as a "task" rather than an impulse. Consequently, the students could not engage in the latter task, especially considering the impact from impulse

A they desired to act upon rather than wanting to find random letters they had no relationship to.

One explanation for the failure of the “task” was its lack of personal relevance. When the students were given a letter that was not “their own” they lost all motivation to complete the assignment. The importance of personal relevance as earlier mentioned by Erik Booth states that “personal engagement relevance” ranks *higher* than the information you deliver (Booth, 2009). We might have been able to complete the task had we spent time addressing the qualities of the individual letters prior to the letter task; thereby assisting the students to connect personally to every letter, not just “theirs”. Because the task lacked both an aesthetical impulse personal engagement relevance there was insufficient force within the students to direct their action in a productive didactic direction. This realization illustrated the importance of the aesthetic impulse delivered *before* the creative action or aesthetic synthesis in this context.

Winter, spring and summer: important design developments

Once evaluated, the pilot gave us a better understanding of what to focus on during consecutive visits. The three-part partitioning of the day adapted from the Straumøy model worked well and was therefore used consistently throughout the remainder of the visits. The format: Fairy-tale, song, and real story in impulse A also worked well. The team kept this format narrowing our curricular focus on Norwegian throughout the project. The stories and songs were altered to fit the theme of the visit. The visits below only account for the theoretical, design and seasonal changes during each consecutive visit from a planning and design perspective. The results and analysis of the phases Winter, Spring and Summer are accounted for in the findings and analysis chapter.

Winter

Based on our pilot findings, the first and second segment of the winter visit remained unaltered. Because the farm had new born kid we planned for goat/kid petting/snuggling before we went to lunch and after the students were finished with their chores. The third segment was redesigned to better facilitate play (Austring & Sørensen, 2006, p. 156). We

created space for free play by freeing up the whole third segment in the forest but added the parallel task to make sure that everyone had the possibility to engage or instigate an activity/play. The teachers supervised a charcoal making activity parallel to the play portion. The charcoal activity created a base camp in the forest. The activity was centered around the bonfire where the teachers could tend to both fire and tools assisting students with the knives axe or saws when needed. The charcoal activity provided an alternative focus for those students that were not engaged in play or wanted to help with the charcoal activity but gave the teachers a meaningful activity to undertake. Some of the students wanted to be close to the teachers. It also allowed the student who wanted to play freely to do so without the feeling that the teachers were hovering over them.



Photo 7: Children examine the char-coal they made.

Spring

Spring on the farm called for a slightly different design for the first and third segment. As the weather was warming up and the sheep were lambing. The other animals were out to pasture and the barn chores were slightly different. The chore groups were briefed on the seasonal changes and adapted to their new assignments. The impulse-tepee segment remained unaltered focusing on the qualities of spring through seeds, compost and rebirth in the thematic presentation. The third segment was in the vegetable garden rather than the forest. This segment was organized into three smaller activities directly linked to the impulse from the previous segment. This gave us opportunities to consider the students' response to an activity in direct correlation to the impulse that we had failed with in the pilot. To administer the activities the students were divided into three groups each assisted by a teacher. Group one planted seeds in the greenhouse. Group two supplied the vegetable garden with manure and compost. Group three harvested ground elder and made

ground elder soup over the fire pit. Once we had completed the activities and the soup was cooking we had a wheel barrel race.



Photo 8: Wheel barrel race to balance out the fine motor skills used in the gardening project.



Photo 9: Students tasting ground elder soup that they made over the bon-fire.

This was a conscious addition by Anne who claimed that activities in the vegetable garden required concentration and fine motor skills. The wheel barrel race was a way we could add the contrast of playful activity appealing to the large motor skills.



Photo 10: Children planting and labeling seeds.

Summer

The chore segment during the summer visit was done collectively. All the animals were out to pasture and there were only a few animals that needed to be fed. After the students fed the animals we took a walk around the farm pastures to check that the animals out at pasture were ok. The theme of this summer visit was building and structures so while we were tending to the animals in the fields, we inspected some old buildings on the farm and talked about their age and use. The impulse in the tepee focused on the building theme. The third segment took place in the logged section of the forest. The students were divided into groups and given the task of building a structure with the materials and tools available. There were lots of branches and logs left by the loggers. The teachers tended the bonfire and assisted with tools or structural questions when needed.



Photo 11: Students construction structures with found objects during the summer-visit.

Results and analysis

This chapter accounts for the finding and analysis from three Straumøy visits that are briefly outlined above: winter spring and summer. The results are organized theoretically. The student and/or didactic development from each visit will be accounted for in the appropriate season and section of the Straumøy model when applicable.

Dewey and the aesthetic experience

The first activity during the farm visit is the farm chores. The chores segment is one of the foundational activities in the Straumøy model. Anne and I kept the chores segment “pure”, free of planned didactic content. We were aware that the sensual impact of chores, nearness to animals and group cooperation was more than enough for the students to experience in one segment.

Communication through experience

The students experience the closeness to the animal and the animal's basic needs, and how the student is responsible for tending them and showing them compassion. The following two accounts are taken from the active camera recordings. The student wearing the camera was working in the cattle barn. Already the students have identified the cows name and its physical qualities such that they can communicate the specific cows needs to their peers.

A student shouts out to the others in the cattle barn that the brown cow in the corner needs more hay. Another student arrives with a wheelbarrow, and attempts to fill the trough with hay.

It is winter and this is the students second visit to the farm. There are three students helping with the chores in the cattle barn. The students are already beginning to identify the different cows and how much hay they need for their breakfast. The student tells her peer that the cow needs more hay. The students are working together, one is feeding and one is filling the wheel barrel with hay. There is another group of students supplying hay via the hay chute connecting the loft to the cattle barn. They understand that they must communicate to the students supplying hay. They need to tell them how much more is needed to feed all the cows sufficiently. Through their collective participation, the students gain insight in the complexity of the task and how the undertakings on the farm as interconnected. This is important, as the student also begins to understand how the task is associated with the other tasks on the farm. The students see the connection through their communication with the students supplying hay. They also begin to wonder how the hay is transported to the cattle barn. Some of the students begin to climb up the hay chute and explore the hay loft to figure out where the hay is coming from.



Photo 12: Students exploring hay-shoots and how the barn works during chores.

Aesthetics of the Mundane Task

The next segment illustrates Dewey's perspective regarding the aesthetical experience. Dewey claims that we need to begin to see the aesthetic possibilities that lie within the mundane task. Once the student supplied more hay the student feeding could finish feeding the cow:

The student cannot reach the trough resulting in the student throwing the hay over the cow, landing on partly on the cow's head. "Mamma Mø has a new hairdo!" the student exclaims and the students all giggle over the cow's hay hair style. The cow is not bothered and continues to eat.

The playfulness that transpires between the students during the feeding is the beginning of what I believe Dewey was alluding to in his definition of the aesthetical experience. The student is too short to reach the hay trough and must throw the hay over the cow. Resulting in hay covering the cows head. Instead of the student thinking about not being able to reach the hay trough the students laugh over the cow's new hairdo and imagine that the hay is a wig of hair. Not only has this student begun to turn their work into play, but the cow in question is named "Mamma Mø". Mamma Mø is a cow featured in a children's book series. Many of the students have read these books and immediately relate the qualities of the cow

with the real cow in the barn. Their knowledge of the character Mamma Mø allows the students to connect the live cow with the silly actions Mamma Mø does in the book immediately with their experience in the barn. The student's ability to turn the task into play or relate the real cow to the fictional cow in literature is something that we see repeatedly during our visits to the farm as in this segment. Play and imagination are interwoven in the students' actions. Most of the time the students don't realize they are playing, but working as described from Anne's observation in the pilot analysis. Play in this instance is part of the aesthetical learning process we are looking for. Here the student is incorporating the mundane task of feeding a cow which ignites their imagination associated with literature and fantasy, as illustrated with the hay hairdo.

The Value of the Natural Experience

Another student is scraping manure with a squidgy. The student is telling the others "we need to scrape the poop!" He is scraping the manure towards a hole in the floor.



Photo 13: The fascination of animals peeing.

The children are assisting in the everyday task of feeding cows. While they work, they begin to understand that however mundane, feeding cows is important. If the cows in a barn are not fed, they will starve. Suddenly the routine task becomes relevant to the students as they begin to understand their responsibility in context with the cow's existence. By doing so the student begins to become aware of their emotional connection to the cow. The second they enter the cattle barn they are eager to cuddle and pet the animals. The students show their empathy for cows and care for their wellbeing. The students talk in cute empathetic voices when they address the animals, especially when there are babies present. The cattle are

large animals. Some of the students were afraid of petting them. They were non-the less attentive to their needs. If they did not dare to get close to the animal, the student would find a peer to assist them. This emotive, real connection, the fear, compassion, responsibility and respect are all emotions and virtues that the students met repetitively in the barn. Their task is placed in the context of life and death. It is the raw connection of life and death directly linked to understating the world through real experiences that transpire during the chores in the cattle barn just as Dewey alludes to. The problems were real, the emotional responses were real and the students seemed to understand the gravity of their task along with the choices they must undertake along the way. Again, referring to Dewey, it is the immediate interaction with natural surroundings that propels an inner force into a rhythm of comfort and discomfort. This inner force that urges them to investigate the task and understand how the student fits into the over picture at the farm. Threw their emotional experience the students began to recognize and accommodate their feelings while working and communicating together. When experiencing real feelings, the students would talk to each other and the adults about their feeling. They would discuss why they were scared, or happy. The following segment shows how the students were extremely aware of their emotions. Not only did these students display compassion for each other, but are able to discuss their feelings together and reassure their peers that it's a learning process. Not many students were visible afraid of the large animals, but some were. It is important to consider the farm visit for those students who show that they are afraid. The following outtake the students were alone, there was no adult supervising their conversation.

The student wearing the camera is afraid of the cows and is unsure of how to help without getting close to the cows. He finds his fellow students in the milking room and is talking to them. The students are unsupervised.

We see that the student is unsure how to help in the barn without leaving his comfort zone. Instead of helping me sweep the floors he gravitates towards his peers in the milk room.

The students have remembered their task from last time and starting hosing and squeegeeing the floor on their own accord. While two of the students are working the student with the action camera says: “spray me! No, don’t spray me, ok?”

The student attempts to suggest that the other working students start playing with their hose. I see this as a possible attempt for the student to shift his emotional state into something more playful by suggesting a water fight to his peers. He suddenly realizes that being covered in water might not be such a good idea and quickly refutes his suggestion. Instead he tells his peers that he is not used to the cows. This moment, I believe is his was a diplomatic way of telling his peers that he is afraid of them. He claimed that it was “the noise they make”. What is key here is that the student dares address his fears to his peers. The students are focusing in the task of washing the milk room, and in their dialog, they begin to reflect over why they are fearful. Anne, Leif and I had a conversation about this topic during an evaluation meeting, Anne said,

“When they [the students] cooperate through concrete [practical] tasks, the work is not taken personally, the work does not affect them on an individual level, right? What they focus on is doing the task and that is a great way to practice cooperation. What I see in school is they have a group project –and the student is supposed to contribute in some way, then there is one that feels like they can’t contribute, or doesn’t know how. The higher up in grade you get the less participation you see”



Photo 14: Helping each other with morning chores.

What is important to understand here is the values of the concrete practical task. The student can understand the practical scenario, rather than the hypothetical group task at school. Anne claims that the students don't associate their own ego with the practical task. As illustrated in the above scenario, we see that the student, who is in many ways showing his weaknesses to the other students. He is not only showing them, but he is expression them through dialog. This might be different from showing weakness at school where your weakness might present its self in deductive subjects like math or English. Here, for example the student does not necessary see his fright as a weakness. Or, maybe he does, but here at the farm he is not judged on his performance. What happens next surprised me.

While he stands in the doorway he tells the two students that he is not used to the cows, and the noise they make. The other student replies: "that's ok" and the other student says: "when you come here allot you get used to it". "I've been here lots of times" [.....] While the students are still working, the student adds: "We've been here since we were born, or not exactly since were born..." The other student says: "well I've at least been here many times and the people here know me really well!"

The student's peers show him compassion and give him support. They tell him that its ok to feel scared and tell him that the more you are around the large animals the more you understand their behavior. One of the students even suggests the importance of the adult's value at the farm. The student says, "the people here know me really well". I interpreted this as Anne and Leif providing a caring framework for the children to learn and experience the farm. Their presence is assuring to the children who have visited. The students illustrate this importance by accounting of their personal relationship to "the people here" who allow the children to experience and learn from their farm. These students understand that they have the freedom to explore and investigate the farm, and they understand that there are grown-ups there to assist them if needed. I would also like to draw the connection to why Anne wanted to have students that were familiar to the farm included in the student body. The above excerpt clearly shows how the students who have had experience on the farm assist and help those who have not. The students who assist their peers feel a sense of accomplishment as they realized they have an understanding that others need to learn. They

are willing to share their knowledge and assist the students that need it. Thus, generation a cycle of shared experience and knowledge and accomplishment. By having to share their experience the students are actively transcribing their emotional understating into more discursive forms of communication.

The fearful student sticks his head in the barn and yells to the teacher: "is everything is alright?". The teacher yells back: 'Everything is fine, thanks!'"

After this peep talk from his peers the student remembers that I was still in the barn working. Although he is too afraid to asset me in finishing the chores he shows his concern by checking on me.

To me this segment illustrates what Dewey claims is the "roots of the aesthetic experience" (Dewey, J. 1934.p. 13). This according to Dewey is how we develop and learn. Through our sensual and emotional understating, we become accustom to existing in the perpetual rhythm of comfort and discomfort (ibid.). By communicating these feelings this student is beginning to understand that his feelings are natural and that emotions are something we need to learn how to confront and learn from, both on a physical and emotional level. Dewey believes that real life experiences provide the material we need to propel our inquisitive nature as human beings. Dewey does not connect these ideas with teaching directly, but in his discourse, he suggests that his ideas "assists our understanding" (ibid. p. 11). He goes on to explain that "to understand the aesthetic, one must begin in the raw" (ibid. p. 3). I have therefor taken the liberty to assume that if he believes it helps us as a reader it will also help a learning process generally. What is interesting is his idea that we must begin with the raw. To explain his perception on raw he provides us with everyday experiences that catch our interest and touch us in some way. We cannot necessarily explain why, but something in the real experience moves us. Dewey goes on to assert that understanding should begin "with the soil, air, and light out of which things aesthetically admirable arise" (ibid. p. 11). Again, he is not specifically addressing a didactic audience, non-the less his message is clear. I have interpreted Dewey's ideas about the "raw experience" and to understand we need to begin with the soil air and light literally in this

project. The chores segment in the Straumøy model introduces these basic earthly ideas to the students through a didactic experiential framework. The lesson plans designed for this segment was developed specially to illuminate the students direct contact with the natural world.

Malcolm Ross

While Dewey provides a philosophical approach to aesthetical learning, Malcolm Ross provides an aesthetical didactic method. Ross has created a model that has identified the impulse as an important trigger to promote aesthetical learning in practice. When we began to design this project Anne and I were very unsure how and if we needed to instigate an aesthetic impulse. We assumed that aesthetical processes were happening, but how and in what connection was something we set out to test. The pilot visit provide insight into the presence and didactical value of the impulse. As we became aware of the qualities surrounding the impulse we could better assist the impulse development as seen from a didactic perspective. Based on the result of the pilot study we can conclude that they impulse does exist in the Straumøy model. The following explains how the impulse manifest itself throughout a visit.

Impulse

As mentioned, the chores segment provides a plethora of personal impulses through their work in the barn and interaction with the animals. Anne and I designed an additional “scripted” impulse for each visit that was rooted in the seasons activates. The impulse that we delivered in the tepee was experiential, but not a physical experience like in the chores segment. Anne told stories from the farm. She also told a fairytale and sang songs that related to the theme. The impulse is discussed and analyzed in the pilot chapter, yet it is worth mentioning that as we become more familiar with the impulse in conjunction with the Straumøy model we see two impulse qualities emerge.

The Direct Impulse

The direct impulse is described in the pilot. The students are given a thematic impulse about predators on the farm. The students begin synthesizing this impulse by either being a fox or

catching a fox. The fox is repeatedly brought up by the students in various scenarios throughout their four visits. This shows us that there is a direct connection with the theme we want the students to understand that the syntheses thought the elements in ross's model. The students also expanded their understating of the fox each time they came across something they believed was associated to it.

One student found a chicken's foot. They had slaughtered some roosters a few days before our visit and the roosters claw had somehow been left behind. She immediately showed it to her peers and they said, "we need to show the adults" three students run towards Anne yelling "we found an eagles claw!" "Eagles claw!" "Eagles claw!" yelling together as they ran. Anne asks, "what is that" "oh, a rooster's claw" she said. The students are still excited and ask Anne "is it from the fox?" Another student says to his peer before Anne can answer "come on, let's build a trap for the fox!" The students are talking amongst themselves as to what they are going to do about the fox. "A trap that will cut his head off" suggests another student. Another student asks Anne "are we going to the same forest as last time?"



Photo 15: Chicken-claw (or is it from an eagle?!) and found branch.

The students currently are on their way to the forest when L finds the rooster claw. The students think they have found an eagle's claw as we see in their chanting Anne realizes quickly where the claw came from but doesn't tone down the children's enthusiasm. She also never says to the students why it was laying on the ground. Anne knew immediately that it was left over from the slaughter the other day, but she only tells that to the other teacher. The children assume that the rooster was killed by a fox and now the students are

going to help protect the farm. They have various suggestions as to go about catching the fox and they seem to become more morbid in their idea development. Their motivation to fix the problem is real and their energy is fierce. The last comment I find interesting was from a boy that helped make a fox trap during our pilot visit. I can only assume when he asks Anne if they were going to the same forest that he was already trying to put together a fox trap in his head and thinking of what he would need to build it and possibly where to find it. This student was in the group of boys that found barb wire and wanted to make a fox trap during the pilot visit. If we were going to the same forest as last time he knew where to find material to build a trap.

The Indirect Impulse

The indirect impulse is harder to define as it is unique to the individual. The indirect impulses occurred at any time during the day from anything part of the experience. It was also a big part of the chores segment. It is hard to pin point what would trigger a process in a student, but it was always something that sparked their senses. One example is the collection of artifacts. During the second visit, I noticed that the students were collecting various natural artifacts and turning them into props like a feather in their hat. Other times it could be jumping in a pile of leaves. The chickens foot was also an impulse the teachers could not have foreseen. The indirect impulse kept the teaching team forced to keep an open mind in meeting the students when the indirect impulse materialized.



Photo 16: Artifact embodied and jumping in leaves.

Fantasy

The picture below illuminates how the found artefacts transported the student into a different realm.



The students were all active in the forest. Some were in the tree hut, some were whittling twigs to use for the charcoal project, and some were hunting the fox. One student was sitting by herself, close to where the students were whittling around the bonfire. I walked over to her and ask how she was doing. She was sitting on her knees on a pile of pine branches arranged at the foot of a tree stump. She ruffled her feathers and leaned over to show me three eggs she was nesting on. The student was sitting on three pinecones. She told me in a very soft voice that she was a Blue tit and these were her babies. As I left, she ruffled her feathers again and nestled down into her nest making little chirping sounds.

Photo 17: Student embodying a Blue-tit and her nesting eggs.

As we entered the forest we would see the students span out and explore the qualities of their surroundings. It became so clear, almost like they sniff out their territory. S began to situate herself by the tree stump amongst the seemingly chaotic play happening around her. As she explored the area she discovered the twigs and pinecones which became her nest. She also found a cozy and seemingly deliberate placement of her nest, not too close to the teacher and bonfire, but far enough away that she could “roost” by herself. S completely embodied her role as a blue tit. She even had decorated her nest with other found artifacts. Most likely blue tits are not interior decorators, but it shows how real life becomes combined with fantasy in the aesthetic process. It was fascinating to see her play out this quiet and detailed embodiment of the blue tit. The fact that S even understood the breed of bird to me provided her fantasy even greater dimension. I would like to make an interesting connection between S and an evaluation meeting. In our review meeting Anne and I discussed the S incident with the egg. I learned that during the pilot, S had been in the chicken coop and helped with feed the chickens and gather eggs. S found an egg and Anne told her to put it in the milking room. Either S misunderstood what Anne said, or she wanted to keep the egg herself. Instead of putting the egg in the milking room she put it in her backpack. Anne had seen her carrying the egg around the farm, but thought that if the

egg meant that much to her she was not going to make her put the egg back. Later, at lunch S came to me and needed help. The egg had exploded inside her backpack covering everything. I helped her with the mess and asked why she had put the egg in her backpack. She said that she thought it was going to become a baby chick. Then I told S that an egg must lay warm for 21 days before it can become a chick. She said “oh, ok.” What is interesting to consider here is that S’s desire to make a chick resulted in her trying to bring the egg home. We discussed the consequence of her putting the egg in her backpack, rather than the milking room. She was now understood partly how the chicks grow. In the next farm visit, S became a bird roosting on her eggs in the forest. This is an interesting coincidence, or a development of the indirect egg impulse S encountered during the first visit that was further developed through play during the second visit.

Craft

The craft dimension was easy to recognize during the chores segment. The student would use wheel barrels and squeegees to feed and care for the cows. Buckets were important to fill for watering the sheep or carrying and measuring feed. We also actively used variations of craft during the forest and gardening segments as well. What constitutes the use of craft in Ross’s model is mastering a tool that assists one’s esthetical expression. What we see is the chore segment builds the students’ awareness of the tools’ functions and how they can use the tools to better assist their esthetical expression. The chores segment provided a scripted use of tools. There was a reason the farmer had a squeegee to scrape manure. The purpose to sweep the halls clear after feeding was to not waste hay, and keep the farmer’s working environment clean and safe. Although these ideas were not always communicated to the student (often because of lack of time) they are implicit in their use. If the students spent more time at the farm they would naturally practice more tool use and how the tools help us. After the pilot visit the teachers agreed that the hay loft group could not use their pitch forks while feeding the cows. This decision was made because the students’ excitement about visiting the farm was impeding their judgment to use the pitch forks in a safe way. They were a large group within a small area. As they still had not mastered the use of the pitchfork and the sharp end movement was not controlled. There was no doubt the children could have mastered the use of the pitch fork had we spent more time on the task.

The teachers also could have found a different solution, but because it could be harmful we took them away. This resulted in the students having to use their hands. The pitchfork made handling the hay much easier and the students did notice the difference. Possibly by offering the students the tool-less alternative might increase their incentive to take caution next time they try. The chore segment allowed the students to test out various tools in conjunction with their barn chores where the adult modelled the proper tool use. Because the students actively completing a task during chores there was less room for the tools to be used towards the student's personal creative exploration. There are instances however where the students take a broom and turn it into an electric guitar while they pretend to be a rock star for the action camera.

The forest segments allowed for the more creative use of tools toward the means of the student's aesthetic expression. The following excerpt is from Anne's log accounting her interaction with C in the forest:

A student came to me and ask if I could cut a branch from the spruce in the timber forest. He was looking for a branch on the ground, but could not find one that he liked. He saw lots of twigs he liked at the top of the trees. He couldn't reach the top branches with his loppers and ask me if I could help him. We have been clearing this forest for many years so it's possible to walk or ride there. That meant that the lowest branches were cut away. I [teacher] went with him but I couldn't reach the branches either. I suggested that we chop down a tree and found one [a tree] that was the right size for child hands using the axe for the first time. I began chopping and showed the student how it was done. The student tried, but had a hard time managing. Several other students gathered and tried. After a while the student wanted to try again, this time he figured it out. The other students had gathered in a line to try. I [teacher] realized that we were running out of time and I needed to take over if we were to fell the tree before heading back to the farm. The students watched and we managed to fell the tree. I think it was the first time most of the students used an axe, and it was very exciting when the tree fell to the ground. The student ran over to the tree and started cutting the branches. That is why we felled the tree, so he could get the perfect branch. Sadly, we did not have time to limb the tree, but we can plan to do that the last visit before the summer.



Photo 18: When the perfect branch could not be found on the forest-floor, we had to chop down a tree to get the ones on top of the tree.

C could not find the branch to meet his needs. He asks Anne for help. When Anne herself was unable to reach the branch with the loppers she found the perfect moment to let C try the axe. C realized that he was too short to use the loppers. When he asks for assistance Anne provides him with a completely different perspective to the problem by suggesting cutting down the tree with an axe. This is by no means a normal teaching solution but Anne has a creative approach to her teaching methods. Many teachers might never consider felling a tree for the sake of the perfect branch, but Anne is taking her students inquiry seriously. Not only that, but she is also introducing a new level of risk as a teacher. The task became suddenly much more exciting as they are now going to fell a tall tree, possibly something the student has never seen before. Anne begins by choosing a tree she knows C can manage to fell. She then demonstrates how to use the axe by showing C how and where to chop before C tests the axe. Anne made the chopping look easy and C become discouraged by the task. By now, the other students have become excited by the tree project and ask if they can try. One after one tries while C watches. He noticed the other students struggle with the axe, with some more practice he might figure it out. After his second try he succeeds. Because of the time constraint Anne had to take over the tree felling project. Although C didn't have time to finish his intended project, the use of tools

allowed for an alternative solution. He could try a new craft and in the process, involve his peers in the experience.

Media

In active aesthetical expression, students should become aware of the different expressive medias. I want to enlighten the distinct use of song.

J is wandering around rather aimlessly at this point and decides to inspect what the students are planting by the green house. He has a wheel barrel that he parks and begins singing “det er reven og rotta og grisen” which is a Norwegian child’s song about “the fox and the rat and the pig”. H is hearing his peer sing and answers “Det er reven og rotta og fisen” and laughs at his own joke. This time H changes the last word that rhymes with “pig” to “fart”. The rhyme becomes lost in translation, but their play on words within the song. Suddenly H says Oi! Its Z, she is the fox! In an instant, the song became a game of tag involving three students and adding by the second. “No, I’m the rat” “No, I’m the mouse!” The children shout out to each other as the run around the yard. “There’s two foxes” Says S who has joined the game and is running after H. “I’m the fox!” some other student shouts from the yard. S is growling pretending he is a fox and says, “I got you almost!”. S tries to tag some other students, but they reply that they aren’t playing.

This song came from out of the blue. We had not sung the song during our farm visits, but J must have associated it to the farm and began singing it in his own accord. As shown in the action camera footage, J was wandering around between jobs and was restless. There were several groups with activities going on around the yard and he gravitated towards one. While he was by himself he began singing. H overheard him and immediately picked up on the tune and gave it humorous twist. Just enough to instigated a game of tag involving five or six students. The fox was a theme that had followed the students from the impulse in the pilot visit. I don’t know what really triggered J to sing. His song turned into a game involving his peers. The organic nature of the game intrigues me. How a phrase from a song can turn into a creative game where they are not merely trying to tag each other, but they take on different animal roles, like the rat, or mouse. S even tries to sound like a fox while he is running after his friends embodying the character.

Senses

The children's senses are active in every single endeavour at the farm. Whether it be entering the barn in the morning, or how the students surveyed the terrain each time we moved to a new area on the farm. I have called this segment *the interactive movie theatre*.

Some boys are sitting on the barn bridge watching the animals in the dry lot. One student says, "it's the movies!" Another student confirms what the other said "it's the movies!" As they watch the pigs the student says, "This is a funny movie!" Another student exclaims: "They are eating the fence!" "Come on, let's go see them eat the fence!" The three run off to see the pigs chewing on the fence gathering a few students with them on the way. They met me and ask, "why is the pig is chewing on the fence?" I suggest they might be bored. One of the students pretends to be a pig and grunts.

These boys were enjoying a quiet moment sitting on the barn bridge watching the other students finish their chores. They begin to pretend that they are watching a movie. What is funny is that "the movie" becomes so interesting that instead of watching it from afar they "run into their own movie" so to speak to get a better understating of why the pigs were chewing the fence. Their senses get the best of them and they can no longer sit and watch. One student goes as far as embodying the pig's behavior. Possibly to better understand why the pig was silly, eating the fence.

Play and Hohn's Socialization Theory

In an interview at the beginning of the project I ask the students: What do you want to do at the farm? Their response was collective and immediate, "play and snuggle with the animals." Play is illustrated in the above excerpts and infiltrates all aspects of the farm visits. That correlates with Ross's model. Play is the one facet in his model that is all encompassing. Play also connects with Hohn's socialization theory. I will provide the same finding and talk about it from both the perspective of play, but also how we can see how social interaction is an important aspect in the development of aesthetical expression. The following is a student who turns their tasks into play, incorporating the worm impulse into their interest in trucks and large machines and through the play set the scene for an imaginative display of dump trucks.

A student has parked his wheelbarrow at the manure pile. He begins to shovel manure into the wheelbarrow. With each throw, he says "Worm!" He sees the worms in the manure pile as he digs and gets excited. "I have lots of worms! They love this [the manure]!" he exclaims. The other students loading their wheelbarrow are equally excited about the worms. Once the student felt his wheelbarrow was loaded enough he began to pull his wheelbarrow towards the vegetable garden. As he was backing up he made a peeping noise with his voice signaling that he was moving backwards. The path was narrow and muddy. A student ahead of him got his wheelbarrow stuck and needed help from the teacher. The teacher demonstrated how to pull the wheelbarrow backwards through the muddy section. Now that it was his turn in the difficult section. He calls the teacher for help. She replied, "have you tried yet?" "No" "Try first!" He tried but needs some help. The teacher tells him to use all his muscles. He manages to pull the wheelbarrow over the difficult portion of the path. He meets up with the other student in the drive way making truck sounds with his voice. He tells the other student that they are dump trucks. "Broom Broom" He says to his friend "I have lots of worms in here! I see the worms! I have lots of worms! Lots of worms! Beep Beep!" The students push their wheel barrels down the driveway. "I am using my muscles" says the student running down the driveway making truck sounds as repeats "I am big and strong!". As he is running he yells to Anne, "Anne! I have lots of worms in here! We found lots of worms!" As he arrives at the garden plot he tells another student that he has lots of worms in his wheel barrow. He drives over to Anne and she says "Wow, you have lots!" The student replies "Now you have lots of worms to help!" Anne and the teacher show the students how to empty the wheelbarrow with a shovel into the garden. The student tells Anne again "Now you will have lots of worms to help you! Anne replies "yes, thanks!" The student continues "I collected lots of worms for you!" "It was a hard job to get all the worms here!" He returns to the manure pile to collect more worms. Alone on the drive way he makes clicking sounds as he "changes lanes" and stops to catch his breath and level his load. He returns with a new load of manure. At the garden, he is met by another student who uses arm signals to direct his wheel barrel into the garden and towards the vegetable plot.



Photo 19: Excitement over finding earth-worms in compost. Playing truck-drivers with wheel-barrels.

This student is inspired by the aesthetical impulse delivered earlier in the day. He takes this job of transporting the earthworms very seriously. His whole being is taken over by the role of transporting the worms to the vegetable garden. Along the way, he pulls several other boys into his play. He clicks his way across the driveway with his voice pretending it is his blink signal as if he was a big dump truck. Clearly taking his chore of supplying fertilizer to a whole new level of aesthetic synthesis.

Discussion

This research project set out to investigate if and how aesthetical learning processes were present in the Straumøy model of teaching. Additionally, possibly contribute to a theoretical and practical design contribution to the Straumøy Model through the EDR method of research. As mentioned in the introduction, Anne, Leif and I hypothesized that aesthetical learning was happening through the use of materials and products that the students would create during their time on the farm. We also know that the theological framework surrounding The Farm as a Pedagogical Resource encouraged the use of creative media (for example, folk crafts, art, and music) for the students to reflect on their experiences (Jolly & Krogh, 2012). The EDR research method used to investigate this question has not only allowed me to test my hypothesis thoroughly in the field, but has offered an understanding as to how the aesthetical learning processes constitutes itself within the Straumøy model.

Aesthetical learning process are not only present, but infiltrate the Straumøy model on several levels. This chapter will explain how aesthetical learning is present in the Straumøy model. I will continue to discuss how the presence of aesthetical learning strengthens a holistic learning perspective. Further I will present some weaknesses in my study and contemplate on how these weaknesses might be accounted for. The Education Design Research method used for this research project has allowed me to develop the Straumøy model practically and theoretically. This chapter will also account for the theoretical contribution that can supplement the experiential Straumøy model and discuss the implications of this contribution theoretically. Lastly, I will connect my research to the current educational situation and future challenges we face on a global level. I want to also acknowledge that these reflections are colored by my experience living in two cultures, my perspective as an artist, teacher, mother and lifetime student with what we today call learning [dis]abilities.

Aesthetical Learning within the Straumøy Model

The Straumøy model is built on the foundation of experiential learning. Experiential learning is according to Høhr our direct meeting with the world (Austring & Sørensen, 2006) and how we experience it on a sensual level. Høhr calls this empirical learning in this aesthetical learning socialization model. Høhr model states that we have three different and interconnected learning modes towards a holistic learning theory. These three modes provide the forces towards our synthesis our experience socially in our meeting with the world (ibid. p 86). It is the aesthetical learning mode that Høhr claims learning occurs and is a necessary part of our socialization (ibid. p. 106). If we look at the empirical results we see all three learning methods in an active synthesis. But again, it is the aesthetical learning mode that transforms our sensuous, emotional meeting with the world into an aesthetical expression through which we communicate with (ibid. 106). It seems that from our data aesthetical learning and experiential learning are happening together in synthesis continuously throughout our project. To illustrate aesthetical mediation, I will reference to the incident with S, H and their peers during the and dynamic dump truck development as mentioned in the results and analysis chapter. S is at the manure pile shoveling compost into his wheel barrel. During lunch students were told stories about how manure and

worms help create healthy soil that helps the plants grow. The activity S was depicting was directly related to the earth worm impulse given at lunch. When S arrives the manure pile he is imitating truck sounds that correlate with the movement of his wheel barrel. As S begins to dig into the manure pile he realizes the compost is full of huge earthworms. The action camera footage reveals that he gets physically excited over his find and exclaims to the other students that he found lots worms. He's excitement is so intense that each time he digs his shovel into the compost pile he says "Worm" "Worm" repeatedly. His delight revealed through his actions eagerness. He is so eager that he had to tell the other students about his find. He shows that he understands why there are worms in the manure pile "the worms love this [manure]!" I have interpreted this as a verbal understating of how the worms like to eat the manure and turn in to dirt, as explained by Anne earlier. Now S is beginning to see this relationship between the impulse and his experience. Based on the thematic impulse S now understands the worm's relationship to the farm. By participating in the garden activity, he is developing an understand of himself in relation to the worm and the farm by transporting the worms to the vegetable garden to get the beds ready for planting. All these transactions are representative of the students empirical meeting with the world and how he is aesthetically synthesizing his experience. S's need to voice his excitement about the worm discovery to his peers is the beginning of the discursive learning process where the experience is understood on a symbolic level as he is beginning to apply symbolic language to emotional and cognitive experience. After S fills his wheel barrel he embarks on a transport journey towards the vegetable garden which challenges his physical capacities. Sections on the path are muddy. Several students get stuck and need assistance from the teacher. The teacher gives the students tips on how to get through the mud by turning the wheel barrel around and summoning all our muscle strength to pull the barrel over the mud. Once S does this and succeeds he congratulates himself over his accomplishment verbally and meets up with his peers on the other side. Clearly proud of this achievement. We see that in this perpetual cycle of excitement over impulse and excitement of achievement is a rhythm that propels the students throughout the day. Reunited with his peers he suggests that they are all working trucks transporting worms to the vegetable garden. He tilts his wheel barrel as if it was a truck balancing its load. The other students are engaged in the activity and they are "driving" their wheel barrels down the lane to the garden as if they

were truck drivers on the road. S has embodied the impulse and his experience and turned it into play where he becomes a truck driver adding in the aesthetic dimension in his learning. By now he has begun to verbally understand the phenomena of earthworms and their importance to the garden. We can see this in his communication with his peers and most importantly through the energy and rhythmic force of his actions. It is this force that Dewey alludes to when understanding the value of the aesthetic experience within the mundane natural world. He describes this rhythmic “ebb and flow” that allows stability in an ever-changing environment. This The contrast of balance and counter balance, of struggle and achievement allow the student to express enormous power due to the “overcoming of resistance” (Dewey, 1934 p. 15). As S continues his task the development of his truck reenactment becomes more complex. He further embodies driving his wheel barrel truck by making blinking sounds to signify changing lanes on the lane on his way to load more compost, and stopping to repositioning his load when he stops momentarily to catch his breath. Illustrating his total physical and mental engagement while building this play into his rest. It is also noteworthy how he engages other students into his fantasy alluding to the importance of socialization in our synthesis our meeting and understanding of the world. The students communicate organically. Their interaction is acute and seamless. Upon arriving to the garden on his second dump he is met by H who directs him with body language and complex hand signals where to dump his wheel barrel load. Here the students are combining the impulse, the experience and the aesthetic expression into a complex synthesis of play and fantasy. The quality of play is so life-like it could be real. Looking back at Hahr’s model we begin to see the patterns of interrelated actions that together constitute the socialization model that applies towards aesthetic learning where empirical, aesthetic and discursive learning occurs in an organic collective synthesis.

Didactic Considerations for Aesthetic Learning

Hahr explains the three learning methods from a social perspective. Malcolm Ross has identified key traits in the aesthetic learning process that help us understand the process from a didactic perspective (Austring & Sørensen, 2006). In the above model, I mentioned the aesthetic impulse. Based on our results from the pilot, we understood that the quality of the impulse delivered in the teepee segment (folktale/real story/song) with a theme that

was seasonally relevant on the farm was sufficient. Rosses impulse learning model allowed us to understand how the impulse phenomena constituted itself in practice. Rosses model provided a concrete didactic tool to dissect and understating the various component that constitute and assist the aesthetical process. Once instigated the **impulse** (as explain in the pilot section) uses four modes of synthesis to cultivate into a mature aesthetic experience. If we consider the above scenario with S and his worm transportation, we see these various modes in action. The first mode is **senses**. By actively using his senses to see, feel and smell the compost S quickly identify the earthworms in the compost pile. His senses propel him to investigate further with his shovel. The shovel represents Ross's second mode of esthetical syntheses, namely **craft**. This mode constitutes any tool or instrument that helps one's aesthetical expression. The shovel is one tool in this segment, but the wheel barrel is also a huge part of S's fantasy. The wheel barrel not only transports the compost, but becomes his truck. I mentioned compost. In this scenario, the third mode of aesthetical reflection can include **media**. This is any form that can communicate one's aesthetical vision, or develop it. In this case, the compost becomes the media that connects the craft and the fantasy, which brings me to the mode of **fantasy**. This is the mode of aesthetical reflection gathers S's fragmented understating worm phenomena, the experience and the symbolic understating into a meaningful whole thought the act of playing truck driver. These four modes starting with the impulse and developed through plat constitute the full aesthetical learning cycle in Ross's Impulse Learning Model (Austriing & Sørensen, 2006, p.155).

Limitations

Currently, I have explained how the aesthetical learning process has been identified within the Straumøy model. I will continue to discuss some weaknesses that might refute the validity of this study. The most profound being condensing a learning philosophy that develops over time into four visits. To be able to complete this research I had to compress a slow holistic educative method into four short visits. By slow I mean a learning process that transpires slowly over time, though multiple, even weekly visits. This is naturally difficult, if not impossible to implement in today's educational system due to practical and economic reasons let alone within the time frame of my project. Anne and I worked together to find a good balance on what elements were important to keep and which ones we could "cheat" to

achieve the most experiential value given our time frame. I use the word “cheat” because although the project did reveal a plethora of aesthetical learning on the farm many of the students had to leave unfinished projects or phenomena was presented and not followed up in the following visit because of the lack of time. The smaller forest projects we presented in the third segment was designed to fit in a one to two-hour time frame. That meant that the project was rough in design, yet enough substance for the students to create an experience that could cultivate the concept we presented. The students did not have the ability to refine and dwell on their creation, or contemplate about it over time. This resulted in the structures the students built during the summer visit being poorly constructed from a craftsmanship perspective. The students got the main idea, but instead of beginning to trouble shoot or refine their technique of both construction and tool development, they lost interest and began to play. This could be due to many reasons. I could blame it their age and attention span, but I believe that the students are more capable than that. I believe it our role as teachers to provide the guidance and space they need to cultivate difficulty. Gert Biesta calls this existing in the difficult middle ground of interruption and suspension (Biesta, 2017, p. 19). The educator’s role in this moment is to provide “sustenance in any imaginary form, so that the student can endure the difficulty of existing in and with the world” (ibid. p. 19). He goes on to explain that it is in this middle ground where the student meets the world. Therefore, it is important for the educator to give this middle ground “form” in the shape of curricula and pedagogy (ibid. p.19). We could have extended our time in the forest to better understand how to build a structure that endured the weather over time. We could have related the students understanding of construction even more to the fairy tale of The Three Little Pigs we told them at lunch, but we ran out of time. We could have just focused on Biesta’s idea of sustenance, but that would have been a whole other project. It is important however to discuss its applicability in the Straumøy model.

The Aesthetics of Teaching

Biesta believes that it is in this difficult middle ground educators role becomes an art. The art is to be open for every possible teaching moment that presents itself in the students meeting with the world, and see the learning opportunities this moment might present towards understating of the world (Biesta, 2017, p. 19). A good illustration of the art of

teaching from this project appeared when Anne was in the forest with C. Anne's solution to C's problem was felling a tree, rather than giving up, or spending time looking a tree with low hanging branches. This was not a solution every teacher might have chosen. I am not saying that every teacher needs to always look for such an extreme solution, but to keep an open mind when meeting the student's inquisitions and understand their possible learning potential that it holds. Another way we might approach this according to Biesta is to refer to teaching as "learning from" rather than "being taught", to view the teacher as a resource for the student, just like the internet, or a book (Biesta, 2013, p. 53). Once the students went home, their structure task at the farm was over. Rather than re-introducing the structure to the students over time to see if their personal development also effected their thinking about what they created over time. Anne and I tried to compensate for the condensation of this *slow* learning process by extending the visits over a whole fiscal year. This gave the students the opportunity to experience the seasonal phenomenon as much as possible. If we look at our results we can see that the students did use their knowledge from their seasonal experience to understand the ideas and concepts presented to them at the farm. We see this exemplified in the cattle barn when Leif is talking to the students about when Mamma Mø is going to calve. He tells the students it will happen in May or June, and suggests that they might see this calve during their last visit to the farm. The students had begun to establish a relationship to Mamma Mø, both emotionally and cognitively. The students could use these relationships to understand the lifecycles that occur at the farm and ultimately the seasons. By condensing this study to four visits we deprived the students of possibility to follow Mamma Mø's gestation continuously. We also did not get to show how she got pregnant. We did have the opportunity to see the sheep mating, but by the time we came back the lambs were already at pasture and we missed the lambing season.



Photo 20: Students watching mating sheep.

By fragmenting our aesthetical understanding of the farm (and other phenomena) in this manner makes it hard to understand how these phenomena are connected on a deeper level. Dewey goes as far as saying, “I believe that to endeavor to stimulate or arouse emotions apart from their corresponding activities, is to introduce an unhealthy and morbid state of mind” (Dewey, 1897). As drastic as this may sound I believe Dewey has a point. If we begin to introduce and use aesthetical sensual learning as educator we need to be completely aware of the power this learning process possesses and the consequences of its malpractice. Today teacher is constantly working against the clock, where the idea of education or ideas can mature over time presents real difficulty.

Regarding the limitations mentioned above, I want to briefly mention another finding the Straumøy model towards a holistic educative perspective. In our results, we found many findings within the experiential and aesthetical dimension. However, it seems that there are less findings from the discursive learning method. The findings that we focused on were the verbal and symbolic expressions from the students. We do see the students actively engaging in conversation about their experience, especially if it was exciting or scary. Initially, I thought the farm was too stimulating of an environment for the students to develop the discursive nature of understanding. However, because of the large amount of the other learning modes represented, that hypothesis didn't seem too balance out. Which led me to think that the discursive learning mode is something that is developed over time. Especially, regarding the ability to express deep, real emotions. Time was the one aspect we “cheated” on in the study. Given the vast range of emotional spectrum the students encountered during their visit, it is plausible that they simply did not have the vocabulary to express it or have the long-term opportunity to develop their expression. A possible solution to the students lack time to develop their discursive modes of learning is interconnecting the aesthetical learning experience with the class room teaching in a more systematic manner. This project has of out of time limitations not been able to follow how the school further developed the students experience. What is important to note is where the students could express their emotional state (especially in extreme circumstances) the students did try. Looking back as M in the milking room. He was very clear with his peers about communicating why he was not actively participating in the chores with them. He was not

used to the sound of the cows. I see the potential for this type of expression to develop further given the opportunity.

Unexpected Results

As mentioned, I set out to understand if aesthetic learning was present in the Straumøy model. As such I found it was present acting as the binding agent between the form and sense drives present in human nature (Austring & Sørensen, 2006, p. 106). What I did not expect to find is energy, or more accurately force that drives the student from within.



Photo 21: Examples of the children's continuous curiosity.

Theoretically I understand that we have an internal drive to learn. However, the nature and quality of the force along with how the students used this force surprised me. Other than the sheer passion of the force there was another quality that I could distinguish. That being compassion and attentiveness to others. The students seemed to demonstrate a genuine compassion for each other and the animals. As mentions above, where H and A were in the milk room with M. When M communicated that he was scared, H was quick to respond that it was ok to be scared, sympathizing with M. He also offered a solution to his problems giving him hope that it will get better the more often you come to the farm. He gives M an idea of how long it has taken them to develop this understanding of the farm when we said, "We've been here since we were born, or not exactly since were born..." have understood H's response as a way of saying that once you begin to understand the ways of the cow, their actions become more comprehensive and therefore less frightening. I interpret this as a mature and deep reflection for a seven-year-old. A also offers M some advice. She shows her sympathy for his fright and adds "well I've at least been here many times and the people here know me really well!" What I believe A is trying to tell M is that she has been here enough to know what to expect from the cows. Furthermore, she finds comfort and support

in the relationships that she has made with the people [Anne and Leif] at the farm. This interaction also illustrates the value of multiple visits to the farm over time. We saw the same acts of compassion from the students towards the animals. There are instances where students really want to snuggle with a kid, but they do not understand the proper way to hold the kid and the kid becomes restless or scared. In this instance, they receive assistance from the students that are more apt in handling kids, or lambs. The students give each other tips on how to settle the kid down. The students explain how to hold them correctly and pet them softly. They also explain how you can identify their cry as either stressful or calm. Some students are afraid of handling the kids, but ask a peer who isn't if they will help hold one while they pet it.



Photo 22: Snuggling with kids and connecting with the animals on an emotional level.

This desire for compassion propels their drive to understand and assist in both their own understanding and others. The students who were unsure around the animals made huge personal accomplishments in daring to get close and touch the cow, or walk into the dark smelly chicken coop. Considering the above discussion, this quote from Dewey seems applicable:

“I believe that if nine tenths of the energy directed towards making the child learn certain things, were spent in seeing to it that the child was forming proper images, the work of instruction would definitely be facilitated.” (Dewey, 1897)

What if we consider the same for the student; that if nine tenths of the students didactic energy was directed towards the formation of proper images rather than spending it on understanding the “certain things” (Dewey, 1897). Dewey is also alluding to Biesta’s notion of subjectivity where he suggests a new educational responsibility. That is not stopping the

internal drive that exists in mankind. This is a drastic proposal, but Biesta claims that it is our job to,

“make sure that our educational arrangement –our curricula, our pedagogies, our lesson plans, the ways in which we run and build our schools, and the ways in which we organize schooling in our societies –do not keep our students away from...what is calling them.” (Biesta, 2015, p. 23)

Dewey is saying that teaching is much about controlling the presentation and preparation of a lesson to produce expected learning results. Biesta is suggesting that we need to change the way we teach to promote and cultivate the capacities of each unique individual. That can only be done if change our expectations of controlled educational outcome. The teacher today can largely control what the student learns and how they learn it. But most teachers know that this presents some fundamental problems in practice. Biesta explains that we need to shift direction we have established in our authoritarian teaching tradition, towards seeing the students own desire for learning as a mode or way of teaching. Biesta is not saying that students should learn about anything or everything they desire, but to assist them in understanding what we consider “desirable” while simultaneously learning to control their own desires in a non-egocentric way. (Biesta, 2015, p. 23). According to Biesta our teaching culture need to be redefined to which Dewey provides a good metaphor. Dewey says, “we cannot direct the growth and flowering of plants” (Dewey, 1934, p. 11). Educators are responsible for tending to “the plant” giving it water and sunlight picking off the shoots that grow in the wrong direction but ultimately, the plant is going to grow at its own pace and blooms on its own terms. This is the law of nature. From an agricultural perspective, we can fertilize a plant and make it grow faster, but the quality of that plant is weakened and the nutritional values depleted. Not to mention how the long-term effects of the soil it grows in diminishes. Creating a perpetual cycle that is not sustainable for the long term. Much like a current global situation. Biesta is not suggesting that we just leave our students to their own accord, but to be there as a mentor in times when you need to know how to make a decision that is “desirable” in relation to one’s self and the world (Biesta, 2017, p. 19).

Theoretical and Practical contribution to The Straumøy Model

With the above understanding of Biesta's our collective educative responsibility, I will answer the second part of my research question, addressing the theoretical and practical contribution to the Straumøy Model. The resource team and I began to see the reoccurring pattern of the impulse. What we saw emerge were two types of impulse within the Straumøy educational model. The direct impulse was instigated and planned by the resource team. The impulse was designed to correlate with the season and current activities or active phenomena present at the farm supplying the students with a theme. What we saw occur after we delivered this impulse was that the students were propelled to assimilate the impulse theme aesthetically. I have spent some time discussing what I call impulse A in the pilot section and will therefore move on to the second impulse we see submerge. The *indirect* impulse is any moment during the visit that moved a student and prompts a personal, or collective aesthetical expression. Many students would find sticks they turned into a weapons or tools in their play. Christian was so attached to his stick that he found one visit that he would not give it up upon leaving. I ask if I could collect the student's artifacts and let the teacher have them for a classroom discussion, but he was not going to part with this stick and claimed that he was going to keep it with his iPad and bring it back to school the next day. This student is very fond of his iPad which led me to assume the stick meant allot to him. Some of the students were playing under an acorn tree and began gathering piles of acorns that they hoarded in their coat pockets and other strategic places. One student found a feather and placed it in his hat after comparing it with his peer who had found a block of ice. One student came to me in tears because she put an egg she found in the chicken coop in her backpack and it broke and made a huge mess. The above examples are some of the ways we could see how found objects might inspire the students to create emotional and creative relationships with their experience. Moreover, what value the object was given through their play. Which brings me to possibly our most profound finding.

If we instigate and esthetical impulse, we need to provide the room for the impulse to cultivate and be expressed. We also need to be aware that we cannot predict the direction the impulse will take. We found that providing the room for the impulse to develop is equally important as providing the impulse. We learned that we could direct the theme of the impulse A delivered at lunch, but we had no way to predict how the students would synthesize this impulse if they did at all. We also needed to be aware of the indirect impulses that occurred sporadically during the day, never knowing when the next teachable moment would present itself. During the fall visit the class was heading to the forest. On the way, we passed a huge pile of fallen leaves. One after one of the children ran into the pile of leaves and rolled in them and tossed the leaves in the air. The whole class was in the pile exploring the leaves in various ways. This was not a stop we had planned, nor did we really have time for it considering the tight scheduled we had for the day, non-the less we let the students explore until we had to move on. This finding represents one of the many directions the student's activities that we as teachers let the students cultivate. The students were having a wonderful time exploring the quality of the leaves. Many of them had never jumped in a pile of leaves before. This moment represents the power an educator has regarding the cultivation of aesthetical learning process in students. This is possibly what Biesta was alluding to above. As educators, we have carefully planned idea that we believe is beneficial to our students. We have guidelines and regulations that secure the equality and quality of education. Yet, what is in focus is the educational product we deliver. That value is determined based on the amount of facts we can fill our students with and the depth of curricula we can cover each year. Biesta is suggesting that we put that notion of education as a product to fill our students with aside. Rather to allow the students drive to direct the students meeting with the world. The students determine their journey and we provided the needed assistance. This is a huge risk for the educator and ultimately what Biesta claims the risk of education (Biesta, 2017, p. 19). He claims, as mentioned above, if we dare take this risk anything can happen (ibid. p.19). In the above scenario, we let them play only to move on to a task I had planned for them. The task I planned was not half as interesting as how they students began to explore the forest and turn it into a scene where some were playing fox and others were catching the fox. Some students were investigating the ice on the creek, some were tending to the fire. I remember Anne saying to me at that

point when their play was in harmony with the sounds in of the forest, “now the calmness is fallen”. The moment she knows from her experience from teaching on her farm, the students are learning [aesthetically] and their play becomes real.

“I believe that much of the time and attention now given to the preparation and presentation of lessons might be more wisely and profitably expended in training the child’s power of imagery and seeing to it that he was continually forming definite, vivid, and growing images of the various subjects with which he comes in contact in his experience.” (John Dewey, 1897)

This research has focused on illuminating the aesthetical learning in The Straumøy model. The project has allowed me to identify its presence in the Straumøy model and illustrate its and the potential educational power. This project was an attempt to illustrate an alternative method art can be understood in schools today as defined by Dewey (Dewey, 1897). Especially through the value and understanding of aesthetical learning, and how it is practiced at Straumøy Gard. Aesthetical learning the way I understand it at Straumøy, has an enormous potential. It can be how we approach everything we do in life. The aesthetical experience is messy but it is real. I see many connections with Anne’s phenomena of the “Circus effect” when it comes to implementing aesthetical learning processes in classrooms today, especially if the school is more discursive in nature. The students get overwhelmed with emotions which they not always know how to direct in a grown-up-way and yes, you spend a large amount of the lesson trying to invite them into the activity or rather, spending time understanding how to direct their excitement, or lack thereof. I understand why teachers veer off from even starting the task, or seeing the limitations before the solution. The only advice I can give both student and teachers when it comes to this experience of the aesthetic experience is what H said to M, “you get used to it when you come here a lot”. I believe that we have had our most potent pedagogical tool at our fingertips the whole time. We just need to learn how to use it properly as it is driven by a powerful force. I hope this paper can help recognize the values of the program they offer at Straumøy. By illuminating the value of aesthetical learning, I have recognized the force that we have to learn.

“I believe that if we only can secure right habits of action and thought, with reference to the good, the true, and the beautiful, the emotions will for the most part take care of themselves.” (John Dewey, 1897)

Further Research

Investigate how the farm facilitates for continuous long term experiential learning. Our students only visited the farm four times. In that period, they began to understand there in the chores segment and were not able to dwell in what Biesta calls the difficult middle ground (Biesta, 2017). Another possible angle is how does the teacher follow up the experience before and after the farm visit. I know that the students used their experience in writing and drawing, but did not have the opportunity to follow this up. The elements from the farm were incorporated into the students' lesson like the charcoal which they used in their math's lesson. This would have been interesting to pursue further. Lastly, the real-life experiences at the farm provided relevance for the students when understanding themselves in relation to the world. Today schools rely on teaching with an abstract approach. It would be interesting to see more studies on education based in real life experiences or investigating the gap between abstract teaching and real experiential teaching.

Conclusion

We can conclude that there is an aesthetical learning process present in the Straumøy Model. Based on the data collected at the farm the Straumøy model not only facilitates aesthetical learning, but can also direct the didactic direction through a thematic impulse using an aesthetical impulse as explained by Malcolm Ross's impulse learning model. The research shows that the farm as a pedagogical resource provides the students to aesthetically synthesize real life experiences within an educational context. The real-life experiences that the students encounter trigger their emotional and sensual capacities through which they can express and explore through the interaction with the animal, farm chores and tools,

interaction with nature, interaction with each other, play. The farm provides a plethora of real experiences rooted in the natural world.

Once the student but the teachers are present to allow the students to explore and meet their emotions through play and contact with What we see emerge through our data is the combination of aesthetical learning processes and real life experiences they students encounter at the farm is a formative development within the student. The combination of emotional and sensual learning allows the student to become aware of how to better understand these feelings when the experience is real and the student has a clear understating of consequences of action. This occurs on an individual level and collectively as a class. The educative role of play is an important conclusion. How the students use the impulse rooted from the real world in their play. Once the impulse is initiated the students use play to synthesize and combine their natural surroundings to the thematic impulse.

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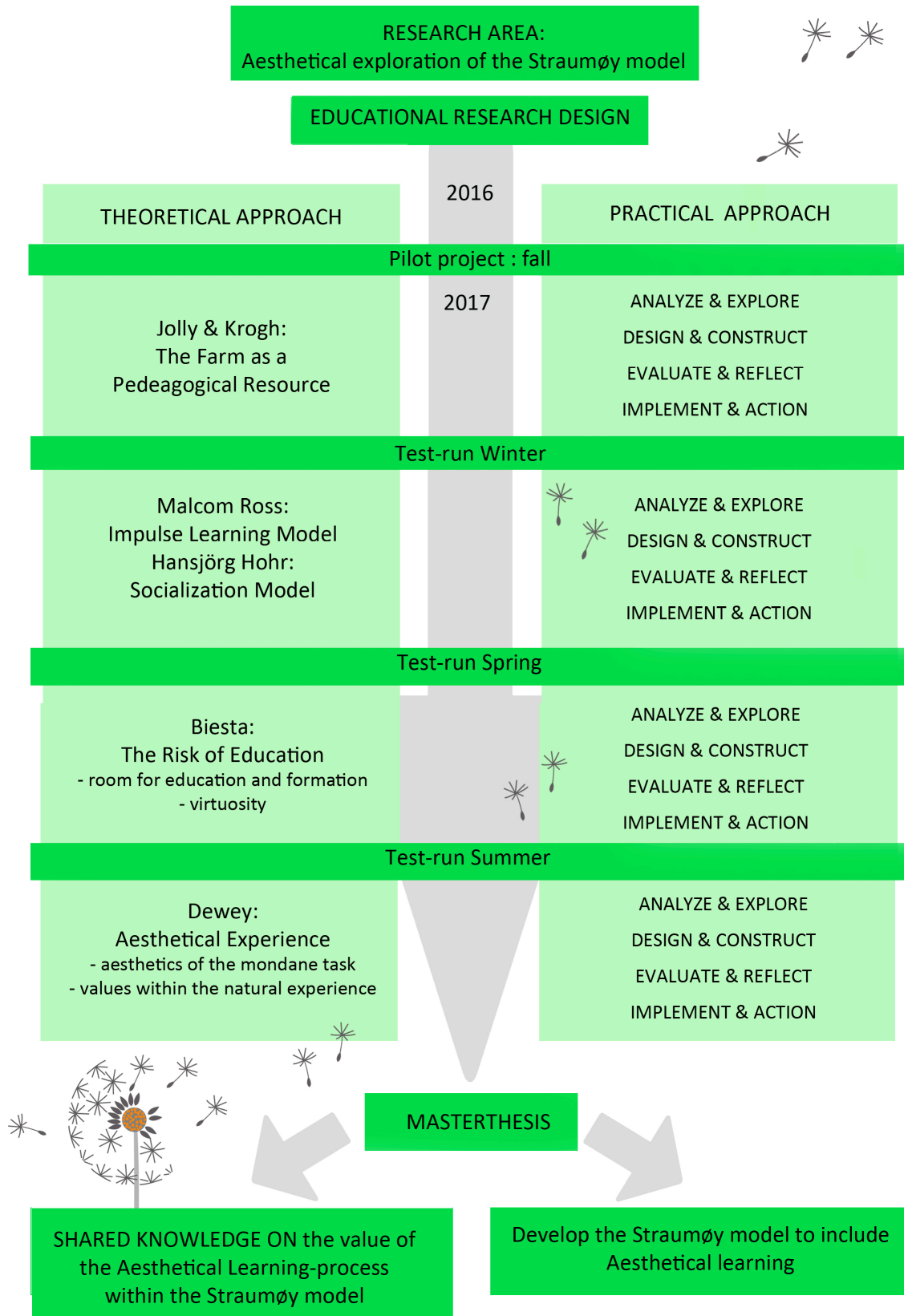
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Appendix 1: EDR-model

An illustration of my research-process



Appendix 2: Lesson Plans

Fall: EDR-Pilot

Farm theme: Livestock and predators

08:00: Meet and greet in the barn loft. Safety guidelines, Introduction to farm daily activities.

Division of chore

groups.

08:30: **Farm Chores**

- Bathroom/hand-washing before lunch

10:00: Lunch in tepee.

- Bathroom break

Impulse A:

1. **Fairy tale:** “The fox as a herder” (Reven som gjeter)
2. **Song** “Mikkel Rev”
3. **Real life story:** Anne talks about predators and livestock and tells a story about how they protect their livestock from predators.

11:00: Short recess around the tepee

11:15: Enter forest and present **Impulse B.**

- Anne brings wheelbarrow with tools/firewood

Impulse B:

1. **Talk about letters and split into groups of two.**
2. **Explain how we can find letters in nature; either by making them out of what you find, or finding your letter in nature.**
3. **Take a picture of it for class collage.**

12:30 Collective round off/clean up and play before leaving farm.

Winter: test 1:

Farm theme: Goats, kids and forest

08:00: Welcome in the barn loft

- Anne goes through safety guidelines and plan for the day
- Division of chore groups: who remembers their chores?
- Fruit snack

08:30: **Farm Chores**

- After chores, we gather after the barn chores and spend time in the sheep barn where the children can pick a kid and snuggle.
- Bathroom break/hand-washing

10:00: Tepee gathering/ lunch:

Impulse A:

1. **Folktale:** The boy and the goat (Anne)
2. **Song:** “Blåmann Blåmann,” bukkene bruse” (All)
3. **Story:** Taking the goats to the island Mitvik (Anne).

11:00 **Forest play:**

- Anne and Sarah have bonfire activity making charcoal, students can participate.
- Anne brings tools and firewood.

12:30 Collective clean up and wonder back to farm.

Spring: test 2:

Farm theme: Garden, compost, seeds, foraging and food

08:00: Welcome in the barn loft

- Anne goes through safety guidelines and plan for the day
- Chore groups, who remembers their chores?
- New spring routines explained
- Fruit snack

08:30: **Farm chores**

- Play/snuggle with baby animals
- Bathroom/hand-washing before lunch

10:00: Teepee gathering/ Lunch

Impulse A:

1. **Folk-tale: Bønnefrøet som vokste til himmelen (Jack and The Bean Stock)**
2. **Song: “Alle fugler” “Kom mai du skjønne milde”**
3. **Story: Earth worm and the Butterfly**

11:00: Bathroom break

Garden activities:

Group 1: Plant seeds by greenhouse (Anne)

Group 2: Work with compost (class teacher)

Group 3: forage and make ground elder soup in fire-pit (Sarah)

- The groups can rotate if needed.
- race with class to break up concentrated work

12:00: Collective clean up and gathering before leaving.

Summer: test 3:

Farm theme: structures and building techniques

08:00: Welcome in barn loft

- Anne goes through safety guidelines and plan for the day
- Chore groups, who remembers their chores?
- New summer routines explained
- Fruit snack

08:30: **Farm chores**

- Because of the summer routines everyone does the farm chores together.
- Explore the different buildings on the farm, old and new after completing farm chores
- Bathroom/hand-washing before lunch

10:00: Teepee gathering / lunch.

Impulse A:

1. **Folktale: The Three Little Pigs**
2. **Song: “Jeg vil bygge meg en gård” (I want to build a farm)**
3. **Story from real life: Story about the history of the buildings at Straumøy; “Larine huset”**
4. Talk about different structures and construction. How do we need to build and with what?

11:00: Logged forest location

Activity:

- Build structures from found material in the logged forest
- Anne brings twine, tools and firewood for bonfire

12:30 Collective clean up and gathering before leaving farm.

Appendix 3: Anne's outline

ARBEIDSPLAN STRAUMØY GARD		VEKE 40 Oktober 2016	
Hjelp oss å kosta i fjøs og sauehus når me er ferdige med fjøsstellet. Det er så mykje trivelegare å komma tilbake til kveldstellet då!			
Tysdag		Fjøsstell:	Etter fjøsstell:
04.10.16			
<i>Anne skal på vidare-utdanning, må gå kl. 13.00.</i>	LL	Laga saft og pakka koppar. Måla nedbør og temperatur. Laga pannekakerøre. Pakka det som trengs for å steika dei i skogen. O	MAT Me går ut i skogen og jobbar der. Undervegs går me og sjekkar om det er hasselnøtter. Me steiker pannekaker på skift på bål. Alle steiker si pannekake. Me gjennomfører prosedyren for kva me gjer dersom ein skadar seg. Ved steiking av pannekaker i skogen treng me: Pannekakerøre på flaske Steikespade Smørekniv Litt aluminiumsfolie To papptallerkar Litt margarin Sukker Fyrstikker Tennbrikker Litt tørr ved Øks I tillegg må me sitjeunderlag, førstehjelpsutstyr og brannteppe i sekken.
	SV	Kosta og rydda på Gamlelåven. V	
	NLH	Jobba med matematikkoppg Anne	
	EVL	Gi hønsa kraftfôr og vatn, henta egg. Gi alelamma og lamaene kraftfôr. Leif	
	NTG	Gi hestane litt kraftfôr. Gi kanina kraftfôr og vatn. Klyppa greiner til kanina. R	
	AB VHB	Gi grisene kraftfôr og vatn. Gi kyme litt kraftfôr. Vaska melkerommet. assistent, assistent	

Appendix 4: Semi-structured interview (in Norwegian)

Semi – strukturert intervju.

Intervju guide for første og andre klasse elever før og etter gårdsbesøket:

Disse spørsmålene skal være veiledende. Faget "norsk" skal kunne byttes ut med de ulike fagene som jeg designer undervisning etter som matte, naturfag og samfunnsfag. Ideer som jeg var opptatt av i utformingen av spørsmål: Forkunnskap om gård og bokstaver, ideer om Kreative og alternative måter løse oppgaven i læringsøyeblikket, lært kunnskap i etterkant av undervisningen

Elevene:

FØR:

Hva liker dere å gjøre på gården?

Hva vil dere gjøre på gården?

Hva gjør bonden på gården?

Hva gjør dyrene på gården?

Hva er viktig å ha på en gård?

Er det forskjellige type gård?

Gjør bonden noe annet en stelle dyr?

Er gården viktig? Hvorfor?

Hva gjør vi på gården i dag?

Hvordan må vi klær oss når vi er på gården? Hvorfor det?

Skjer det samme gården vær dag?

Hva synes dere om å komme til gården i skoletiden?

Kan vi lære på gården?

Kan vi lære om bokstaver for eksempel på gården?

Hvordan då?

Hvordan lærer dere om bokstaver?

Hva er en bokstav?

Kan dere tenke dere andre måter å lære om bokstaver?

Hvorfor er det viktig å lære om bokstaver?

Hva tror dere vil skje når vi kommer tilbake om vinteren på denne gården?

Hva tror dere vil skje når vi kommer tilbake om våren?

Hva tror dere vil skje på gården om sommeren?

Vil ting forandre seg til neste gang vi besøker?

Hva synes dere om å være ute hele dagen?

Hva synes dere om å lære ting ute?

Kan vi lære fra naturen?

Kan vi leke i naturen?

Hva liker dere å leke når dere er ute på tur, eller i naturen?

Liker dere å lage ting ute i naturen?

Hva lager dere?

Lager familien din noe fra naturen?

Hva har vi fra naturen i huset vårt?

Hva er viktig fra naturen?

Kan vi lage ting på gården?

Hva lager bonden på gården?

Hva lager dyrene?

Hva gjør maskinene?

Kan vi lære noe av dyrene?

Kan vi lære noe av naturen rundt gården, sjøen, skogen, marken?

Hvor har dere lært om gården?

Hva skjer på gården når vi ikke er her?

Skjedde det noe uventet på gården?

Hvem andre en dere besøker gården? Hvorfor?

Gleder dere til å besøke gården?

Etter Besøket:

Hva opplevde dere på gården i dag?

Gjorde vi noe bonden pleier å gjøre på gården? Eler pleier ikke å gjøre?

Er det mulig å gjøre ting vi vanligvis ikke gjøre på gården?

Hva er en bokstav?

Hvorfor skriver vi bokstaver?

Kan vi bruke bokstaver på en annen måte?
Hvordan kunne du tenkte deg å lært bokstaver?
Hvem fant opp bokstaver?
Er det lett å forstå bokstaver?
Er det lurt med bokstaver? Hvorfor?
Hvordan kan vi være kreative med bokstaver?
Kan vi gjøre vanlige ting på en annen måte?
Hvordan kan vi være kreative med språk?
Kan vi bruke språket (Matematikk/Naturfag/samfunnsfag) for å være kreativ på gården?
Kan vi lage bokstaver på mange måter?
Hva er viktig for en bokstav?
Kan vi bruke bokstavene for å forstå hva vi lærer på gården?
Hvorfor kommer vi på gårdsbesøk?
Kan vi lære andre ting på gården en det dere har trodd?
Hva har dere lært på gården i dag?
Vil dere komme igjen?
Takk for at dere kunne svare på mine spørsmål!

Lærer:

Før opplegg:

Takk for at du tar deg tid til å delta i dette prosjektet. Det setter jeg veldig pris på!
Du har fått en liten innføring i mitt masterprosjekt. Har du hørt om eller vært med på noe lignende før?
Vis ja, hvordan foregikk den undervisnings økten?
Hva var budskapet?
Var du selv ansvarlig eller var det i regi av noen andre?
Hvordan opplevde du opplegget deres?
Hadde du selv klasse med?
Hadde du som lærer praktiske utfordringer før-underveis-etter et slikt opplegg?
Hvordan kunne det vært bedre for deg som lærer i forkant av et slik opplegg?
Opplevde du at det som ble undervist kunne også knyttes til undervisningen på skolen?
Kan du gi noen konkrete eksempler på hvordan du klarte å knytte det opp mot din egen undervisning?
Når du ser tilbake på opplegget hadde du en positive opplevelse?
Hva var din oppfatning av elevenes opplevelse?
Opplevde du at opplegget var kreativt?
Hva er din forståelse av kreativ undervisning?
Hvordan opplever du at skolen bruker kreativitet i undervisningen?
Hvordan opplever du at din skole bruker kreativitet i undervisning?
Kan du gi noen eksempler på kreativitet og hvordan det praktiseres på din skole?
Hvordan definerer du forskjell på kreativitet og estetikk?
Har du eller dine kolleger snakket om å inkludere kreativitet eller estetikk i deres skolehverdag? I så fall, hvordan då?
Opplever du at dagens elever skolehverdag er estetisk?
Opplever du at det er rom for kreativitet på skolen?
Synes du at kreativitet er viktig i undervisningen?
Har du konkrete eksempler fra din egen undervisningserfaring hvordan barna opplever eller viser kreativitet?
Hvilken fag underviser du?
Har du noen eksempler av hvordan kreativitet blir brukt i din egen undervisning?
Er noen fag lettere i tenke kreativt i en andre? I så fall hvorfor?
Har du noen eksempler om estetisk opplevelser på skolen, enten i undervisningen eller i skoledagen generelt?
Hvordan definerer du tverrfaglig arbeid?
Jobber du tverrfaglig?
Kan du gi noen konkrete eksempler på hvordan du jobber tverrfaglig?
Opplever du at det er enkelt å jobbe tverrfaglig?
Hva er din opplevelse av hvordan barna opplever tverrfaglig undervisning?
Hvordan kunne det eventuelt vært lettere å jobbe tverrfaglig?
Hva er viktig når du skal få inspirasjon til å lage undervisningsopplegg?
Hva slags inspirasjon får du når du skal lage et undervisningsopplegg?
Hvordan jobber du når du skal lage et undervisningsopplegg?
Er det noe du savner som lærer når du lager årsplan/lokale læreplan/individuelle undervisningsopplegg?
Hva er ditt forhold til læreplanen?
Føler du det er lett å finne måter å undervise fra læreplanen?
Bruker du lærebøker i din undervisning?
Fungerer lærebøkene godt i forhold til det du underviser?
Opplever du at lærebøkene dekker det du vil undervise?

Eventuelt hvordan underviser du det lærebøkene ikke dekker?
Jeg har vært så heldig å fått lov til å forske på deg og din klasse, det setter jeg utrolig stor pris på.
Hva er din forståelse av mitt prosjekt?
Opplever du at jeg har kommunisert intensjonene og hensikten av mitt masterprosjekt tydelig?
Eventuelt, hva kunne jeg gjort for at det kunne blitt enda tydeligere?
Hvorfor blir dere med på dette prosjektet?
Jeg vet at dette gir deg som lærer en del ekstra arbeid. Er det noe jeg kan gjøre for at det blir lettere for deg?
Opplever du at det er lett å gjennomføre et slikt opplegg i din skolehverdag?
Eventuelt hvorfor/hvorfor ikke?
Er det viktig for deg at et slikt opplegg har et definert pedagogisk agenda rettet mot læreplanen?
Er det viktig at et slikt opplegg kan jobbes videre med i klasserommet?
Eventuelt, hvor ofte kan du referere, eller bygge videre på det som skjer på en slik visitt?
Er et slikt prosjekt verd det ekstra arbeidet? Eventuelt hvorfor det?
Hva får du ut at dette prosjektet?
Du har fått et grovt skissert opplegg fra meg om dagen. Er dette nok informasjon for deg i forkant, eller ville du hatt mer info om opplegg, både praktisk og/eller pedagogisk?
Hva er din rolle i dette opplegget?
Har det vært tydelig kommunisert?
Kunne jeg ha gjort noe annerledes i forkant til forbedring til neste økt?
Kan jeg være mer sensitive til dine pedagogiske behov til neste gang vi møtes?
Hva kunne du tenkt deg en slik undervisnings økt ville inneholde?
Ville du gjort noe annerledes?
Opplever du at et slikt opplegg er realistisk i dagens skole?
Hvordan var det for deg å få godkjent mitt opplegg i din skole?
Denne økten skal handle om høsten, og jeg skal jobbe ut i fra norskfaget. Heilt konkret skal vi lage eller finne bokstaver i skoggrensen. Har du jobbet med bokstavene på denne måten tidligere?
Eventuelt, hvordan opplevde du det?
Hvorfor jobbet du med bokstavene på denne måten, hva var annerledes eventuelt?
Hvilken utfordringer ser du for deg vi vil møte på?
Hvordan tror du at du vil møte elevene om de skulle få utfordringer med denne oppgaven?
Jeg vil gi elevene mye rom for hvordan de kan løse denne oppgaven, noe som kan føre til hva jeg kaller kreativt kaos. Har du opplevd noe lignende tidligere i en undervisningssituasjon?
Eventuelt når opplever du det og hvordan håndterer du situasjonen?
Kaos skal selvfølgelig ikke gå ut over velferden og sikkerheten til elevene. Opplever du at det er ubehagelig at elevene jobber så fritt? Eventuelt hva er dine bekymringer?

Jeg håper å begynne med å la elevene jobbe parvis på tvers av alderstrinn med enkelt bokstaver. Jeg vil gå rundt å veilede de som har behov for det. Jeg vil være veldig åpen i denne fasen og akseptere alt av løsninger så lenge bokstaven er forståelig. Videre vil jeg ta utgangspunkt i kvalitetene til gjenstandene (ikke nødvendigvis bokstaven sine kvaliteter) for å se om vi kan begynne å danne ord. Dette vil være strykt i stor grad av hvordan elevene løser oppgaven og vil være improvisert der å då. Jeg tenker at bokstaver som sitter fast(ikke kan transporteres) styrer hvilket og hvor ordet blir til og vi kan hjelpe elevene å skape disse ordene. Jeg tenker to eller tre bokstav ord, kanskje til og med tema fra gården: sau, rev, hus, mus osv. Nå styres elevene i større grad om hvordan bokstaven brukes og hva som kan staves. Det er også rom for kreativitet i denne fasen også. Har elevene en god ide må vi være åpen for det. Elever som ønsker en utfordring og vil prøve seg på et ordentlig vanskelig ord kan også få mulighet om det er stemning for det.

Ser du noen utfordringer i dette scenario? Eventuelt innspill?
Tilslutt vil takke deg for at du tok tid til å svare på disse spørsmål!

oppfølgingsspørsmål for lærer:

Hvordan opplevde du den praktiske fordeling av dagen, rytmen, opplegg og tidsbruk?
Kan du trekke frem momenter som fungerte godt i forhold til den praktiske organiseringen av dagen, enten fra ditt perspektiv, ellers barnas?
Kan opplegget forbedres til neste besøk, og eventuelt hvordan?
Hva er din oppfatning av barnas opplevelse av den praktiske organiseringen av dagen.
Kan vi tilrettelegge bedre for dem til neste gang?

Norsk

Hvordan opplevde du at opplegget var rettet mot norskfaget?
Følte du at norskfaget kom tydelig frem i opplegget, eller burde det vært mer/mindre innhold?
Hva var din oppfatning av barnas forståelse for norskfaget i opplegget?

Opplevde du at opplegget dannet et grunnlag for norskfaget som du kan bygge videre på i klasserommet med det som elevene opplevde på gården?
Eventuelt i hvor stor grad og hvordan?
Kan du trekke ut spesifikke momenter/opplevelser fra norskundervisningen (fra hele dagen) som du sitter igjen med?
Hvordan ble disse opplevelsene/momentene introdusert til klassen fra ditt perspektiv?
Opplevde du at dette fungerte? Eller ikke?
Opplevde du at norskfaget ble formidlet på en sanselig måte? Eventuelt hvordan?
Hva var din oppfatning av elevenes forståelse? Var den sanselig? Eventuelt hvordan?
Opplevde du at bokstavoppgaven var tydelig formidlet til elevene?
Eventuelt hvordan?
Hva kunne blitt tydeligere?
Hvordan følte du elevene klarte å løse oppgaven?
Synes du de klarte å finne bokstaver på en kreative måte?
Har du noen spesifikke eksempler på kreativitet fra økten?
Var bokstav oppgaven sanselig, eventuelt på hvilken måte?
Har du noen konkrete eksempler på sanselige opplevelser fra barna, eller din interaksjon med barna?
Var det noen elever som ikke klarte å løse oppgaven?
Hvordan møtte du disse elevene?
Når du skulle hjelpe en elev tenkte du på kvaliteter til bokstaven for å så finne materialer, eller prøvde du å se om materialene kunne være med å danne bokstavens egenart?
Var det vanskelig å finne materialer i skogen?
Du fikk selv en bokstav å finne, hvordan løste du denne oppgaven?
Opplevde du at elevene så på deg da du jobbet?
Eventuelt, hvordan da?
Løste du din oppgave før eller etter du hjalp elevene?
Opplevde du at elevene hjalp hverandre? Eventuelt hvordan eller hvorfor ikke?
Hvordan opplevde å være delta i oppgaven på (nesten) lik linje som elevene?
Opplevde du at elevene fikk tilstrekkelig veiledning i løsningsfasen?
Eventuelt hva kunne blitt gjort annerledes?
Opplevde du at det var elever som ikke ville delta i opplegget?
Eventuelt, hvorfor tror du de ikke ville delta?
Opplevde du mestring fra elevene i denne oppgaven?
Eventuelt kan du komme med spesifikke eksempler?
Hva synes du om det visuelle resultatet i sin helhet?
Opplevde du at alle barna opplevde mestring, eller var det noen som ikke klarte å henge med? Eventuelt hvorfor?
Hvordan tror du det kan forbedre dette til neste gang?

Dyrestellet:

Hva synes du om dyrestall økta i sin helhet?
Hva er din oppfatning av elevenes opplevelse?
Hvordan var det for deg å delta i dyrestellet?
Hvordan opplevde du at elevene så at du deltok på dyrestellet? Eventuelt eksempler?
Hvem av de voksne henviste elevene seg til underdyrestellet?
Hvordan opplevde du deres reaksjon til det sanselige (lukt/vær/dyreinteraksjon)?
Synes du dette er nyttig arbeid i en skolesammenheng (faglig/sosialt/kognitivt)?
Eventuelt hvorfor?
Hvordan opplevde du elevenes interaksjon med dyrene?
Kan du komme med konkrete eksempler?
Var det noen elever som mistrivdes i fjøsen sammen med dyrene?
Kan du si noe om hvorfor de ikke trivdes eventuelt?
Så du en utvikling i elevene i deres kontakt med dyrene i den korte perioden vi var i fjøsen?
Ser du muligheter til å trekke inn undervisning i dyrestelløkten?
Hvordan eventuelt?
Hvilken fag?
Hvordan opplever du å jobbe på denne måten?
Hva synes du må være på plass for at en slik skoleopplevelse kan gjennomføres? (gårdens utforming, etc.)
Hva mener du fungerer/ikke fungerer her på Strømøy?
Opplevde du kreativitet i dyrestell økten? Eventuelt noen eksempler?

Mat og fortellerstund

Hva var din oppfatning av denne økten?
Opplevde du at økten var tydelig og organisert? Eventuelt hvordan kan dette forbedres?
Hvordan opplevde du elevene i denne økten?

Kunne det vært bedre tilrettelagt for elevene her?
Hvordan opplevde du formidlingen av informasjon og opplegg i denne økten?
Hva opplever du skjer i en mat økt? Eventuelt er det viktig? Hvorfor?
Er det forskjell fra en mat økt på skolen? Eventuelt eksempler?
Opplever du at vi møter kompetanse mål i denne økta? Eventuelt hvordan?
Hvordan opplevde du gårdsbesøket i sin helhet?
Opplevde du dette som en estetisk/sanselig opplevelse? Hvordan/eksempler?
Opplevde du dette som en helhetlig didaktisk opplevelse? Hvordan/eksempler?
Kan du trekke ut opplevelser som du likte bedre en andre? Eventuelt forklare hvorfor?
Kunne du tenkte å undervist på denne måten? Eller delvis?
Fikk du noe ut av undervisningsopplegget i sin helhet? Eventuelt hva?
Vil du ta noe fra denne opplevelsen med deg videre i klasserommet/undervisning?
Hva eventuelt?
Hvordan kan du bygge videre på denne opplevelsen?
Hvordan opplever du å jobbe sammen med en kunstner?

Appendix 5: Log

1st Log from master project at Strømøy Gård 10.11.16:

Weather: Sunny, -2celcius.

Reflections and experiences on the various activities and design of the day.

Transport and logistical execution:

The teacher had sent out carpool forms to the parents such that the students could legally transport to the farm. Two days before the fieldtrip the class teacher sent out SMS messages to all the class parents asking if we could contribute to the carpooling. I was not in charge of this, but I did send her a message that I could also assist and drive twice if necessary. The teacher believed that we would have enough parents to assist in the car pool.

After dispersing the kids in cars, we drove individually to the farm. Once we got there was an assistant waiting and watching the kids that had already arrived. I am assuming that some of the local children came directly to the farm before coming to school.

The children waited in the driveway of the parking lot until they saw a large frozen puddle in the neighboring field. The kids ran out to the puddle and started slipping and sliding on the ice. The assistant allowed this for a while, until she called the children back to the driveway entrance. Now we were waiting on the main teacher. She was the last to arrive and the last to get dressed. Once she was ready we began walking up to the barn in an orderly fashion.

While we were waiting on the teacher to get dressed I noticed that all the kids were dressed properly and had lunch packs with them. One of the girls that went sliding on the ice got her gloves wet, but she told me that she had a spare pair in her pack. There was one student that was just carrying his lunch box and drink in his hands. Otherwise everyone seemed to have what they needed to spend the day outside in below zero weather.

Once we reached the barn we met Anne, the farmer/teacher who ushered us into the barn loft. The children found seats in the loft room. It consisted of benches against a wall forming a horse-shoe shape. In front of the benches were tables. The tables were all adult sized so the kids rather disappeared behind the tables. Anne introduced herself and gave a short overview of the day. The students were quite and yet full of questions and suspense. Anne had colored string with which she and the main teacher helped divide the children up into work groups. There were four groups with one adult in each group. Anne was the only adult that knew the barn routine, but she has written up a division of labor that helped us understand what our chores were. I also put the go-pro on one of the students during this gathering. I chose to do it rather quietly as I did not want to bring all of attention to what I was doing or who was getting the camera on. I put it on a student I knew well and that I knew would not cause a big scene about it. The assistant, main teacher and I quickly divided our groups up and we gathered our students. This to me was rather chaotic, the adults probably should have known their posts and group of kids such that we had more ownership of the situation collectively. This is something to consider for next visit. At this point Anne led us to the barn and we went to work. On the way, Anne tried to describe to me where the hay was and how much to divide to the to barns, but I was not completely sure what she meant and hoped that I could figure it out as we went. The main teacher and I were in the cattle barn together. This was rather hectic at both of our groups were trying to hand out hay to the animals. We tried to figure out what our roles were but we ended up doing the same tasks. The ribbons that we had tied on the kids had already fallen of some and the kids were wondering where their ribbon was, but not only that, they became very territorial when a student from another group mixed in with theirs. On my chore sheet it said that we had to feed the cattle in two rounds. This made it easy for me to direct the children, but also was a smart trick the farmer had derived from her experience to ensure that the cattle got the right amount of feed. We seemed to run out of chores so my students wandered down to the sheep barn where the other groups were still working hard. As I was looking around I heard two students on the top of the barn bridge throwing hay down the shoot by themselves. I went up to see what they were doing and realized that I had misunderstood what Anne meant about where the hay was. I realized that the half bale she was referring

to before we did the chores was here and it need to become divided between the sheep barn and the cattle barn. Two students were already working hard, so I got my group to help them out. Buy this time some kids were really getting into the work, and some were wondering around to the different chores. Some were not interested in the chores at all. One boy had found a chunk of ice. He was walking in the hay while sucking on the ice. I felt that I needed to tell him that if he wanted to suck on the ice, then he needed to move away from the hay as water and hay are not very good friends. I suggested that he sit on the front leading fork of the tractor. He climbed up there and sat contently on the fork until the assistant came up and pulled him down and threw out his ice chunk. This was a difficult moment for me as the student looked at me while the assistant pulled him away from an activity that he was content with. Meanwhile the rest of the group was working hard with the hay. A few more students had gathered and they were sharing two brooms. I ask them to put the pitchforks away as there were too many kids working for it to be safe. They seemed to have a hard time sharing and taking turns and I was not in tune to their problems to have a good solution to the problem so they were mostly working it out on their own. When the hay was divided, the main teacher came up to the ramp. We were looking down the Shute to the cattle barn where the kids had just swept about 1 m of hay on the ground. There was about a .5m drop down the shut and three of the students really wanted to jump into the hay. I was standing next to the teacher and wanted to tell the kids they could but felt that the teacher was the one making the calls. One of the students looked at us both and because I didn't say anything, and she didn't say anything the student jumped and the two others followed suit. The jump was harmless and the kids were fine and the teacher turned to me and exclaimed that the last student would have never done that on her own. She said it in a way that to me seemed like she was proud of the student to dare to do something that untraditional. We then walked back to the sheep barn and began to see that most everyone was finishing up their work. We then gathered the student back up above the barn. Anne explained that we were going to the tee pee to eat lunch. The children gathered their bags and we walked over to the tee pee. While Anne was giving our instructions, I took the go-pro off the first student and put it on the next. At this point one of the students had realized what was going on and had ask several times if he could wear it. When I choose the next student, I didn't want to put it on the one who ask, but the boy who I observed earlier that was not allowed to have the ice chunk. He did not seem to mind, but he was not very interested in getting it on. My thinking was that he might enjoy the attention, but that was not the case. On the way over to the tee pee he struggled to carry his pack and dragged his feet the whole way. I met up with him on my way over and ask if I could help him put on his pack, but he did not want to. So I walked on. Once we sat down in the tee pee he ask if I could take off the go-pro. I could tell he thought it was uncomfortable. I put it on the child that had wanted it earlier. He immediately began to "play" with it.

We gathered in the tee pee and I told the children that they could eat. Their teacher said "værsågod" and they began eating. I realized that I should have let the teacher administer this as they might have some routine, or rules that they follow when eating. Note to self: ask teacher about that.... We ate and I had hot chocolate for the kids. Once we all settled down Anne lit a fire in the fire pit. She sat down and ate, then she started telling some stories about foxes and farm animals and different experiences that she and her relatives had had. She then started reading a story from Asbjørnsen and Moe about how the fox got its white tail tip. The children all were listening, some were restless, but most of them although fidgeting in their seat were following the tale. When Anne was finished she talked ask the students about the difference of the fox and the animals that she had on her farm. Most of the students raised their hand when Anne ask them if they knew what we called animals that prayed on farm animals and what we called "domesticated" animals. She ask the students if they knew any songs about farm animals and they called out ba-ba little lamb. We sang that one and then she ask if they knew anymore. They then knew mikkell rev.

Once they had sung this song then Anne handed the torch over to me. I summarized what Anne talked about and tried to relate these stories and interactions with writing, and letters. At this point the kids were ready for a break, but they seemed to understand the task. After I had introduced our nest activity the children were ready for a break. Anne said that the children could go out and play, but the teacher intervned and wanted to define an area the children had to stay in. Anne said that they could not jump over any fences, or go into the animals without supervision from an adult. As the children left many wanted to look for letters immediately. I told them, that we were not going to do that now, but later. Once they began to explore the area the children dispersed into smaller groups. Some of them went down to the horses and lamas. The horses and lamas were on the opposite side of the fence and most kids stayed on the right side. Some wanted to come closer to the horses and open the fence. The group I was with saw a branch fall on to a hunting shack roof. We followed the

activity and saw a squirrel in the trees looking for food. Some of the children and I tried to follow the squirrel's activity until he disappeared in the forest.

I followed some children into the barn where they wanted to continue feeding them hay. One boy who had been afraid to enter the cattle barn earlier now wanted to give the cattle more feed. He wanted me to come with him as he was not totally able to do this on his own, but still really wanted to try.

The children were allowed to play for a good 30 min. I went to get my camera and in doing so heard some girls playing behind the tee pee. Three first graders were humming and shuffling behind the tee pee. There were trees surrounding the area and a slope down to a lower level. The girls had begun to gather acorns and had accumulated several stashes which they had found a spot for. One of the girls had stuffed her jacket pocket full of acorns. They were in a different world when I come into their play and started asking questions. They went quiet and protected their stash.

I let them to there play and moved on to the next group. By this time there was some children gathered around a hill between the barn and guest house. The children were climbing on the rocks and defending their area. One boy came up to me with a chunk of ice. The teacher gathered the children and we began to walk out to the forest equipped with a wheel barrel of tools.

On our way to the forest some of the students found a gathering of leaves, they were in a huge pile and they began to jump in them and throw them in the air. The rest of the class dove in. Anne and I let them enjoy that before we moved on to the first gate. We walked on to an open field and the kids followed Anne and her wheel barrel. Some of the kids were electric, and they were not quite sure where we were going. We came to a new gate. This time we had to leave the welfare and carry the tools to our camp spot. The children each took a hand saw. Anne had a backpack and I had a bag of fire wood. We crossed the gate and Anne ask me to shut the gate behind us as there were a family of lamas in the field. We met the lamas crossing, but as one boy was trying to tip toe over to greet them another girl came out from the left and bolted through the flock scattering them away from the little boy. He was upset and stopped off. He and some others found an ice patch running down the field. They began to explore it but were called back to the group by the teacher. Everyone had passed the gate except one boy, who had thrown himself in a gathering of weeds and was upset. The assistant walked over to help him. They came through the gate eventually. The children had gathered on a hill they found in the forest clearing where Anne had brought us. I began to explain again that I wanted them to find letters anywhere in the area. They could build them with sticks or find them in trees, the ground. Anything goes as long as they could read it. I divided them up in groups of two and they were assigned either one or two letters each to according to their grade. (1=1 2=2). I realized in the dividing up of the groups that the assignment was introduced poorly. They were not existed about their letter, and some did not know the letter they were given. Some just momentarily made the letter with some twigs and looked at me, ask if it was ok and could they go and play now? I realized quietly my plan did not progress as I had envisioned and to keep to the plan I moved around to the kids working to take a picture of what they had made. As I began to track down the kids some brought me back to the hill we started at to show me the letter they had made. It had either been ruined, or they forgot where it was. I did try to show some how they could use the moss to make letters, but they were not very interested.

Meanwhile, the farmer was building a fire. Her fire was now burning nicely and a student or two were helping her find wood to fuel it. As I was standing in the clearing trying to reevaluate my plan a student come up to me to show me some bones he found. He pulled several white bones from his pocket and we talked about what they might be and their shape. One of them looked like an uppercase B. I wandered into the forest to investigate what another group of kids were doing. They had created a fox den that they were protecting it from some of the other children in their class. They were not getting along, so I ask one of the boys to show me where he found his bones. He guided me over to a spot in the woods. There were some feathers left in the clearing, but all the bones had been collected by the children. We looked at some of the feathers and tried to figure out what kind of bird they belonged to. He pulled his bones out of his pocket again. We were looking at them when I ask him if we could make a letter out of them. Then I challenged him to see if he could make every letter in the alphabet out of the bones he had found. We started and as we got excited about the project the other den protectors come over to see what we were working on. They had also gathered some bones and they began to pool their bones to see if they had unique qualities that would contribute to our goal. The boys

were extremely cactuses of their bones and put them all back into their pocket after each letter we made. This made it difficult to see what we had to work with. I suggested that we lay them out in front of us so that they would be easier to see and not get broken the in the shuffling to and from pocket. The boys began to lose interest mid-way into the alphabet. To figure out the next letter I had to run through the whole alphabet fast in English, as I cannot say it in Norwegian. This fascinated the boys as they had never heard the alphabet that fast in English before. They now would wait in awe for me to figure out what letter came next while listening to me saying the alphabet as fast as I could. I would say the letter in English and then sound it out, then they would guess what it was in Norwegian. This got technique got us through the remainder of the letters. Once we hit Å the children disappeared into the forest finding other activates.

At this point I walked back to the farmer. She was tending to the fire. She looked at me and said “De har falt til ro” I knew what she meant. This is being she was waiting for, and what she by experience knew would happen in the forest. One boy was exploring the fire, a group of boys had found some garbage in the forest that they were using as tools, some were creating imaginative stories based on what they had learned about the fox. Some girls were laying on an ice patch and watching the water trickle underneath the top ice layer. Some were sawing down tree limbs and some were climbing up tree tops. The main teacher came over and mentioned to Anne that they were extremely lucky with the weather. She beloved that this would not have been as good of an experience had the weather been bad. Anne answered that if it would have rained then they would have found a spot further in the thick of the forest, and the location in which we explored the forest could be regulated from the wind direction and the general weather. At this point I also ask the teacher how she felt the lesson was going and she replied that some children had a hard time adjusting to the free flow of the day and events. But she was glad that they had all found activities in the forest. The one student that I assumed was the focus of the teacher’s concern was the only student that came up to Anne twice as we were cleaning up and thanked her, he said he had had so much fun in the forest and was not ready to go home.

After consulting with the farmer and the teacher we decided to gather the children so we could have enough time to find all the tools and gear we had used the in forest. The class gathered in no time at all, at the ringing of the cattle bell that Anne had introduced to them at the start of the day. We then sent them off to hunt for tools, but they were also found quickly. We counted the tools to make sure we were not missing any and loaded up the back pack. Each child carried a saw. We moved back through the gate and towards the barn. Once we were back the children went to the tee pee to gather their packs. They all came back to Anne at the main barn and she thanked them for visiting. We left her there as we walked the class back to the parking lot and divided into cars. Some were picked up by parents and some rode with the teachers.

Back at school I met up with the main teacher to get her immediate feedback. Her main concern was one student that did not do well with loosely planned activities and lack of structure. Although she did not mention this students name, I felt I could understand who she was referring to. It was the boy who had thanked Anne twice before leaving the forest. It was also the boy that was sucking on an ice chunk at the beginning of the day, who wanted me to take off the go-pro during lunch and who threw himself in the weeds before we made it to the forest. I noticed that this student had some difficulties, but there nothing that was out of line or worrisome about his behavior form my perspective. The teacher was afraid that if they lost control over this student the other students would get afraid. We talked back and forth about our perceptions of his experience and I talked her about how he had thanked Anne. I explained that today was full of new routines and experiences, but he left with a positive experience and an understanding of routine for the next visit.

Before our visit I was going to interview the main teacher as well as present a teaching scenario that she could comment on. I was hoping she could enlighten me on any problems she might foresee in my free teaching model. Unfortunately, the teacher was ill and not able to answer the questioner. I sent it to her electronically asking her to answer some, if not all the questions. I did not get a reply. I was hoping to uncover some of the teachers concerns before the fieldtrip so we could address them before the fact, rather than having to identify the problems as they unfolded themselves. Unfortunately, this did not go to my plan and I had to become attune to the individuals as we spent the day together. (refer to dialog with Anne about knowledge of students disorders before hand). I notice that the teacher was hesitant to most of the actions on the farm. Her lack of control over the students, her understanding and experience in the barn. I hope to ask her more about her experience and concerns from the field trip in a follow up dialog set Thursday 17.11.16 at 1330 at school.

Appendix 6: Log - Reflections on the first of four educational research lessons.

Interview notes from Meeting with class teacher.

I began asking her what her experience was like, her reactions and general feelings. She said that she was happy with the visit and that there were some incidents that revealed her lack of control as a teacher. She said that she felt much more in control of the students and their behavior when they are in the class room setting. Her fear of not knowing how they would react on the farm became apparent to her and us. I noticed this as she overregulated the children and told them what not to do rather than what to do. She was concerned with clear defined boundary's both in the interaction but also in the play. She said that she this need for control was in part her own personality, but also intensified by the regulations and responsibility she has for the students from the institution. She told me that she could let her shoulders down when she had brought the children back to the school and was no longer fully responsible.

She mentioned one student that needed clearly defined boundaries and structure, that she felt did not have an easy time on the farm. I assured her that this student did very well and was extremely thankful to the farmer at the end of the day. I told her that the next visit his student would understand the day and that he also would be able to build upon his positive experience from the previous visit.

We talked about how the teacher could bring what we had learned into the classroom the following day-weeks. She had talked to the children about their day and by the end of their discussion they had managed to incorporate every subject into their day. This she said, was illustrated by little subject cards she hung on the backboard, she normally hangs them up for the students so they know what subjects they are going to learn for the day. This time they experienced the field trip and defined the involvement of the various subjects subsequently. She was amazed that they could meet all subjects on one day.

I ask her about teaching cross-curriculum. She said that her school had decided last year to get rid of as many text books as possible. Their idea was that it would free the teacher up to create lesson plans that were more personal to the teacher, but also could reflect a greater specter of subjects when taught. She explained that this was a new way to teacher for her and that it was time consuming to structure the subjects and under-subjects that one would teach in these lessons. They also tried to bring the classes out of age based groupings and let the cross-curriculum teaching extend into intermixed age groups. She felt that this was an interesting method to use, but often difficult in the existing schools daily structure.

Pilot study: reflection, structure and future focus based on meeting with mentor.

Based on my description of events and reflections of specific moments during the day at the farm My mentor and I have outlined the following didactic framework for the next lesson at Strømøy gård.

Initially I had a three-part division of events for the day. I see that for the following visits I now must add a fourth element which does not take place at the farm, but a follow up activity that is carried out at in the classroom prior to the visit at Strømøy. The three-part division is important structure for the future visits. The first part, which is the barn chores primary purpose is to bring the children in to the reality of the farm. Make them acquainted first hand with the animals and their needs, as well as our role as providers and caretakers. It also functions as a method to familiarize the students with the farm, and the people and animals involved by working side by side. Working together creates a bond not only in the way we communicate in our division of labor, but how we can work towards the common goal of caretakers while we familiarize ourselves with the farm and its inhabitants and rhythm.

The second division of events is the togetherness of shared meal and experience. As we sit together and eat we not only fuel our bodies for the next physical experience of creative play, but the teachers tell stories of experiences on the farm which we weave together with a story or song.

Appendix 7: Map of Straumøy Gård

The area where the project took place.

