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Master thesis

Transmission of Crafts -and what can be used in a SEN-context.



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Abstract

There are rapid changes in our society in how the market relates to crafts. The industrial and digital revolution challenge us to bring new arguments to the table. The educational system has an ongoing debate regarding how crafts education should be organized in the future. There is a growing understanding for the use of practical crafts in a SEN-context as a therapeutic and formative tool, and for the impact of the UNESCO 2003-convention for Safeguarding the Intangible Cultural Heritage.

The aim of this thesis is to understand the transmission of practical crafts, both from a theoretical point of view, and from the practical side. It also intend to explore transmission in a SEN-context, and examine the material as a whole in order to see what can be learned. The research question, *how to understand transmission of practical crafts, from a theoretical and a practical view, and in a SEN-context*, evolved through an exchange with Otto Salomon, Jon Bojer Godal, Richard Sennet, Nicola Wood and Michael Polanyi who are theoretical sources for understanding the transmission of crafts. For the SEN-context Aric Sigman has been important. The request for research was approved by the NSD – Norsk senter for forskningsdata AS.

This thesis investigates three institutions; The Ruskin Mill Trust and Ringsaker AO centre, which both are experienced within the SEN-context, and the Norwegian Crafts Institute.

In total seven interviews were completed. The first three interviews with craftspeople who are all recognized as masters in their field. Also two learners and two teachers who work within a SEN-context, were interviewed. An interview guide was designed in order to ensure all the specific areas are investigated during the interview sequence

This thesis explores and describes methodology and structure for transmission of crafts, and based on the material it suggests recommendations for the future. Furthermore this thesis shows why our society need crafts; In schools, special

education, therapy, for well-being and as a part of our cultural heritage, our life. Finally this thesis shows how transmission of crafts can have a strong positive impact on people with special needs, and a true formative effect.

Glossary

To assist orientation I have chosen to begin this thesis with a glossary of terms. The terms are placed in their alphabetic order. I am fully aware that there are existing different interpretations of these terms, for my purposes it is useful to explain how they are meant to be understood in this thesis:

Bearers of the tradition

The bearer is to be understood as a craftsperson working with traditional crafts whom had his or hers knowledge handed over from the previous generation. I use the term *bearer of the tradition* in order to describe a craftsperson who possesses embodied knowledge in his or hers tradition, and is recognized by the community.

Community

The term community is widely used in my thesis, and is to be understood as rooted in Latin: *communis: shared, in common*, and therefore *not* limited to a geographical area. This interpretation is in line with the UNESCO 2003 convention of safeguarding the Intangible Cultural Heritage where the term is widely used. As an example the term *community* is repeated 25 times in the application form for inscription on the representative list¹ (UNESCO, 2018, Form ICH-2)

Crafts

When I use the term *crafts* it will be in the meaning *traditional crafts* (see below)

¹ Representative List of the Intangible Cultural Heritage of Humanity

Craftsperson

I have in general chosen to use the gender neutral term *craftsperson* when describing the performing craftsman- or woman. In plural form, I will use the term *craftspeople*.

Herme

In the Norwegian literature and some of my interviewees have used the Norwegian term *herme*. I have not succeeded to find a perfect match in English, but the term could be interpreted as *mimicking, replicate interpret or watching and learning*. Jon Godal defines the term like this:

The reflective action has the habit driven action as a premise. In general the practical will be drilled through herme the instructor that has demonstrated. Difficult and crucial grips will be trained in the learning environment 1:1 (Godal, Vatile & Mattson 1999 p.81)

In and about Crafts

In this thesis I point out the difference between to *know* and to *know how*. Unfortunately, this is not very precise in English. In Norwegian we say *vite* and *kunne*, (or in German *wissen* und *können*) which makes it more clear. My point is that there is a difference between the ethnologist, architect and the historians approach to crafts compared to the craftspersons knowledge. The ethnologist, architect and the historian might have a lot of knowledge about crafts, while the craftspersons knowledge is embodied knowledge. In this context I will use the term *in crafts* when I refer to the craftspersons skills and knowledge.

Learner

In order to underline the role of the person who is acquiring knowledge, I have used the term learner. In this context learner is used in a broad context as a term describing those who are learning at different levels, as children, apprentices, students, within or without the SEN-context.

Master and apprentice

The relation between the master and the apprentice in a crafts context goes far back in time, and all over the world. I have used the expression *Master and apprentice* when describing the relation on a crafts certificate level.

Models

By *models* I mean the pedagogical frames which characterizes the learning situation, like for example *learning one to one*.

NGO

In Chapter One, when writing about transmission as safeguarding measure in the spirit of the UNESCO 2003 convention I use the term NGO. Non-governmental organizations are usually non-profit and sometimes international organizations independent of governments and international governmental organizations that are active in humanitarian, educational, health care, public policy, social, human rights, environmental, and other areas to effect changes according to their objectives. There are several NGOs in Norway, and two examples of NGOs working with crafts is Norges husflidslag and Norwegian Crafts Institute.

SEN

I am using the term SEN, which is short for *special educational needs*. Types of special needs may vary in severity, as Downs syndrome, autism, blindness, and ADHD all are diagnosis under the SEN-umbrella category. There are nevertheless, different ways of understanding the term. Definitions of SEN vary widely across countries as they are specific to each country's legislation. Some countries define SEN using a general definition of disabled children, others categorizes SEN pupils into more than ten different categories. In particular the differences between Norway and England compared to the US is significant, according to an overview benchmarking the OECD countries (OECD, 2012) In the US a child must be diagnosed as having a disability and the disability must be found to "adversely affect educational performance" so as to require special services. To receive special education services, a student

must demonstrate a disability in one of 13 specific categories, including autism, developmental disability, specific learning disability, intellectual impairment, emotional and/or behavioral disability, speech and language disability, deaf-blind, visual impairment, hearing impairment, orthopedic or physical impairment, other health impaired (including attention deficit disorder), multiple disabilities and traumatic brain injury. In England a child has special educational needs if he has a learning difficulty which calls for special educational provision to be made for him or her. In Norway the pupils who either do not or are unable to benefit satisfactorily from mainstream tuition have the right to special education.

Sloyd

The term sloyd refers primarily to woodwork, but the term can also be used describing knitting or metalwork. Educational sloyd's purpose was formative in that it was thought that the benefits of handicrafts in general education built the character of the child, encouraging moral behavior, greater intelligence, and industriousness. Sloyd had a noted impact on the early development of manual training, manual arts, industrial education and technical education. Otto Salomon is regarded as the grandfather of educational sloyd. In his two publications *The theory of Educational Sloyd: The Only Authorized Edition of The Lectures Of Otto Salomon* (1898) and *The Teachers Hand-book of Slöjd* (2013), Salomon spells *sloyd* / *slöjd* different. I have chosen to be faithful to the original text, which means that both *slöjd* and *sloyd* will appear in the text as quotes, but with the same meaning.

Traditional Crafts

By *traditional crafts* I mean practical crafts handed down from generation to generation. Traditional crafts is in general recognized by the use of traditional techniques, tools, materials and models, The term *traditional crafts* is also used by UNESCO. In the Japanese Law of May 1974, Law for promotion of traditional Crafts Products, Designed by the Ministry of Economic, Trade and Industry, Crafts protected under the Law have to fulfil the following criteria:

- The article must be manufactured using traditional² techniques
- The article must be primarily manufactured by hand
- The article must be used mainly for everyday life
- The industry must be of a regional nature
- The materials should be mainly those which have been traditionally employed

(Weihe et al, 2009, p.63)

The spoon carver and researcher Dr. Nicola Wood, at the Sheffield Hallam University, says she will not attempt to make a definition of *traditional crafts*, instead she gives several examples as basketry, pottery, wood turning, clothes making and furniture making in order to describe the term. She also emphasizes the use of many techniques in traditional farming such as making brooms and rakes, and she mentions how close linked the skills are to traditional food production (Wood, 2002, p.5).

When looking at the Japanese definition and Nicola Woods more tacit approach, there is no contradiction in the different ways of explaining the term, but together they give good indication of the meaning.

Transmission

By *transmission* I mean the process where the knowledge is transferred between craftsperson's.

User

The Ringsaker A.O-Centre use the term user³ for their learners with special needs. The term *user* intend to be non-judgmental and describes in a neutral way the group of individuals using the learning environment organized by

² *Traditions* is in the Japanese Law of May 1974, Law for Promotion of Traditional Crafts Designed by the Ministry of Economic, Trade and Industry, defined as an unbroken tradition of at least 100 years.

³ NO: Bruker

Ringsaker A.O. Centre. The term user is referred to first time in 2.2.13 where I present three institutions, and among them Ringsaker A.O. centre.

En glede å lære av gamle folk.
Økseseminar i Rissa. Da gamle
folk seg god tid. Vi fikk tid til
å lære.

Kan gi litt bort mer ^{ja} ~~ja~~ lang bort.
Tar seg ikke nok tid. Viktig å kunne
ta seg tid.

I ren praksis kan gi utøver utbyttet
av læringen. Hva er viktig som lærer?
~~kan~~ kjemien mellom lærer og elev. En
du punkter godt ned. Blanding av
hvå du er lærer må du være
psykologisk. Må behandle folk forskjellig.
De er på forskjellige nivå. Som lærer
er det veldig viktig å slappe nysgjerrig-
het og ~~hva~~ entusiasme. Ikke alltid
liker lett. Viktig. Språk

1. Chapter One

Introduction

Just before summer in 2017 I was discussing education in crafts with a prominent member of the staff at the Norwegian University of Science and Technology. He kept on telling me about all the relevant things a higher education in crafts could learn from academia. After listening to him for quite a while I asked him if he could turn it around and see *anything* that the academic world could learn from the practical field, from the transmission of crafts? He was terribly insulted by my question and told me loudly that I was “difficult”.

The feedback I received could be understood as an example of a limited understanding of crafts as knowledge. It could be understood as tension between the practical world and the academia. In both cases I think it indicates a need for a better understanding of transmission of crafts, and not least it calls for a deeper understanding of the theme.

This is why this thesis has an empirical approach in order to investigate the transmission of crafts. My research contains qualitative methods as observation and interviews in the field. In order to better understand crafts I needed to move from my office chair to the workshops where the craftspeople are.

At the end of the day academics will be the ones who are organizing the programs for education, also within the field of crafts. In order to avoid mistakes, they need guidance to understand the complexity in passing on crafts. It is therefore my hope that this thesis can provide a deeper understanding of crafts, and help building a bridge between the academic and the practical world.

In this first chapter I will investigate the relations between practice and theory, have a closer look at transmission of crafts, and I will discuss *why* I

think there is a need for a better understanding of the issue. In order to get a broader perspective in this thesis I will not just use examples from Norway, but also include the craftspeople tradition found in Japan, in order to safeguard the craft tradition a Law for promotion of traditional crafts, as explained in the glossary. I will also highlight the relation between master and apprentice in the Japanese tradition.

The *why* will be answered with several examples from different positions as politics, the UNESCO 2003 convention, and a precious need for changing the education in a more craft friendly direction. Crafts strong formative ability will be highlighted, and in particular in a SEN-context. I will use examples from Ruskin Mill in England, which offers a range of course subjects to learners with complex needs. Their Practical Skills Therapeutic Education Curriculum claims to help students overcome barriers to learning, and become skilled through doing purposeful activities. Not least I will explain why a deeper understanding of crafts is important in my professional role as the head of Norwegian Crafts Institute.

1.1 Transmission of crafts

In the spirit of crafts I suggest we use the toolbox in line with what John Shotter claims, when he explains the tools in our toolbox as our ways of understanding. Nevertheless, *Shotter often finds the tools are hardly ever in the box, but spread everywhere and often not accessible (Penman, 2008, p.119)* In line with Shotter I suggest that before putting our hands into the toolbox of a Norwegian carpenter, we should look at transmission of crafts in a broader picture, looking for research tools. As the tools can be everywhere, we might as well start in Japan.

In 2007 I visited Japan in order to learn about how training of craftspeople. The background was the international recognition of the high quality of Japanese crafts and the Japanese way of organising education in crafts.

Contrary to our European traditions with journeymen the Japanese apprentice does not travel. Each workshop has its own secrets deeply rooted in the local tradition and generally speaking do not share them with others. The trainee usually stays for a long period in the workshop, often for the rest of his or her working life. The trainees I talked to, greatly admired their teacher, and would like to be together with him or her, as much as possible. Eugene Herrigel describes the powerful impact the master has on the apprentice:

Steep is the way to mastery. Often nothing keeps the pupil on the move but his faith of his teacher, whose mastery is now beginning to dawn on him. He is a living example of the inner work, and he convinces by his mere presence. (Herrigel, 1999, p.45)

When I asked the masters and their apprentices if they would have liked an exchange-programme between Japan and Norway I was each time asked to repeat and explain my question. My argument was that a different environment and context may reveal new creative impulses and input, give insight into other solutions and possible even generate creativity. The response was always the same: "Creativity? Impulses? You might have misunderstood; we are not art-students. We educate in crafts." (Weihe et al, p.65)

Listening to Japanese apprentices talking about their subordinated relationship to their master gave insight into a world entirely different from our own. Their humility and admiration of their master was a cultural shock. Even more so, when the experienced apprentices sitting beside their master and telling how much they admired him or her, and that their ambition was to spend as much time as possible together with him. Hardly any student in

Norway I know would be able to utter such phrases without blushing or having an ironic twist, and the approach can seem a bit submissive: “Nothing is more required of the pupil, at first, than that he should conscientiously copy what the teacher shows him” (Herrigel, 1999, p.45).

The length of the crafts education in Japan is an important reminder of the dedication to crafts and the demand for quality. An apprentice needs about 12 years to reach the Master level. Those 12 years would be in a learning process with a master in his or hers workshop. In Norway vocational school training will take three years, and just half of the period is dedicated practical work. After this, there is no formal education *in* crafts within the Norwegian school system.

The fact that Japanese apprentices in general spend 12 years in the workshop with their master before they are regarded as fully experienced, and the Norwegian students spend 1 ½ years with practical learning before getting their craft certificates, shows a different level of importance given to artisanship in the two societies.

I have chosen to share my experience of Japan as a reference, at this stage, in order to give an example of a concrete recognition of traditional crafts in a society, which gives a possibility for benchmarking in a broader context and help to gain a deeper understanding.

1.2 Why is a deeper understanding of the transmission important?

Why investigate the transmission of crafts more closely? Will it bring new arguments and knowledge to the table? I believe it can. The industrial and technological revolution has rapidly changed our relation to crafts. Nicola Wood exemplifies this point with the crafts of making clogs:

“Whilst the industrial revolution led to a high demand for clogs, the resultant increasing mechanisation of the process led to a gradual erosion of both the design of the product and the hand craft skills which only remained in isolated areas” (Wood, 2006, p.101).

In *Digitally handmade* Lucy Johnston claims that while the industrial revolution of the nineteenth century diminished the role of the craftsperson in the manufacturing process, the digital revolution has had a less devastating effect. According to Lucy Johnston digital technologies have given rise to new working methods and consumer products that don't eliminate, but can enrich traditional hand techniques. (Johnston, 2015) Therefore we need to understand and define the need for crafts in our time. Not just the products, but traditional crafts as knowledge, practices, for well being, SEN-friendly, and as cultural heritage. In order to develop the society a craft-friendly direction, I will try to explain the impact and the many outputs of crafts transmission.

As Lucy Johnston suggests I believe that there is a shift in the society's understanding of traditional crafts on different levels, and an increasing understanding of the value of passing on practical crafts in different contexts, as for example in primary school and for preserving and restoration of our physical cultural heritage.

Examples of evolving acceptance of craftsperson's knowledge in our society, also on a higher level, is evidenced through examples such as a formalized 3

years scholarship program for craftsmen- and women⁴, or the bachelor program for craftsperson's⁵ within the field of restoration.

Describing crafts and transmission of crafts in words can be a challenge as their contexts can be complex and contain a huge number of elements. One of the challenges is that crafts and transmission of crafts is one way of expression in itself, and writing is another form of expression.

Godal compares reading a book and yarn-shooting⁶. He claims that while the book as a medium contains one dimension, where the reader receives information from the text written in it, the yarn shooters work contains several dimensions. The yarn-shooter considers the shape of the yarn when it's put in the sea. The shooting is therefore completed differently in the edges compared to the middle. He also considers the sort of fish he is going to catch, as the shooting is different for different species of fish. He or she has to consider depth and the stream in the current area. By comparing these two ways of reading, Godal shows the complexity and the need for interpretation in the craftsperson's approach to knowledge. The complexity is also exemplified by Nicola Wood, (2006) who illustrates it with the carpenter hitting a nail into a piece of wood. The carpenter's hand is in direct contact with the tool handle, but there is only a subsidiary awareness of this and the focal awareness is on the impact between the end of the hammer and the nail. "The person hammering is able to tacitly adjust the speed and direction of the hammer blows whilst concentrating attention on the nail entering the wood". (Wood, 2006, p.109)

⁴ Since 1996 the Norwegian Crafts Institute has had the responsibility for administering a three-year scholarship programme for craftsperson's who wish to develop their skills beyond the trade level and the standards of trade certification. Formalized since 2015.

⁵ Bachelor in Traditional building-related crafts and technical safeguarding, Norwegian Technical University NTNU

⁶ NO: Garn-skyting, Can be translated as the fishermen's preparation of yarns for fishing

Godal's yarn shooter and Nicola Wood's carpenter are excellent examples of the complexity in embodied knowledge. Nevertheless I will add that the yarn-shooters approach to knowledge and performance is not exclusive for crafts. As a similar example from daily life, not related to crafts, one can image all the judgements and calculations we do every morning in order to put butter on a piece of bread. The complex interaction between body and accurate calculations finally ensures a perfect slice of bread. The surface, the consistency of the slice of bread, the softness of the butter, the angle on the butterknife; all of these single factors are important and have to be considered in order to prepare a piece of bread with butter.

1.2.1 My professional role

Another main motivation for investigating the crafts is related to my professional work. The organisation where I work, The Norwegian Crafts Institute, is safeguarding and focusing on traditional crafts. The institute is passing on the crafts knowledge to a new generation. I hope that my investigation into the theme will enable me to critically investigate, methodology and practice, of my organization and how it is maintaining and developing traditional crafts today. I hope that this thesis will bring new knowledge on the table, and confirm or challenge our choice of methodology and tools, and will help us improve our methods in the future.

For more than 30 years Norwegian Crafts Institute has been organizing transmission of craftspeople knowledge and how it is passed it on to a new generation. In most cases, the methodology has been following the master-apprentice model where the bearer of the tradition is working together with a craftsperson. Over time the knowledge has been passed on from the bearer to the new craftsman. The institute have also tried out other models over the year, but the one to one has seemed most effective. I will go into more detail with this model in Chapter Two.

1.2.2 Political reasons

Norwegian politicians understand that we need craftspeople in Norway in the years to come. We need skilled craftspeople to paint our houses, build our homes and schools, and to make our food, to restore our cultural heritage; stavechurches, farmhouses, church paintings, castles and other monuments. Norway's Minister of Education, Jan Tore Sanner, writes in the newspaper *Aftenposten*:

Instead of talking down practical education, we will highlight and applaud those who choose it. And more importantly: In the next few years, we will struggle to get a lot of skilled workers. In other words, we must not only cheer, we need more people to apply for vocational subjects. Norway needs you as if you are wondering if you are going to choose vocational subjects! (Sanner, 2018)

Sanner finds support from the Norwegian Head of the Directorate for Cultural Heritage, Jørn Holme, who suggests that the bottleneck for safeguarding our Cultural Heritage is not lack of money, but skilled craftspersons. The Norwegian government has even proclaimed that 2018 is the year of vocational subjects.

While Jørn Holme's reason for more training of craftsmen is the society's need for restoration and maintenance of monuments and buildings, Jon Godal is concerned for the traditional crafts itself, as a living heritage.

Sanner's perspective suggests that that crafts and practical skills are important and that we will need more craftspeople in the years to come, we will need to educate more craftsmen- and women. In this context I suggest it is crucial to include practical crafts in the education and curriculum already in the primary school.

Politicians have also understood that if young people are going to choose the path of crafts, the foundation is laid in the primary school to offer a new generation a taste of practical crafts. We need to show them it's important by making room for it! There are several suggestions that have been made in

order to strengthen crafts education on this level, but there have not yet been any revolutionary moves made. This problem could be rooted in the system and lack of a deeper understanding of crafts and practical skills.

1.2.3 The status of crafts in our society

I also believe there is still a way to understand and reflect upon the status of craftwork and manual labor in our society. As an example of this I will mention Jon Godal who remembers and writes about his experience from 1979 when there was a discussion on a possible education in crafts as a part of higher education in an article published in *30 år I håndverkets tjeneste* (Velure et al, 2017):

One of the prominent professors raised, looked at me and said: If a man has been provided enough in his brain to study theory, he or she will never go on with something practical (Velure et al, 2017, p.11).

Even if Jon Godal's experience from the meeting with the professor happened almost 40 years ago, my own experience, on which I have reflected in the introduction, shows that there is still a need for increasing the status of crafts and craftspeople in our society and in the schools system. Both examples I have mentioned here should be an inspiration in order to strengthen the craftsmen's status. To do that, I suggest we start in primary school, as Otto Aron Salomon predicted 120 years ago, and whom I will come back to in Chapter Two.

1.2.4 Changing the education and including craft practice

There is an ongoing discussion on crafts in the Norwegian school system on all educational levels, from primary school to university level. Here are some examples:

In 2017 the Norwegian Minister of Education said that he wanted *practical crafts* to be a clearly defined part of the education in primary school after having been given a cold shoulder for many years. This was probably based on the recommendation of an advisory board established by the Ministry of Education.

In 2016 The Ministry of Education established an advisory board⁷ chaired by the former president of the Norwegian Parliament, Kirsti Kolle Grøndahl, with an open mandate to look at future education on a crafts certificate level, and they came up with several suggestions, as to strengthen craft / practical skills at all levels in school. As a concrete measure the board suggested to include practical crafts as one of the basic subjects in primary school, with the same priority as math and English. The board also suggested to invite practicing craftsmen to be supervisors and teachers in the school. It was emphasised by the board the importance of maintaining the education in the small and traditional crafts, as cobbler, blacksmith and silversmith. Furthermore, the board suggested establishing scholarship schemes for apprentices, students, teachers, strong professionals and traditional bearers who worked in the field of traditional crafts. (Kolle Grøndahl et al, 2016)

The examples in the previous paragraphs demonstrates that there is a political will to change the education according to traditional crafts and improve the education.

Is it possible to strengthen the craft in school? To answer this I suggest it will be important to critically investigate the pedagogical principles and the impact of craft in education. I have therefor formulated four questions I will explore in Chapter Four, in the light of my findings:

⁷ Yrkesfaglig utvalg for immateriell kulturarv og verneverdige fag

- Is the preferable way to pass on crafts through practice?
- Is the best model for teaching and learning crafts in an one to one relationship?
- Does craft have a strong transformative impact?
- Does the new technology in transmission of crafts contribute to the craftsperson's toolkit and how?

At the Norwegian University of Science and Technology (NTNU) there was in 2015 established a bachelor program for *Traditional crafts and safeguarding of buildings*. This education is primarily directed toward craftspeople.

In Norway, all children and youth between the ages of 6 and 19 are entitled to education for a total of 13 years. This right applies from first grade to elementary school to the last year of upper secondary school. This is often called basic education. At this stage its possible to choose a vocational direction in school, as an apprentice or as a combination. Final exam in vocational subjects in upper secondary education gives a crafts certificate. The next step is the higher education which includes education at universities and colleges.

The previous examples shows how the Norwegian school system slowly seems to open their door for crafts on different levels. I will suggest this calls for a deeper understanding of methodology and pedagogical principles. Is the Norwegian school system of today able to handle the complexity of practical, traditional crafts? There are several critical voices, among them, Jon Bojer Godal:

From the outside it seems like the driving forces of the school system has found a sadistic pleasure in killing the level of knowledge in the trade (wooden boatbuilding). Is it a conscious downsizing in order to promote the interest of the industrial manufactured boats in artificial fibers, aluminum and steel? (Godal et al 1999 p.17)

As I noted in the introduction where I discussed crafts and higher education with a prominent member of the staff at the Technical University, and here exemplified by Godal, there seem to be a tension between academic and practical application in the understanding of learning. It demonstrates why it would be interesting to investigate how a recognized master craftsperson has achieved their craft skills; Through the school system, in an auditory, or in an interaction with the master, with a theoretical or a practical approach?

I suggested that there is a potential in an exchange between theory and practice. Academia could learn how the craftsmen successfully hand over and transfer complex knowledge to a new generation. This is a process that has been going on for thousands of years.

In the academic context it could be of great interest to identify research *in* crafts. Not in the meaning research about crafts, as ethnologists and historians do every day within the academic institutions, but research *in* crafts, as practiced with a craftsperson. In other words: Is there a parallel universe for developing crafts as knowledge on a higher level? By *parallel universe* I mean an environment for craftspeople, formal or non-formal, where they can develop their practical skills at a higher level, outside the academic frames.

1.2.5 Possibilities of traditional crafts in a SEN-context

For 10 years, I have been working with children in the summertime. The programme organized as a cooperation project between Maihaugen Museum and Norges Husflidslag, and is named Young Sloyd. It is situated at the Maihaugen Open Air Museum, which contains traditional buildings, forests and lakes. My responsibility is to be Robin Hood and I teach the outdoor-part of the course, including fishing, bow and arrow, and sleeping outdoors.

Each year children with diagnoses of ADHD participate. There can also be children participating with other challenges, but ADHD is the most common

SEN-label used. Ten years of experience has taught me that practical activities and being close to nature and crafts has a transformative impact on children. I have seen several cases where children who cannot cope within the narrow frames of a classroom, who needs both medication and assistant, transform quickly as they become a member of Robin Hood's bold outlaws.

Examples of how crafts can be used as a powerful therapeutic instrument is already well documented and contains a wonderful potential. We might therefore say that crafts represent a huge possibility for SEN, and that SEN represent a huge possibility for crafts, because of crafts strong transformative impact on the practitioners. Aric Sigman suggest "Craft courses score highly in terms of providing students with creativity, independence, determination and problem-solving skills". (Sigman 2015, unpaginated)

The importance of crafts for human development is also supported in Otto Aron Salomons work, Salomon writes how crafts develop us humans. Salomon's view is particularly interesting because his arguments were introduced as a reason for introducing educational sloyd in primary school in the 1880's. Solomon summarize how practical crafts are a tool for releasing the potential in Humans and assisting human development.

In the publication *Practically Minded*, Dr. Aric Sigman explains the impact of practical work-based learning, and the transformative effects practical crafts provides us as humans. The importance of practical crafts in a SEN-context is explained by Sigman who refer to a report made in 2010 by the British Government's Office for Standards in Education. He had been investigating the Ruskin Mill College curriculum for Practical Skills Therapeutic Education:

Ruskin Mill College has outstanding success in developing students practical crafts and land-based skills. Students have excellent successes in achieving a range of national awards. They develop highly effective communication and personal skills which enable

them to participate confidently as valuable members of the wider community (Sigman, 2015, unpaginated).

I will discuss Ruskin Mill college more closely in Chapter Two. In this context it is interesting to observe the red historical thread from Salomon to Sigman. Salomon's main mission in the 1880's was *not* to educate woodworkers and craftsmen, but in developing the pupils physical and mental powers:

Its purpose is not to turn out Carpenters, but to develop the mental, moral, and physical powers of children; and it is the most effective instrument yet devised for securing this development (Salomon, 1898, p.1).

In my opinion, it would therefore be interesting to examine crafts in a SEN-context: How the transmission of knowledge is performed, to learn about the effects and about crafts as a therapeutic tool. I suggest that a better understanding of the complexity of practical knowledge and learning in relation to SEN-education, can be investigated in order to provide a new direction: In particular in the education system, but also for the understanding of practical knowledge and craft in society.

For the survival of handcrafts in the future we should continuously be aware of, and develop, new potential for crafts. I suggest that one of the interesting possibilities is the combination of traditional crafts and special needs.

1.2.6 Transmission as safeguarding measure in the spirit of the UNESCO 2003 convention

In 2007 I was working in Georgia on behalf of UNESCO, and I met several craftsmen. One of them, Irakli, was a traditional blacksmith. Irakli told me that that during the Soviet occupation it was forbidden to practice the trade of blacksmithing, as it was regarded as a way to undermine Stalin's industrial

long-term plan of the industrialization of all the processing of metal. The blacksmiths therefore, in order to safeguard their tradition had to practice their trade secretly, and in the night. Blacksmithing was an underground movement. If the practitioners were caught they would risk being sent to concentration camps, also known as Gulag. Despite this fact, and in order to keep their precious tradition alive, they kept on hammering.

When the Norwegian Parliament ratified the UNESCO convention for “Safeguarding of the Intangible Cultural Heritage” in 2007, they also recognized the craftsperson’s knowledge as an important part of our cultural heritage, Traditional Crafts is one of the five significant domains covered by the convention.

Luckily Norwegian blacksmiths are not in a similar situation as the Georgian blacksmiths were under the soviet occupation. There is no political prohibition of handicraft in Norway. Nevertheless there are other threats, as the rapid changes in our society caused by urbanization, industrialization and digitalization, challenges the traditional crafts. Not just the products, but also the methods for transmission. There is a changing market where handcrafted products are challenged by mass production and cheaper products, often imported from countries as China and India. The market for bunads⁸ has increased heavily the last decades, and producers outside Norway have therefore picked up the needle and the thread:

The reason is partial price and partial offer. You'll lose by about two-thirds of the total if the bunad is partly produced abroad, and the recruitment of Norwegian textile workers has not grown close to what the demand has. Everyone wants someone to sew bunads, but very few want to do it themselves (Ibsen, 2015).

⁸ Traditional folk costumes

Another threat is urbanization. Young people move into the towns instead of picking up their families' trade such as blacksmiths, hand weavers or boat builders. These are generic threats, which are repeated in places around the world.

There are several examples where Norwegian organizations volunteer in activities which aim to safeguard traditional crafts and pass it on to a new generation. One example of such an organization is The Norwegian Folk Art and Craft Association⁹, which have been supporting traditional crafts in Norway for more than 100 years. As a non-governmental organization with more than 24 000 members, they are an important organization in order to promote crafts locally and nationally, and to improve the awareness and the quality of folk art and crafts.

The craftsperson's knowledge is very vulnerable, as it is situated in an individual, and dies with the craftsperson if not passed on to a new generation. Traditional crafts are practices which are passed on through skills and movements and interaction with materials and tools. This is why the convention recognize the practical transmission as the most important safeguarding measure.

The UNESCO 2003 convention is important for NGOs like Norges Husflidslag as it commits the Norwegian state to "Safeguard", not just the objects, but the living, traditional crafts. The main safeguarding measure as it is expressed in the convention is the practical transmission, and passing it on to a new generation. Norway's ratification of the UNESCO Convention for Safeguarding the Intangible Cultural Heritage calls for a deeper understanding of Safeguarding through transmission.

⁹ Norges Husflidslag

1.3 Challenges and limitations

One of the challenges when describing crafts, and transmission of crafts, is that the practice is one mode of expression, and explaining through the use of words is another form of expression. Godal explains the difference between practical learning and theory like this:

The craftsperson (The yarn shooter) express him- or herself in another medium than the theorist, thus both of them thinks, both has a huge insight and both are practical usable. The difference lies in that there is needed a particular type of knowledge to be able to read a yarn, as for reading books it is based on the common knowledge to read. The benefit of words is that they are more common than knowledge expressed in other ways (Godal, et al, 1999, p.21).

In this context I might ask if it's possible to describe the depth and the complexity in what we sense when a skilled craft person performs. According to Godal, it is challenging. This thesis will therefor *not* attempt to describe *how* things are made step by step. I will investigate how transmission of crafts occurs through the relation between the craftsperson and the learner. This relational process of one to one teaching and exchange is complex and includes location, material, tools, movement, sensory perception, rhythms and action born knowledge.

1.3.1 Economics

When investigating good practices and experiences for transmission it is for example obvious that it is more expensive teaching one to one or in smaller groups, compared to larger groups. In this thesis I have chosen *not* to discuss or dwell by the economical perspective, as this perspective already are more than well emphasised and well taken care of by government, Municipalities, and schools. My aim is to identify the pedagogical methods and practices.

Besides it would be quite difficult, and probably a MA in itself, to calculate these costs. If for example more practical crafts are introduced in school, it may result in less students are dropping out of school. Less drop-outs would have positive economic consequences and could be incorporated in a budget.

1.4 The structure of this thesis

This thesis start with a glossary, for the reader reader to understand the perspective of the author. My intention is to clarify expressions and terms, and avoid misunderstandings or misinterpretations.

In Chapter One I have investigated the relations between practice and theory, and had a closer look on transmission of crafts. I have also explored *why* I think there is a need for a better understanding of the issue, and I have used examples from my professional work, political reasons, the status of crafts in the society, challenges in education, and traditional crafts in the spirit of the UNESCO 2003 convention for Safeguarding the Intangible Cultural Heritage. In order to get a broader perspective in this thesis, I have introduced, not just examples from Norway, but also from Japan and Georgia.

In Chapter Two I will explore some relevant theorists who have investigated crafts and craftspeople. I will discuss methodology of empirical data and how I selected the interviewees. I will describe Ruskin Mill Trust and Ringsaker AO-center, who are both working with crafts in a SEN-context, and the methodology and principles used by Norwegian Crafts Institute. Chapter Two concludes with the research question for the thesis.

Chapter Three presents the findings. It starts with a short introduction to the field work and my aim to sample the craftspersons voice. This is followed by my reports and reflections of interviews and observations.

While Chapter Three was dedicated to the case studies, I have, in Chapter Four, discussed and compared my findings in the Chapters Two and Three. I have compared my experiences and how I learned from learned from the interviews, observations and the theory. I have used my findings in order to assist my research question.

In Chapter Five I have summarized my findings, and presented my contribution to the knowledge of transmission of crafts, both in general and in a SEN-context.

2. Chapter Two

What do we know about transmission of crafts?

The previous chapter provides reasons for knowledge regarding transmission of crafts. This chapter will explore some relevant theorists who have attempted to describe crafts and craftspersonship. I will discuss methodology, empirical data and how I will select the interviewees. I will briefly describe Ruskin Mill Trust and Ringsaker AO-centre, who are both working with crafts in a SEN-context, and the methodology and principles used by Norwegian Crafts Institute. Chapter Two will conclude with my research question.

2.1 Theoretical contributions to Crafts

When I use the term *relevant theorists* it means I have selected, and some are excluded. The theorists I have chosen writes about the transmission of crafts in a way that I suggest will be useful to explain contexts, as their theories are rooted in practical experiences. This means I have chosen not to include theorists who are unclear when relating their theories to crafts, and where imagination is needed in order to relate their work to practical crafts. I have chosen not to include the engineer's technical perspective with boxes and arrows when describing the transmission, as I find these models too technical, and more confusing than clarifying when relating to my qualitative approach where I am investigating the individual impact and process. From my point of view the engineer's approach describes the transmission as a GPS describes how to get from A to B, while I want to investigate what happens on the way, and the transformative impact, as crafts is embodied in individuals.

From my own experience I will suggest that learning crafts organic rather than mechanical. I have therefore chosen to concentrate on theorists who explore the learning process from a personal perspective and their

relationship with the craftsperson. This is also my approach in Chapter Three where the interviews are designed as qualitative and open in order to better understand the craftpersons individual experiences.

Contribution to the subject of crafts is not new. I have examined theorists such as Otto Aron Salomon, who wrote his theories on the theme slojd in the 1880's to more recent publications on the theme, like the Danish bricklayer Mattias Tesfaye's book *Wise hands*¹⁰. When I investigated different places in the world, Japan to Norway, it appears to me that the issue I am about to discuss is universal and not limited to Norway. In order to better understand crafts and the transmission, there are some in particular relevant theorists, Otto Aron Salomon, Michael Polanyi, Richard Sennet, Jon Bojer Godal, Nicola Wood, Mattias Tesfaye.

The Swedish slojd-guru Otto Salomon was influenced by the works of the educators and philosophers who have approved physical activity as a means of formative education, and he drew his basic ideas from Comenius, Locke, Rousseau, Salzman, Pestalozzi, Fröbel, Cygneus and Spencer. (Thorbjörnsson, 1994, p.2) Salomon blended their ideas with his own experiences and adapted them to the needs of his own time. Converting their theoretical ideas into educational practice, Salomon built up a system of efficient educational crafts which has been recognized as an important contribution to education.

The Theory of Educational Slojd: The Only Authorized Edition of the lectures of Otto Salomon was published first time in 1898. This book looks at slojd in a broader view, like a powerful tool in education. He writes about slojd:

“Its purpose is not to turn out Carpenters, but to develop the mental, moral, and physical powers of children; and it is the most

¹⁰ DK: Kloge hænder

effective instrument yet devised for securing this development.
(Salomon, 1898, p.1)

Salomon use the term *slojd* as meaning a system of educational handwork, embracing different kinds of materials and techniques. Otto Aron Salomon writes how traditional crafts have an impact on the human development. Salomons view is particularly interesting because they were introduced as a reason for introducing educational slojd in primary school in the 1880's. Salomon summarize how practical crafts can be a tool for releasing the potential in Humans. Salomon gives a systematic and clear answer with his seven formative aims of Educational Slojd:

1. To instill a taste for, and a love of labor in general.
 2. To inspire respect for rough honest, bodily labor.
 3. To develop independence and self-reliance.
 4. To train in habits of order, exactness, cleanliness and neatness.
 5. To train the eye and sense of form. To give a general dexterity of hand, and to develop touch.
 6. To accustom to attention, industry, perseverance, and patience.
 7. To promote the development of the physical powers
- (Salomon, 1898, p.7)

What Salomon suggest is that learning crafts is transformative. It changes and develops the learner in several ways. "Slojd is solely a means of Formative education" (*Salomon, 1898, p.1*). With his seven formative aims, Salomon formulates the rich outputs of practical slojd, and how it benefits the student in human development.

I have listed Salomon's seven formative aims because I think they explain some of the complexity of practical crafts education. They indicate how educational slojd changes us a humans. Salomon's theories are therefor relevant for understanding the transmission of crafts in general and in a SEN-

context. Richard Sennet has a similar approach when he describe how we need crafts in our lives.

In *The Craftsman* (2009) Richard Sennett views the satisfaction of physical making as a necessary part of being human. He investigated that we need craft work to keep ourselves rooted in material reality. As a violinist himself Richard Sennett has an insight in training and repetition which is similar to the craft persons experiences. In *The Craftsman* he explores the dimensions of skill, commitment and judgment and focuses on the intimate connection between the hand and the head. *The Craftsman* indicates that he is fascinated by the ideas of John Ruskin who claimed that people would live better lives if they returned to manual work: "The radical nature of John Ruskin's vision was to assert that modern society as a whole, should and could return to the preindustrial past". (Sennett, 2009 p.108)

In the introduction I used the term *Master*. Salomons context is sloyd education for 10-11 years old children and upwards, and therefore he use *teacher*. Salomon points out the quality of the teacher as a crucial point: "If the teacher be bad, the instruction is bad, and the school is bad. If the teacher be good, the instruction is good, and the school is good". (Salomon, 1898, p.69)

Salomon says that the teacher first of all needs to be a good teacher, an educator, and that the technical skill is not of so much importance. Understanding his point it is important to take into consideration that he says this in the context of educating young people in primary school. And that the aim is not to educate craftsmen. He goes very far and claims that the artisan cannot be a good teacher until he or she *has forgotten his trade*. (Salomon, 1898). He also explains that this has been the feedback from the Swedish inspectors that have reported on Sloyd:

(The inspectors)...say unanimously that the work produced by means of ordinary teachers is far superior to that produced by means of artisans. (Salomon, 1898, p.71)

Salomon does not explain what he defines as *work*, but I understand it as he points at the educational output, and *not* the objects or the practical skills. In other words Salomon says that being an educated teacher is important in this context.

Why does Salomon have this strong view? Why does he devalue the importance of the teachers practical skills? Could it be that he, and the Swedish inspectors, defends their profession as educators?

Salomon moves into the SEN-context in his book in the chapter *Habits of attention* in his book *The Theory of Educational Sloyd*:

If practical manual work be introduced, the case is different, for many that are when the head works without the hand, excel when the use of hand is required as well as that of the head, as in slojd. Children who are naturally apt and dexterous when hand and head work together, although slow when the head works alone, have often more self-respect after discovering their power and their skill. (Salomon, 1898, p.47)

In Salomons opinion, the children that struggles theoretically might transform as humans when learning practical slojd. In his view the practical crafts is a tool for transformative learning. The aim is not the objects, or educating craftsmen, but education in a broader view, as humans. Developing our skills and powers gains self-respect.

I have used two of Salomons publications, *The Teachers Hand-Book of Slöjd*, wich originally was published in 1892 and *The Theory of Educational Sloyd: The only authorized edition of the lectures of Otto Salomon* which came out in 1898. In Salomons books he use a different spelling of the term *slöjd* and *sloyd*. In order to stick to the original text, I have used both spellings.

While Salomons concern was the formative result of practicing crafts, and how it has an impact different from a theoretical approach, Michael Polanyi explains how the practical dimention and how we work with our hands as different from reading a book or listening to a teacher talking. Polanyi

interpret skills as how the “the performer co-ordinates his moves by dwelling in them as parts of his body” (Wood, 2006, p.16).

Can one explain complex knitting, technique and patterns, in words and make other people understand what you are talking about? It would be, in best case, very difficult, and some would say impossible. Michael Polanyi illustrates this point well. Michael Polanyi was a philosopher who among other books wrote one called *The Tacit dimension*.

In my introduction I provided two examples of the complexity in a performing action: I referred to Godals yarn-shooter who is making his or hers yarns, and I referred to the person putting butter on a piece of bread. Polanyi observed that much of this knowledge was so internalized and interwoven it was not possible to express, which became widely known as tacit knowledge.

The person hammering is able to tacitly adjust the speed and direction of the hammer blows whilst concentrating attention on the nail entering the wood. (Wood, 2006, p.109)

The basic insight provided in the Tacit dimension is the understanding that we, as Michael Polanyi puts it, “Know more than we can tell” .(Polanyi, 2009, p.4). Very relevant for this thesis is this, that tacit knowledge cannot easily be formalized and put into words. Polanyi also claim that the *tacit dimension* is important in order to understand our life and our world. I understand Polanyi’s tacit knowledge similar to the terms *action borne knowledge* and *embodied practice*.

An example Polanyi use for illustrating his point is recognition of a face. You can recognize a human face among thousands just by looking at it. But if you try to describe the same face in words, it will be much harder separating one face from the other.

Nicola Wood explain the learning process into two phases, and exemplifies it from when she learned how to make a wooden slide whistle. A simple musical

instrument consisting of a long tube with a mouthpiece to blow into at the one end and a plunger to vary the note the other end. This is a popular instrument also in Norway. Wood suggest: “To interpret Polanyis theories, the process started with a period of empathic indwelling whilst working with the expert, but this was relatively brief in comparison to the subsequent period of personal indwelling whilst I repeated the making of my own.” (Wood, 2006, p.18) In other words the first step in her learning process was to make flutes together with a practitioner, and the second step was repetition and practicing.

Jon Bojer Godal is undoubtedly the most recognized Norwegian practitioner and theorist on traditional crafts. He has done a lot of research and documentation, and has published several books and articles on the theme, and is one of the inventors of the term *action-borne knowledge*, which we use in order to describe the transmission. In Maihaugen Museums yearbook Godal explains the need for such a term:

The expression action borne knowledge was an answer on a need for a covering term. We were working with plans for an education in crafts on a university level, and the performing trades premises (Falk et al, 2007, p.15).

Godal wanted to find a term that covered the craftsperson’s learning process: Knowledge born through action. He was not satisfied with the existing terms. The Swedish term silent knowledge (*tyst kunnande*) points at the absent of something. Godal wanted to find a term that pointed at the containment of the expression, not the absent. In Maihaugens yearbook from 2007 he writes:

We had been checking out the literature, and was not satisfied with what we had found there. “Silent knowledge” or “tacit knowledge” was not good enough. First, the craftsperson’s were not always silent. The have a language and use it (Falk et al, 2007, p.15).

As in Nicola Woods example when she learned how to make the wooden slide whistle and she describes the first phase as *emphatic indwelling*, Godal also emphasise the first phase in the learning process. He uses the Norwegian term *herme* to describe almost the same thing. I have struggled to translate the term “herme” into English: The word describes the interaction between people where one is doing something and the other one is mimicking the action from observation. In his article *Does the term action born knowledge help us to a future to the crafts?* In Maihaugen¹¹ yearbook (Falk et al, 2007) Godal gives an example where he observes how the son of the lumberjack Gunnar Heggelia, Håvard, walks behind his father and makes the same moves. The same dancing moves, bending his knees and hips in the same way. He describes how the boy saw, imitated and learned. We might say Håvard adopted a piece of moving culture handed over from his father.

The reflective action has the habit driven action as a premise. In general the practical will be drilled through *herme* (NO) (mimicking, replicate interpret, watching and learning) the instructor that has demonstrated. Difficult and crucial grips will be trained in the learning environment 1:1 (Godal et al 1999 p.81).

Another point that Godal refers to is the difference between *kunnande* og *viten* (It lacks a good parallel in English: know and knowing how is probably the closest). In German *können und Wissen*. The action born knowledge is first of all *å kunne*. According to Godal knowing is tied to action. It is something that we *can*, as bicycling or writing. What we *can* we learn directly, and its tied to role models and making our own movements. We learn directly by mimicking and trial.

According to Godal its fundamental that *kunnande* is something we can, but *viten* is something we know without necessarily are able to do.

¹¹ Maihaugen Museum in Lillehammer

Thirty years ago, Jon Bojer Godal was one of the founders of Norwegian Crafts Institute, and he have had a major influence on the design of the current model for transmission of crafts the institute use today. Godal is an important contributor when it comes to explaining the difference between theory and practice.

The Danish bricklayer, Mattias Tesfaye published in 2013 the book *Wise hands* in which he describes a defence for the handcraft and the professionalism of the trade. Tesfaye is relevant because he investigates the situation in Denmark, which is very similar to the education in Norway. In his book he attacks the systematic destruction and downscaling of crafts in Danish school system, and describes the effect on the children and the traditional crafts. He finds support in Nicola Wood who explain the situation in England like this: "The situation nowadays is very different with few traditional trade apprenticeships remaining, a decline partly due to imports of cheap, hand crafted items from countries with low labour costs"(Wood, 2006, p.7)

Nicola Wood conducts research into how craft skills and tacit knowledge are handed on. She is particularly interested in exploring ways to preserve and share craft knowledge using multimedia, the web, video etc.

A huge advantages of Godal, Wood and Tesfaye is that they are actually craftspeople themselves. This means that they have an insight provided not just the theoretical way but also embodied experienced.

Tesfaye refers to the philosopher Anaxagoras (500-428 bc.) to explain the huge role crafts has in our culture and our history. "It's the human hands that makes us the most intelligent animal" (Tefaye, 2013, p.28)

Twisting Anaxagoras' argument, Tesfaye says that without crafts there is no culture, and without crafts we are like animals. In other words: Crafts is what makes us human, its our identity and our history. I suggest Tesfayes contribution is important as he explains the cultural and social value of crafts

in the spirit of the UNESCO convention for Safeguarding the Intangible Cultural Heritage introduced in Chapter one. One of the countries that were a driving force in the work in the initiative for, and later the preparation of the UNESCO convention was Japan.

In the book *Zen and the Art of Archery* Eugen Herrigel describes his own journey, a learning process, where he is learning how to shoot with a Japanese bow, and at the same time get an insight in Zen Buddhism. He spends six years with one of Japans great Archery Masters, and as he step by step learn to use the giant bow he also change the way he relates to the world. This book explains the learning process and the relation between Master and the apprentice both in a zen perspective, and from the apprentice' view.

In order to provide a broader view investigating transmission of traditional crafts Eugen Herrigels book is an important contribution in order to benchmark experiences from our own part of the world with Japan. As the consciousness in Japan on traditional crafts appears as high, and even declared by law¹², it calls for a trip to Japan in order to find good answers.

Two former Master thesis, *Å være, -eller ikke være*, written by Synnøve Myklestad and Jarle Hugstmyr's *Jakten på en Håndverkprosess* has been useful, both because they are discussing a similar theme, and as a reference for the structure of this thesis.

I have also been collecting information from the Norwegian Directorate for Education, in order to get information about the frames and guidelines for vocational education in schools. This information has been useful in order to compare the craftspeoples experiences with the way the training is organized in vocational school today. The material from the Norwegian Direktorat for Education has been provided by email (email, June 15th, 2018).

¹² Law of the 25th of May 1974; Law for Promotion of Traditional Crafts Products Designed by the Minister of Economy, Trade and Industry

In order to compare the information provided by the Norwegian Directorate with the experiences from the vocational school, I also contacted an experienced teacher at the construction department at Lillehammer High school (email, June 18th, 2018) to hear their opinion. I asked the teacher how many students it is per teacher when learning practical subjects, and how this has changed over time. I also asked what the teacher would consider as the best situation.

2.2 Methodology for sampling craftpeoples voice

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In the book *Others life and our own*¹³ the social anthropologist Fredrik Barth gives a wonderful introduction to his fieldwork from different places in the world. Through participatory observation and the personal meetings with people he is able to understand more: “In order to take part in other peoples reality we need know what they know, and forget what we know. It’s just the people themselves that can give us the key to their world”. (Barth 1980, p.10)

In my choice of methodical approach and tools for my research, my meeting with Fredrik Barth was really important. As I wanted to learn about the craftsperson’s experiences with transmission of crafts. In Barth’s spirit I was convinced that I needed to meet the craftsperson’s in order to listen to their voice, in person, in situ. I needed to be there to observe the transmission myself as an observer. Nicola Wood suggests:

To gain insight into learning in a craft context, I observed courses run by two traditional crafts practitioners who

¹³ NO: Andres liv og vårt eget

where also experienced teachers: A basket maker and a baker. (Wood, 2006, p.9)

In the spirit of Nicola Woods experience, and as a part of the research, I wanted to go directly to the sources, in order to listen to the craftpersons voice. Not necessarily because I doubt that the theory is right, but because I wanted this thesis to contain the important dimension of crafts we find in the woods and in the workshops among performing craftpersons. I wanted to visit the workshops, listen to the spokeshaver, smell the freshly cut wood and see some action. In order to understand better the processes and interaction I had to pack my notebook and my bags and prepare for field work.

If we want to understand anything of other peoples lives, we have to accept their opinion of what is important in life; we have to listen to them and their priorities.
(Barth, 1980, p.8)

Methodologies investigated and why they are chosen

I have considered the use of both qualitative and quantitative methods in my investigation. When I chose to use a qualitative approach in order to answer my research questions there were several reasons. First of all this is about craftspeople. I was interested to map their experiences and views, I had to ask them. Much of the theory I have examined lacks the most important part, the craftspeople's voice. For example, in Almeviks crafts research there are many wonderful process drawings, curves and charts, but I miss the voices of the craftsperson. One honest exception is Jon Bojer Godal who in his articles describes his meetings with several craftsmen.

For me it's obvious that in order to answer my research question, I need to ask the craftspeople, as they have experience, they know the shoe they put on their foot and know where it hurts. As I do not know exactly what to ask for I need to have an open approach, to be open-minded. This is the reason I have chosen to use a qualitative approach.

There is so much to learn, of absolutely unpredictable things, in such a new world –it is like being a child again. You have to dare and use the whole of you, all the time: Be among people participate in their activities, live like them. (Barth, 1980, p.13)

My research methods will be *interview, open questions* and *observation*. I will listen to the craftperson's own voice and use observation as a method in order to experience the interaction and relation between craftspeople in the teaching process.

There are in particular two theoretical sources that has been important for structuring my choice of methods. *Research methods in education* (Cohen et al, 2011) gives a useful overview over both the research methods and the research process. This publication also takes into consideration some of the challenges when working with sensitive educational research, which I suggested could be relevant in the SEN-context. The other main source is *Research design* (Cresswell, 2003) that has been in particular important when preparing for the field work and the interviews.

2.2.1 Qualitative research

Qualitative research is an umbrella category that encompasses various kinds of studies, and the field of qualitative research is larger than just participant observation. Qualitative inquiry employs different knowledge claims, strategies of inquiry, and methods of data collection and analysis (Ibid, 2003, p.179).

One of the main characteristics of qualitative research is that it takes place in the natural setting, *in situ*. This approach gives the researcher a high level of details, and a possibility to understand more of the context. There is no single blueprint for naturalistic, qualitative research, because there are no single picture of the world (Cohen et al, 2011, p.219). As the intention for the researcher is to view the participants in their natural setting, as a part of the group, it can give a deeper and broader understanding of the situation.

The qualitative researcher needs to build trust in the environment where the study is taking place, as the methodology is interactive and acquires personal involvement.

Open-ended observations can contain surprises, and “in fact the strategies of inquiry chosen in a qualitative project will have a dramatic influence on the procedures” (Creswell, 2003, p.179) In some cases this calls for improvisation and change during the study, as new information might emerge during the study:

Qualitative research is emergent rather than tightly prefigured. Several aspects emerge during a qualitative study. The research questions might change and be refined as the inquirer learns what to ask and to whom it should be asked (ibid, 2003, p.181).

There are many methods for collection of data, such as film, photos diary and notes. The situation may change and influence data-collection. The

researcher can use a diary, a blog, take pictures, catch it on video recordings, written interviews or made with audio recordings. Therefore, context will often decide the method: “There is no single prescription for which data collection instruments to use; rather than the issue here is fitness for purpose” (Cohen et al, 2011, p.235).

Artefacts can be useful as a part of the collected data in the research study. As Cohen notes: “They (artefacts) has been shown useful in educational research, and indeed have been widely used in ethnographical, anthropological and historical research” (Ibid et al, 2011, p.531).

When choosing the qualitative approach I need to bear in mind that qualitative research is interpretative research, which involves sustained and intensive experience with participants. This introduces strategic, ethical and personal issues into the qualitative research process. “One cannot escape the personal interpretation brought to qualitative data analysis”. (Cresswell, 2003, p.182).

2.2.2 Observation

There is a Chinese saying that if you want to understand something, you have to chew it in your mouth (Cohen et al, 2011, p.465)

Observation involves a wide field of issues, possibilities and concepts, but it is “the distinctive feature of observation as a research process is that it offers an investigator the opportunity to gather “live” data from naturally occurring social situations” (Ibid et al.2011, p.456).

In Ethnographical research observation as a method is recognized as a strategy of inquiry (Cresswell, 2002). The intention of participant observation will be to observe participants in their natural setting (Cohen

et al.2002, p.465). In naturalistic and participant observation the researcher will at the same time be a participant in the group, and an observer “.....as he or she has to balance the participation in order to absorb the situation, with sufficient detachment to be able to analyse and observe in a detached way”. (Cohen et al. 2011, p.465).

Some years ago I was visiting Holar north on Iceland where a Swedish blacksmith was introducing a little girl to blacksmithing during a workshop. As I observed the blacksmith the guiding the child hammering the hot iron, observed how the little girl felt the weigh of the hammer, the heat, felt how the iron transformed. I realised that it all gave her an insight which is deeper and embodied, as it allowed the child to use all the senses. This is an example of how participating observation gives a deeper insight as it allows us to use all our senses. In contradiction to looking blacksmithing on YouTube or in a book, the participating observation gives a broader understanding.

2.2.3 Interviews

Interviews have been used extensively for data collection across all the disciplines of the social sciences & in educational research. There are many types of interviews, as suggested in the literature. (Berry, 1999)

As a qualitative method, the interview as a method share some of the challenging issues, arising out of the situation, from naturalistic and participant observation:

- There has to be trust between the researcher and the person who is being interviewed. Interviews is an interpersonal matter (Cohen et al. 2011, p.425)
- The researcher has to have a desire to know.
- It is also important for the researcher to be unobtrusive, in order not to color or disturb the person who is being interviewed.(Ibid et al. 2011)

The open-ended interviews strategy as a method of inquiry involves narrative and anecdotal evidence. An example in my introduction is my conversation with the member of the staff at NTNU in my introduction to Chapter One. There are several ways of using the interview as a tool. It can be facilitated personally, in situ, face to face, or over the phone. Interviews are used as a technique when hiring people for a job, and the output is always to collect knowledge.

There are also other ways of dividing and grouping the different types of interview. (Cohen et al. 2011) divides the interviews into four types:

1. The informal conversational interview where the questions will emerge from the context, and where nothing is decided in front.
2. The interview guide approach where the topics that should be touched or cover is specified in advance, but as an outline.
3. Standardized open-ended interviews is when the exact wording and questions are decided in front and where all the interviewees are asked the same questions in the same order
4. Closed quantitative interviews. Questions and responses are fixed in advance, and the respondent chooses from a set of ready made answers.

(Cohen et al, 2011, p.413)

These four categories are demonstrating different shades of qualitative or quantitative approach. While the qualitative approach is unstructured, subjective and open-ended, the quantitative side involve structure, statistics, numbers.

Creswell (2003) divides qualitative interviews into three types:

1. The face-to-face, one-to-one interview.
2. Telephone interview where the researcher
3. Researcher interviewing participants in a group

(Creswell, 2003, p.188)

There are pros and cons about these three types of interviews that I have considered. For the group-interview it would have allowed me control the questioning in a structured way. On the other hand people are not equally articulate and perceptive, and in would therefore be a risk losing important voices.

When considering a telephone interview, it could have be useful if the participants could not be observed directly. It could also decrease the risk for me to interfere with the response. In my case I was able to visit them in their natural setting.

For the face to face interview the limitation will easily be that my presence could bias the response. On the other hand, being there, physical situated together with the interviewee would make me capable to interpret and understand, interact and interpret in a more holistic way, in the spirit of Polanyi's "we can know more than we can tell".

For the qualitative interviews in the thesis and following case studies it is important that the questions are unstructured and open-ended. Their intention is to provide views and opinions from the interviewees.

2.2.4 Groups identified for interviews

In order to answer my questions, I identified three groups for the interviews. First I decided to interview skilled and recognized *craftspeople*, as they could tell me how the learned their crafts, and how they are passing on their knowledge to a new generation. As I wanted to investigate the best ways to learn crafts, the testimony of the craftspeople were crucial.

I also wanted to interview *learners*, as they could give me an insight from their point of view, and it would help me to compare their experience with the view from the craftspeople whom they learn from.

It was important to interview the *SEN-teachers* in order to get an insight in their experiences with crafts as a formative pedagogical tool, and compare their methods for teaching crafts with the craftsperson's experience.

2.2.5 Ethical consideration

All research that involves people in the collection and analysis of data is subject to ethical considerations. The Ethics Approval procedure at HINN (Inland Norway University College) has been followed prior to undertake the research. I have applied for approval for my research where I outline the proposed methodology and ethical considerations. My request for research was approved 02.02.18 by the NSD – Norsk senter for forskningsdata AS¹⁴.

I have obtained the informed consents from my interviewees. They have all been informed about the methodology, the purpose, risks, and eventualities that might occur.

Research involving people acquires that informed consent is obtained from the interviewee and the craftspeople involved in my observation. For this purpose I have prepared a form that can be signed by the interviewee, where he or she confirms the consent. This form have been approved by NSD.

For the confidentiality question pointed out by The Norwegian National Committees for Research Ethics I have changed the name of the interviewee. I can see no need for using the correct name of the

¹⁴ The Data Protection Official for Research Norwegian Centre for Research Data

craftsperson in this thesis. By changing the name I will protect the interviewee from being recognized, and in this way ensure adequate privacy protection and confidentiality. I have emphasised this issue in the communication with my interviewees.

In the SEN-context I have made an observation at a training centre which teaches special needs learners. In my case I chose Ringsaker AO Senter, which is recognized for their work in the field of crafts and special needs. I have compared the observations here with the findings in the theory and my other observations.

There are challenges that need to be considered when interviewing diverse groups, such as different linguistic or cognitive abilities, asylum seekers, elders, or special needs. In an interview, good communication is a paramount. One of the major challenges the researcher might face when interviewing marginalized groups, is that the interviewee could have communicative difficulties, or cannot communicate easily at all. This could for example include children with autism, deaf people, children with Downs syndrome, or them who cannot speak. "It can also be difficult to get access to the target groups "on the edge of society", without assistance from parents, social workers, health-care workers, teachers. These gatekeepers can also be present in the interview, and in some cases answer on behalf of the interviewee" (Cohen et al, 2011).

In this context, and in my case, I think the most fruitful will be to facilitate the interviews with the *craft teachers* that works in a SEN-context, in order to compare their techniques, methodology and experiences as teachers, masters and tutors. I will be searching for their narrative stories. Combined with observation of the interaction between the tutors and the students, I think this would provide useful evidence.

..qualitative research (as we see here), is often heavy on interpretation, and one has to note that there are frequently multiple interpretations to be made of qualitative data – that's their glory and their headache! (Cohen et al, 2011, p.537)

A challenge with qualitative research is therefore that the researcher could add his or hers own perspective to the response, and thereby the result. It takes good listening and observation skills from the researcher not to interfere. Creswell suggest that: "Qualitative research is between people, and one should keep in mind that the qualitative research provides subjective data, as it is on a personal level" (Creswell, 2003, p.19). According to Cohen one should be aware that the interview easily are coloured by the researchers interpretation and the persons involved:

Critically important in this area is the maintenance of trust and report, showing interest assuring confidentiality (where appropriate) and avoiding being judgemental (Cohen et al, 2011, p. 235).

For the qualitative researcher the approach will be holistic and with an open perspective. This approach is important in order to get a broader contextual understanding.

A curiosity is that for special needs qualitative research represent there is only a small percentage of the research made in the field of special needs education. According to the article *Qualitative Special Education Research: Purpose, Rigor, and Contribution* published by the Hammerhill Insitute on disabilities , only 6% of research across the field's 11 most widely read journals, over nearly two decades, has been qualitative. (Trainor and Leko, 2014, p.264). After my opinion this fact supports my qualitative approach to the thesis, and increase the odds for the discovery of some white spots, also in the SEN-context.

2.2.6 Artefacts

As I am focusing on process and narrative I am unsure of the role crafts artefacts could play in this context. I have not planned any use of artefacts as such in my research, but as the interview was taking place in situ, in the craftsperson's own environment, artefacts will become evident when used on the initiative from the craftsperson's perspective.

The artefacts themselves are not my focus in this research, as that is the interaction between the artisans and learners. Nevertheless, tools and materials will be a part of the learning process I am investigating, and will therefore play a role and have other functions like:

- Aesthetics
- Usefulness
- Gifts
- Cultural identity
- Environment

2.2.7 Guidelines for interviews

As suggested in theory (Cohen et al. 2011) I have used the *interview guide approach* in order to make sure that the specific areas are touched during the interview sequence. For my interviews with the craftspeople I have formulated some basic questions from the topics I want to touch and divided them into *contextual information* and *narrative stories*:

Contextual information:

- Crafts
- Age
- Country
- Gender
- Where they learned
- Previous experience

Narrative stories:

- How / why did you become a craftsperson?
- Tell about your master / masters? (The age of the master)

- Tell me how you learned your crafts?
- How do you continue to develop your skills and learn?
- How do you teach others?
- How do you practice measuring in your crafts?
- When you teach, do you use new technology?

In the spirit of qualitative interviews the questions are unstructured and open-ended as their intention is to provide views and opinions from the interviewees. They are just *guidelines* that I use as reference to facilitate the interviews. I have been open for different point of views that have appeared in the situation, as for example that two of the craftsperson separately, and on their own initiative, gave me an introduction to *research in crafts*.

Nevertheless, the guidelines has proven to be smart in order to make it easier for me to compare the data afterwards. Empiricism is the school of thought which states that knowledge must be gained from experience, and in order to make my empirical data useful, I needed the guidelines.

2.2.8 Frames and principles for interviews and observation

There are a wide range of tools and possibilities when it comes to documentation of the interviews and the observations as video recordings, photos, audio recording, taking notes, making sketches. When considering the tools, principles and the frames for the interviews and the observation I needed to identify what material I wanted out of the sequence, and what I would be able to handle.

2.2.9 Less filters and obstructions

After been looking at different possible technical tools, I ended up with concentrating on making notes (write by hand) and taking photographs. The reason for choosing these two tools is that I want to absorb the feedback from the craftsperson with all my senses, and that I am afraid to lose my concentration and overview using a video camera or an audio recorder. I need to listen, to smell, to see, to sense, to taste and to emphasise. In order to handle this dimension figured it will be best concentrating on taking notes and pictures. This is also in line with my previous experience doing documentation of crafts.

I did also take into the consideration that a video- or an audio recorder could disturb the situation of trust established through an open conversation. As a qualitative researcher, I needed to build trust in the environment where the study was taking place. The methodology is interactive and involves personal dialogue. For me this was also a heavy argument for keeping it simple and low-tech.

The interviews and the observations was all done *in situ*. In the craftsperson's own environment, in the workshops. This was done on purpose in order for the craftsperson to feel relaxed and on a home ground. I think it also made the conversation easier, because we were surrounded by the craftsperson's own artefacts as tools and materials, it helped create a warm and homely atmosphere.

2.2.10 The craftsperson's voice

After the interviews were completed, I wrote them down as a text and passed the interview back to the craftsperson for additional comments. On one hand it was a possible risk for changing the containment and conclusions in the interview, on the other hand it might help fulfil the picture and bring additional information on the table. I think this was the right thing to do as it is the craftsperson's voice I wanted to hear. Besides my intention was to invite possible perspective that had not been highlighted in the interviews. For me

it was also a question of strength the interviewees ownership to their narratives, and make sure they were properly included in the research.

Nevertheless I did not receive much feedback from the interviewees. There were just some minor corrections on contextual information as names and numbers. But it felt right doing it anyway, because the absent of corrections coming back, approved the contain of the interviews.

2.2.11 Criteria for choosing craftspeople for this study

When picking the right crafts persons for the interview, I needed to find persons who represented a higher performing level as a craftsperson, to enable them to share experiences of learning their trade, and how they share their knowledge today. With this in mind I have chosen three criteria's for the craftsperson's I will interview:

- They will be on a high performing level as well established craftspeople, with rich experience in their crafts, and recognized by the community. (Not in the meaning as a geographical community, but among fellow craftsperson's and customers.)
- They will have rich experience training other craftsperson's.
- They will represent different trades of traditional crafts.

In addition to these three criteria, I wanted to find interviewees from different geographical areas and of different genders.

2.2.12 Analyses of the material

I have used a coding system which enabled me to analyse the findings. This is called *content analysis*. I used the coding from the start which made it easier for me to find common threads and differences. I considered the use of colours and numbers, but in the end I chose to structure the interviews using the questions and themes I suggested when I designed the guidelines for interviews (2.2.7)

2.2.13 Three institutions

There are three institutions that will be referred to in the thesis. In order to provide the reader with some contextual information I will give an introduction at this point. Both Ruskin Mill Trust and Ringsaker AO-centre works within a SEN-context, while Norwegian Crafts Institute works with transmission of crafts on different levels. As the institute is related to my professional role, I have chosen to emphasise their methodology for transmission in particular.

Ruskin Mill Trust

The first time I visited Ruskin Mill in Nailsworth, in 2016, I was struck by the wonderful surroundings. Like Norwegian Crafts Institute, Ruskin Mill Trust was established in 1987, but the two institutions have a different approach to crafts. Ruskin Mill have developed a method of Practical Skills Therapeutic Education working mainly with children and young people from the age from six to twenty five, but the center also includes adults with complex behaviour, learning difficulties and disabilities, whose needs cannot be met elsewhere. The Practical Skills Therapeutic Education method, developed at the Trust, are in particular inspired by Rudolf Steiner, John Ruskin and William Morris. The Trust's vision is that each individual has the potential to shape their own future through experiencing meaningful relationships with universe, earth and people. The Ruskin Mill Trust operates several centres situated at different places in England.



From my first visit at the Glass House in 2014

For this thesis I have not made any interviews or observations at the Ruskin Mill in particular. That is partly because of the distance between Norway and England, but also because I have good impression through my former visits both at the field center in Nailsworth and the Glass House in Stourbridge, which I visited in 2014). Besides the Ruskin Mill research material by Aric Sigman (Sigman, 2015) and the Practitioners guide (Ruskin Mill, 2013-14 edition).

Ringsaker AO-center

Ringsaker AO-centre have a more down-to-earth vision as Ruskin Mill Trust, as they want to be a good working arena for disabled in Ringsaker Municipality, and that their ambition is to be among the best in the field.

Ringsaker work and education centre provides and organize work and training in Ringsaker municipality for people with special needs; 110 users receive assistance from 35 employees. At Ringsaker AO Center, crafts is an educational foundation for the education. The crafts training includes various crafts such as stitching, knitting, weaving, ceramics, gardening, woodworking.



One of the popular products they make at Ringsaker AO-center is rugs

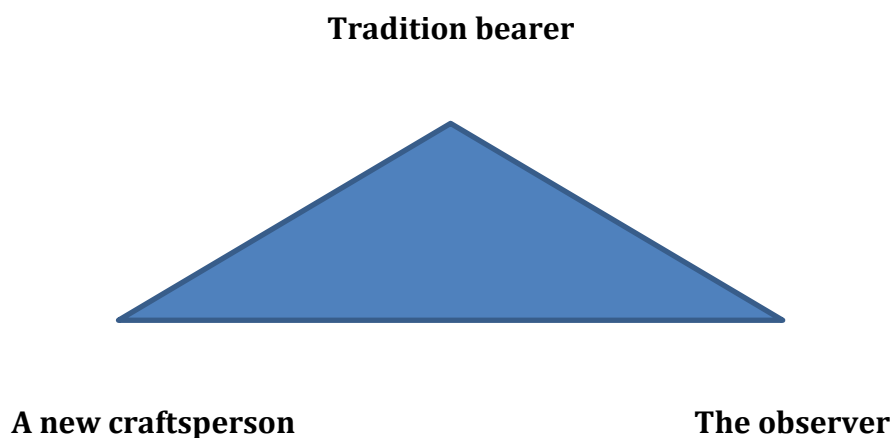
How theory and methodology relates to my professional role and the Norwegian Crafts Institute

In my introduction I expressed a hope, that my questions will enable me to investigate the methodology and critically examine how my organization is safeguarding traditional crafts today, and to improve our performance in the field. The Norwegian Crafts Institute documents, preserves, and promotes the knowledge, culture, and professions relating to traditional craftsmanship as well as to encourage the general public's knowledge of and respect for traditional crafts. This work is done in accordance with UNESCO's Convention for the Safeguarding of Intangible Cultural Heritage. The Institute refers to:

Action-borne knowledge

The Institute use the term *action-borne knowledge* to describe the knowledge of a craft has its basis in both practice and action. The term is used in order to describe the approach to the method for passing on traditional crafts. Atle Ove Martinussen describes action-borne knowledge as "the sum of experience and skills that have been passed on from one generation to another in a knowledgeable fellowship of action and culture". (Weihe et al, 2009., p.124) This term is also pointed out by Jon Godal earlier in this chapter.

The model¹⁵ can be described as a triangle model consisting of three relations: The senior master called the tradition bearer, a new craftsperson, and lastly, the observer:



The bearers of the tradition

We understand the bearer as a person carrying the knowledge and skills of several generations within him- or herself and he or she is a part of a living tradition. The knowledge of the bearer is regarded as something important that needs to be safeguarded. The tradition bearer is in most cases recognized of the community of his or her trade, in the fellowship of craftsperson's.

The new craftsperson

The new craftsperson is the one that is willing to learn. Often this person is quite skilled, and therefore capable of receiving knowledge handed over from the bearer. The relation between the bearer and the new craftsperson is important, and often the project is organized on the initiative of either the bearer or the new craftsperson.

The observer

The observer has the task to observe, document and record with video, photo and writing all that is going on between the tradition bearer and the new craftsperson. The observer's role is to be a fly on the wall, and shall not

¹⁵ *Fishing gears, open boats and preserving skills* by Atle Ove Martinussen (Weihe et al, 2009, p.119-127)

disturb the transmission process. Nevertheless the observer should know the craft and the technique in order to know *what* to emphasise in the documentation.

When the institute are organizing a project like this it's the interaction between the bearer of the tradition and the new craftsperson which are regarded as most important. This is rooted in the approach *action-borne knowledge*, and that this type of knowledge is best transmitted through practice.

Most of the institute's projects are organized one to one, as explained in the glossary, with one tradition bearer and one new craftsperson, but there are also projects that includes more bearers or more new crafts persons.

2.3 Research Question

My aim with this thesis is to understand transmission of practical craft, both from a theoretical point of view and from the practical side. I intend to explore transmission in a SEN-context, and to examine the material as a whole, in order to see what can be learned. Hopefully there will be some output, experiences and conclusions to put on the table in the end that may improve knowledge of transmission of crafts in different contexts. I have therefor formulated my research question and sub-questions as *how to understand transmission of practical crafts, from a theoretical and a practical view, and in a SEN-context?*

In Chapter Two I explored some relevant theorists that have attempted to describe crafts and craftsperson ship. I will also introduce and discuss methodology to be used collecting empirical data and how I will select the interviewees. I described briefly Ruskin Mill Trust and Ringsaker AO-centre, and the methodology and principles used by Norwegian Crafts institute. Chapter Two concluded with a research question for the thesis. In Chapter Three we will move

out in the field, to the craftspeople's workshops, and present the findings from interviews and observation.

3. Chapter Three

In the field / The craftsperson's voice

In Chapter Three will first give a short introduction to the field work and my aim to sample the craftspeople's voice. This will be followed by my reports and reflections from interviews and observations in different contexts.

Faren min var et gen: på sit felt, multikunstner. Blev inspireret til i hele kreativit. Vokst op med et skapende miljø.

Løremesterne

6. januar 1947 på vej til verket den sager. Vi var 10-15 mand på guldmedaljerne.

Endelig gamle reder som virkelig kunne fægt, og der var jo et de en lort. Kurt var en skarp en.

Hadde ikke en bok. Det var praktisk. Utelevet praktisk.

~~I Sverige var tællerne av tællerne~~ slik at der i Sverige den gang.

Efter sørendbrev dro jeg guldmedaljerne i København. For a lort foringivning i guldmedaljerne.

From my notes

3.1 The interviews

I investigated seven interviews. The first three with craftspeople who are all recognized as masters in their field. These three are Shan, Namo and Franco. They all represents different crafts as carpenter, maker of traditional costumes, and goldsmith.

I have also interviewed two craftspeople who are learning from Shan; Rote and Robin in order to understand the transmission from the learners point of view.

Siri and Tone works at Ringsaker AO centre were they work with crafts in a SEN-context.

My interviewees age are in the range between 32 and 61 years old, and they are four males and three females.

3.2 The observations of case studies

The first observation took place in Tinn were I observed the interaction between the master carpenter Shan, and his learners, Rote and Robin. They were working on a large timber house from year 1600 from Svalastogo in Tinn Austbygd. The restoration task was very complex and contained several different challenges. They used a limited range of tools, which was the same tools used when the building was erected more than 400 years ago.

The two learners are working on their own and on different tasks. In between they get together and discuss the case in order to make the right choices. The two learners ask for Shan when they are in doubt. My role as a fly on the wall worked out as planned. They were focused and I felt that I could observe without interfering in the training process.

The second observation was taking place in Ringsaker AO-centre¹⁶ which is a center for work and education. More contextual information of this center is to be found in Chapter Two. Ringsaker AO-center have organized their training in 5 different sections, and I spent a whole day in the weaving section. I had planned to be a “fly on the wall”, but it was not easy, because the learners noticed I was there, and physically included me in the work. The result was that my position changed from being a “fly on the wall” to participating observation, where I interacted in the training in a Fredrik Barth-tradition.

There also occurred another challenge. When I arrived, two of the users¹⁷ at Ringsaker A.O. centre walked out of the room because I represented something strange and new. Maybe I made them a little embarrassed. Anyway I tried to be unobtrusive, and sat down. One of them came back after a while, but the other one went to another section (pottery).

All of the users were gathered around a table and they worked with their tasks under guidance from the teachers. There were three teachers on 6 users. Craft processes included weaving, doing embroidery and knitting.

Shan

Shan is a man, 57 years, and a carpenter who has specialized in restoration¹⁸ of wooden houses from medieval times and the Viking age. He is recognized for his work by the cultural protection authorities and other craftspeople. Shan was the first craftsperson that was given the opportunity to investigate in his crafts through the Norwegian Crafts Institutes 3-years scholarship for craftspeople in 1995. Shan was also the first craftsperson without any formal higher education recognized as an expert by UNESCO and used for international assistance.

¹⁶ Ringsaker Municipality Work and education Centre

¹⁷ The term *user* is referred to in the Glossary, p.14

¹⁸ Shan use the Norwegian term *Restaureringstømrer*



Shan demonstrating a former axing technique

Namo

Namo is a woman, 58 years old, and master of making traditional costumes¹⁹. She has two crafts certificates, both in traditional costumes and in dress and costume²⁰. She is highly recognized among in the community specialised craftswoman, and widely sought after as an advisor in her field. As Shan, Nammo

¹⁹ NO: Bunadtilvirker

²⁰ NO: Kjole og draktsyer

explored her craft through the Norwegian Crafts Institutes 3-years scholarship for craftsperson's, from 2007.



In 2007 Namo received a three year scholarship for exploring her crafts

Franco

Franco is a goldsmith and a designer of jewellery, 58 years old. He runs his own one-man-company where he designs and produces jewellery. His crafts certificate was achieved after training in what he describes as a wonderful training place in Gøteborg where the practical learning was crucial. Later I went to Købehavn in order to study more. He started his training when he was 16 years and saw the advertisement in the newspaper. Originally his plan was to be a carpenter.

Rote

Rote is a man, 44 years old, and is originally a maker of musical instruments. Currently he works for a museum where one of his main tasks is to maintain and restore wooden buildings. Together with Robin Rote is going through a three months training program under Shans leadership, specializing in restauration work. The approach is organized as embodied practice.

Robin

Robin works at the same place as Rote. He is a man, 50 years old, and is originally a furniture maker. Currently he works for a museum where one of his main tasks is to maintain and restore wooden buildings. As Rote, Robin is going through a three months training program under Shans leadership specializing in restauration work. Through embodied practice and repetition Rote and Robin acquire new skills and insights, transferred from Shan.

Tone

Tone is a woman, 61 years old and educated a teacher with traditional crafts as her speciality. Currently she works for Ringsaker A.O. centre, which is recognized for their work for students with special needs. The Ringsaker AO centre combines crafts and education, and Tone is responsible for the educational training program. Before she started to work at Ringsaker AO centre, Tone has been working a teacher and a crafts consultant in the national NGO, Norges Husflidslag. During the interview she is constantly knitting.

Siri

Siri is a woman, 32 years old. She has a background a craftsperson on a crafts certificate level (flower decoration) and she is educated as a vocational teacher. She has worked at the Ringsaker A.O-center for 1 year with people with special needs. She has worked in regular schools as a teacher, and in her former work, she have also had responsibility for apprentices. In her work in ordinary school as a teacher, she had an experience with a student who had special needs, where she really felt her impact changed his approach to

learning in a good direction. For Siri this was a turning point where she decided she would work with special needs in the future.

My findings

I have chosen to organize the findings from my observations interviews using the guidelines for my interview in a thematic way in order to get a better overview. Nevertheless I have made room for some overlaps and digressions when summarizing, as I feel it is necessary in order to reflect the interviews and observations. The interviews and the observations is to be found as an appendix to the thesis.

Drivert med ~~me~~ nye deler synes er viktig.
Dypt. Et fag med mange muligheter. Et
stort landskap. Ikke bare i bytte
deler. Skolebuss, materialhandel,
verktøybutikk.
Fint at vi er fä + bfä. Vi redder et
bygg i lønning.
Hans sier du med den skallen". Løp
en plan. Fordeller oppgaver. Viser.
Selvstendighet. Kan spørre når
han er der. Dropte i forkant. Veiløp
og gode vis overtagelse. Nær skole.
Bekreftelse. Kinner. Hva må vi passe på.
Slappe i middagstid. Gitt oppgaver. Gode trenings.
Stavkirken. Film. Detaljer/løsninger på kiler.
Kompliserte og kreative ting. Vært med
i skogen. Når vi tar en godde emne/
røtter. Lese skogen. Hva egentlig og hva
ikke. Hva er det vi gjorde? Ser på
materialkvaliteten. Lesing. Hvordan la vi
narta, plassene. Beste boden. Saker er
lenke i trossen.

Oppi ser på gamle bygg. Se spor etter endringen
Bygginger deler som har vært et helt annet
sted. Lite baktakt. Beste estimater.
Forsøker å sette ting i system. Ser hvor
nye sleivene som kan vært gjort.
Vi forbedrer. Tettene ligger på i Møtde
byggingen sammen. Når hjørner er
bedre en andre.

Bruker engelske by nord/danke kommer.
Spør hva slags jobb er en på. Tatt igjen
kan på et bygg fra før svarte danner.
Veldig mye er utbredt. Når blir du
nøyaktig? Hvor viktig det har vært i
dette om nøyaktig? Det ser ikke galt ut.
Mest kommer når vi kommunikerer med Hans.
I perioder bruker vi Norsk-Dansk kommunikasjons.

Fir et ganske godt øyeblikk. Se
nå som en ikke ser det eller vet ~~det~~ kan den
er ~~der~~ der. / Kan på litt om hvordan.

From my notes

3.3 How to become a craftsperson?

One of the first issues I touched upon with all of the craftsperson's I interviewed was how they became a craftsperson. What make someone choose the path of crafts? When going through the data I discovered that there is not just one answer to this question.

Shan says he chose crafts because it fits well with his ambition to take over the family farm. He also explains how he has always enjoyed using his hands and to be outdoors in the nature. His father was a teacher, so his choice was not inherited:

-I enjoy to create, and clearly see a result of my performance. It's an enormous satisfaction when I have finished, and I have worked in line with the restoration principles so that I am not impairing the quality in the old building.

Namo has been attracted to and performing crafts since she was a small child. Differently from Shan the crafts was present as a vital part of her family's life. Both her mother and her aunt were working with textile. She learned from them and was affected by both in her childhood. This helped her develop skills already in her early years:

-I crocheted a tie to my father when I was just 4-5 years old, and I sewed my first dress already before I started school. I also sewed a dress when I was around 12, and it became actually quite nice, but it was no bunad. It was fashion!

Like Namø, Franco was attracted to crafts and affected by his family. His intention was originally to be a carpenter. He describes his father as a genius in his field and a multi artist. Growing up in a creating milieu learned him to think creative. Even if he knew he was going to be a craftsperson the choice of crafts was coincidence:

-My intention was originally to be a cabinetmaker, but on my last day in primary school I saw this advertisement in the newspaper where they searched for apprentices. I was 16 when I started as an apprentice as a goldsmith.

One of the apprentices, Robin, is a cabinetmaker. He knew from 16 years old that he was going to work with his hands, but originally he had planned to be a car mechanic. His brother convinced him to chose different by saying:

-You are so skilled that you should be a cabinetmaker and create things. That appeared to be a home run. Perfect.

The other apprentice, Rote, explains that he have always been working with crafts. Wood and electronics. He grew up with a grandfather that made everything himself. His grandfather was an old Chief. Rote tells me that he finds a great satisfaction in making and creating something.

Siri explains that she grew up with a grandmother who was a real craftsperson. She was weaving, painting and introduced her to the crafts, letting Siri try and fail. She explains how the grandmother's pedagogical approach has inspired her in her current work, and how important the feeling of mastery is.

Tones mother was a knitter, and Tone thinks that maybe this was the reason for an early interest in crafts came. She explains how she was attracted to crafts, and loved crafts in school.

Except for Shan all the other interviewees explain how they were affected by someone in their family when they were young, from Rotes grandfather the Chief to Namos aunt and mother with needle and thread. The impact of living crafts in their surroundings appears to have had an impact on their choice of trade.

Another interesting observation is that a majority of the interviewees knew at an early stage that they were going to work with crafts, but their choice of trade appears to be a coincidence. This can be exemplified by the advertisement that Franco saw in the newspaper on his last day in Primary school or Robins older brother who convinced him to be a cabinetmaker instead of a car mechanic.

3.4 Tell about your master / masters?

For all the interviewees their teacher, master or bearers of the tradition have had a huge impact on their learning. For Shan there are in particular three persons who had a major impact on his learning. Shan explain to me how one of his masters in particular was important for the attitude to crafts and the knowledge. Another had a great insight in wood and knowledge of materials. The third one introduced Shan to the use of restoration principles.

-With attitude I mean as an example when I teach, to explain in a way that creates a respect for the crafts and knowledge in it. For example to be precise with the tools. It has to be sharp! Or when in the woods. Identifying the material when it appears as a part of a tree that fits. A shaft. This is an attitude it takes time to turn into practice.

In particular Shan mentioned one of his masters and praises his great experience:

-He had done it! He could do so many things, and had tried so much in his practice. That was what was so fine with him. He had been joining the transportation of timber in the woods from he was 8 years old.

Nano mention several masters that had a crucial impact on her learning. But as Shan she mention in particular one:

-She knew so much! Also more than just the crafts. She knew so much about old ways to do things, and among other things she learned me a lot about how the stitches shaped the garment.

Nano also underlines the master's willingness to share their knowledge and the ability to communicate from both sides:

-I have learned from several masters. Bearers of the tradition and other craftpersons have been open in their approach in order to answer and show, and the fact that the chemistry between us have been important for my learning.

In particular Franco mention the importance of the old masters he learned from during his apprenticeship.

-There were some old foxes that really knew the trade, and it was from them that we learned. We did not have even one book. It was practical, exclusively practical! That's how it was organized in Sweden at that time.

He mentioned one of his teachers who was in particular inspiring. He saw the apprentices, he was skilled and he had a deep understanding of design and shape.

Tone told me about an interesting experience when she learned wood turning at the crafts school. Her teacher had tried to explain to her the procedure in details, but she was struggling with the technique. In the end the teacher gave up explaining it. She could not understand until he stood behind her and held her hands while she was turning. Tone describes this as a turning point for

her, where she, not just understood the principles of woodturning, but the fact that she learned better with hands than with words.

Siri decided early that she wanted to work with crafts, and that it was the trade of flower decoration she wanted to learn. She explains that even if she was not in particular bright theoretical head, she was very good learning with her hands and tells me about one teacher in particular that made a difference: "This teacher saw me for whom I were, and let me learn the way I needed. It was safe to make mistakes".

Both Tone and Siri explain how these meetings had a great impact on the way they teach today.

3.5 Tell me how you learned your crafts?

The interviewees have all described their journey as learners at different stages. In most cases it started with the impact from their home, where a father, a mother or an aunt inspired to work with crafts.

Namo grew up in a stimulating milieu with a mother and an aunt who were both working with textiles. Already from early age she was able to make garments, and she was both into sewing and knitting. She also mentioned education in primary school briefly. As she reached the craft certificate level, where she actually took two crafts certificates in two different trades, in both traditional costumes and in dress and costume. She worked in the trade of traditional costumes for several years and gradually became more recognized for her skills by the community. There is at this stage, when she had reached a higher performing level, she was able to receive the knowledge from the three of the bearers that she mentions in particular.

Shan was not from a family with craftspeople's, and his father was a teacher. Nevertheless he started early to do carpentry, and he had the possibility to

learn from older people. He explains that he learned basic carpentry through one to one situations. He says that every building site is a learning site. He feels privileged as he had the possibility to be a scholarship student in crafts and because he had the possibility to participate in Norwegian crafts Institutes projects. He mention the setting one to one as in particular good environment for learning:

-There are all kinds of courses and seminars these days. When I was an apprentice I was put together with an older craftsman who could, and I learned one to one. Fewer people is always better. To big is social, but not professional.

As with Namo, Shan mention some bearers that he met at a later stage, after the crafts certificate level, who was in particular important for him. As Namo he was at this stage able to receive the knowledge they offered.

Franco was also attracted to crafts at an early age, and he had a father (who he describes as a genius and a multiartist) who stimulated him to be creative. Franco describes it as a creative environment. He also describes his period as an apprentice as in particular stimulating. They were a team of 10-15 people in the gold department, and among them some "old foxes" that really knew the trade. Franco emphasize how the training was exclusively practical, and that they did not use books.

Common for all of the three master craftsperson's is that they started early and were in a stimulating environment. With an exception of Shan, they all had parents who were into crafts. Nevertheless Shan also had older people in his community that he could learn from at an early stage.

Non of the interviewees pay much attention to what they learned in the primary school. I have not asked for that in particular, but nevertheless the absent of credit to the primary school as a learning environment for crafts is worth mentioning. The only small exception is Tone who mention that crafts in primary school was important for her.

During the craftsperson's period as apprentices they all mentioned their masters who guided them on their journey. All three of the master craftsperson's mention the one to one situation as in particular suitable for the learning environment.

Namo and Shan mentioned the important impact from bearers at a later stage as craftsperson's at a stage where they have been capable of receiving more complex knowledge. For Franco he mention the importance of the interaction with his own children who are both educated as professional designers, and his customers who continuous challenges him.

3.6 How do you continue to develop your skills and learn?

Namo explained how she again and again return to the same garments in order to unveil new information. Through all the interview she underlines how she is still learning: "I am still in touch with bearers of the tradition and other craftsperson's, and I am still learning! A lot. You never get one hundred percent fully trained!"

Franco has a different approach. He praises his two children who are "put together the same way as me". Both of his children is educated as designers, and together they are dynamite bringing new impulses and developing ideas. Nevertheless Franco miss to work more in a team.

-If I was going to choose again I would have been a part of a team as early as possible. 3-4 goldsmiths would have been perfect. Sometimes I feel I am sitting here lashing for myself.

Shan praises his interaction with younger people. He likes to work with younger people that have an approach where I can pick up something new. He also underlines how he is learning from working in the field:

-I still learn the most through practical tasks, but I can still read a book. Immediately I do not trust what I read completely before I can go out in the woods and check if its true. Through testing. It does not feel good to transmit knowledge I have not experienced and checked myself."

Shan underlines how the knowledge in his field need to be developed, and that it in many ways has been status quo the last 30 years: "I wish I could help to develop it further, but then I would need time to do research. There are still things I do wonder about and that I would like to investigate".

Common for all of the interviewees is that they underline how interaction with others takes them further as craftspeople: Fellow craftsmen, bearers of the tradition, children and customers has been mentioned.

3.7 How do you teach others?

Shan is a hard-core defender of a practical approach to learning, and he underlines how important it is to demonstrate when it comes to crafts, and to go through the process step by step. He explains how the demonstration is important: The way to stand, to hold the tool: "I can understand that it might be convenient to explain things theoretically, but it really does not have any mission. The practice – to show – is the only right way." Shan has a technique that he uses when he is a learner: He praises the work first, and he afterword's he points at what is not so good:

-The experience of the learner is of huge importance. It's easier with them who are more experienced and therefore learn quicker. It is easier to teach someone who knows how to build a log house, than someone who have never built a log house before.

Shan underlines how important it is to move on step by step in a suitable pace and to be exact as mistakes can have major consequences: "If a log is shaped in a wrong way or you remove too much, you will have to change the whole log". This is one of the reasons he prefers a one to one situation when teaching.

The chemistry between teacher and learner is important for Shan, and that there is a good relation. As a teacher Shan sometimes feels like a psychologist, and underlines that people have to be treated differently as they are on different levels. It is important from time to time to stop the work and explain / show:

-It's convenient to bring pictures from other relevant projects or situations. And it makes it more interesting for me as a teacher. In this way I combine the three ways in the practical work; practice, theory and research.

Shan also reveals one of his techniques for keeping the learners on their toes:

-As a teacher you have to create curiosity and enthusiasm. It's not always easy, but in particular important. Therefore, it is of huge importance to have some interesting tasks that almost can be as rewards. It creates curiosity for the trade. And it's fun for me too"

Namo has taught a lot of classes. She explains that her students return to her classes again and again. In particular she mentions a lady from Lom who is a regular. Namona likes best to teach in a one to one situation, eventually as small groups as possible. She claims that it is easier to discuss in a one to one situation, and that it's easier to follow the learner more closely. As Shan she points out that mistakes happen more rarely in a one to one situation as the learner has her full attention.



An example of Namos work

She explains that she does not have an apprentice herself, of two reasons. She does not have enough space in her workshop, and secondly because of the economy. Nevertheless, she wished she could have an apprentice, and it happens occasionally that learners come individually to work with her for a day or a weekend.

Franco explains that he teaches the learner step by step and they keep on until it's good. In the end they should be able to do it themselves. He emphasizes the

one to one model as the ideal situation when teaching and explains: “Of course one could have had three apprentices, but then one would need more masters.” He further explains that it is a challenge in his trade when the practical part of the education is done in a school, and not in a workshop: “If an apprentice does the last year in school it goes wrong. It does not work! Too slacky”.

He explains how learning the trade is all about getting the crafts into their fingers. In a professional workshop this is daily life to be able to make 3000-4000 welds in one operation, and that volume training is crucial.

-The best way to learn the trade today is to be in a workshop where there are old foxes like me, who are versatile, and learn the trade one to one.

As Namo he feels he should have had an apprentice, but he cannot afford it.

-It's sad, because I really feel I could have contributed.

All of the three craftspeople do pass on their knowledge on different levels, as courses, individual training and by participating in special programs. Nevertheless none of them have responsibility for apprentices in their workshop. Common for them all is that they wish they could, but the economical frames provided is not sufficient for a small scale business.

3.8 Teaching crafts in a SEN-Context

First of all it's important to clarify that the goal of the training at the Ringsaker A.O. centre is not to make craftsperson's, meaning learning a trade. When I ask about this both Tone and Siri explains that the training is a provider for the

users²¹, and the main goal is neither to produce a new craftsperson or products, but to give the users a meaningful day. For the users of Ringsaker A.O-centre it is important to get out of their house and meet others. This foundation is important in order to understand the service. Tone says:

-The ability to see the person. Find the best, and see the possibilities in each individual. Often it's best not to know everything. Our experience is to start with a blank sheet, as some of the users can have a troubled background. Often, not prejudging, it will lead to a positive change of behaviour.

Nevertheless she emphasize the need for mapping what the learner are able to do, and the level of knowledge. They are checking out talents and capabilities, by letting them try different things. Tone tells me that she uses the technique she learned from her teacher in the crafts school when she learned wood turning:

-We have a user that is almost blind. It's impossible to describe things for him with words. He knows that the knife is sharp. I am holding his hands, the knife and the onion. In this way he has learned to cut vegetables in the most wonderful way!

Tone explains that at the Ringsaker A.O-centre the main principle is its one to one learning. Teaching in a classroom is not possible. When interviewing Siri she confirms this. She explains that most of the time the teaching is organized one to one, and sometimes rarely one to two. Siri use an example where they are making toilet-folders. The user chose the colours and put the pieces of fabrics together. Siri is just present, facilitating, and letting the users do the actual work. The only thing she says she actually does is to help the users pin it:

²¹ The term *user* is explained in the Glossary p.14

-And we talk about it meanwhile, combined with practice. Often one user can do a small part of the process, and then hand it over to another one. It means that in the end of the day the product is our common product.

In the interview with Tone she underline this and explains that one product, for example in the ceramics department, a cup can contain of 20-30 processes:

-This way of organizing the work demonstrates that people have to rely on each other, and that together we are able to make a nice product.

Tone emphasize how the users through crafts learns a lot of other things too: While working with crafts in interaction with others the users are learning to behave, and they develop their social skills. This is one of Tones major points of where the output of crafts result in a huge advantage.



One of the users knitting at Ringsaker AO-senter

A similar experience is also made at the Ruskin Mill, and exemplified by Sigman. He writes about “Whole-body” learning and how an integrated practical skills therapeutic education involves a great deal of body movement and activity. He describes how “hand movement and use of tools, general body movement and physical activity has profound cognitive and intellectual implications for the students”.(Sigman, 2015, not paginated)

Tone further claims that the manual work actually reduces the symptoms of ADHD and Asperger’s. Tone explains that they had a case, a lady with several diagnoses in addition to ADHD. When she was introduced to hard work with splitting firewood and put it in huge bags, she gradually changed her behaviour through the manual crafts work. Now she is able to fill 10-15 bags a day; She has developed her muscles, she gets warm and tired. For the first time she is able to sit down for more than two minutes. She is now able to sit down and eat with the others. Her motor skills have improved radical, and her seizures, which used to appear often, are almost gone.

3.9 Artefacts and SEN

Even if the objects they make at Ringsaker A.O-center are not the main goal, Tone claims that one of the fine things working with crafts is that it becomes something, a nice product in the end: “This builds the users self-esteem that hardly can be created through paper.”

The Ringsaker A.O. Centre has a small shop where they sell their products. Siri explain how this shop is an important part of the training.

-The users are learning customer care, and they wrap presents. So this part build both the social and the motoric competence.

She also thinks its important for the users to be in the shop and to meet the customers. Siri tells me how one of the users are copying what Siri say to the customers, even the way she pitch her voice.

3.10 How do you practice measuring in your crafts?

When designing the interview guide I wanted to find a question that was common, and important, to all trades. We find measurement in all crafts and all materials, and it has also changed a lot over the years. There are measures connected to the body, like an inch (the thumb) or an Norwegian “alen” which is two English feet. There are Norwegian alen, boat-alen, English and old Norwegian inches. The inches were divided into even smaller parts. There are used different tools for measuring, as the human eye, the craftsperson’s body, a stick, a folding rule, measuring tape or other items. This question was also meant to be an icebreaker that went directly into the crafts.

Namo explains that she use a measuring tape and use centimetre. From older bearers in her trade Nammo could tell me that she knew about the use of a thread with knots. Herself she has never met anyone who used knots. Just heard about it.

Shan works a lot in inches, while younger craftsmen works more in centimetres. He describes himself as a bit old-fashioned, and when working with younger craftsmen he revert: “When we worked with the stave church-program we used old Norwegian inches. I have no tradition in using my own body for measurement”.

He explains that he has been wondering about the fact that the parts in the stave churches are not equal. Could it be because the craftspeople has been using their own bodies, as for example thumbs with different width?

Shan explains that one of his former masters used inches only, and that this man also used a special tool for measurement called *skrap*: “I use it, and I have given one to each of my trainees, but I don’t really know if they use it.”

Franco work with millimetres down to 1/100 mm, and for this purpose he use special tools. He praises measuring by eye. He claims to be able to insert

stones with a certain distance between, without measuring: “With experience it works fine.”

3.11 When you teach, do you use new technology?

I made sure I touched this issue during the interviews as the new technology is on its way into Norwegian education with full speed, on all levels. In a press release from the Norwegian government 25.08.2017, Prime Minister Erna Solberg says:

-We want understanding of coding and technology to go into the curriculum already from primary school. With this strategy, we are entering a new decade for Norwegian schools. (Solberg et al. 2017)

What really makes this an issue is the introduction of new technology into the vocational education in Norway.

By 2017, the government will launch 18 pilots for competence raising for vocational teachers. Some of the offers are specifically aimed at providing vocational teachers with the use of ICT and e-learning and the use of new technology. (Kunnskapsdepartementet, 2017, p.30)

Shan explains how he often brings his laptop or ipad to work in order to show examples from relevant, previous projects to the learners. He often use the lunch break to show examples.

Namo explains how she use pictures to show and communicate with the learners after the course is over:

-The problem is, as an example, when I get a question from Lom, it can be difficult to communicate via a digital picture. It often ends with them coming here. Then it's easier to guide them.

Namo does not use “You-tube and such”. It happens occasionally that she uses internet for educational purposes, but in those cases it would be an example in order to check how different stitches are named in English if I have foreign students. But she does not find this help crucial: “It’s incredible what one can teach without knowing the spoken language”.

For Franco the new technology is a part of the business as he have an internet shop for his jewelleryes. He is aware that there could be corners to cut if he invested in new technology for his production for example for the modelling process:

-But for me modelling is some of the most fun part of the trade, and I don’t want to outsource that to a computer! I had a lot of discussions with salesmen who have tried to sell me this kind of equipment.

Franco emphasize his point by explaining how it is important for him to be able to write by hand, not just typing a keyboard.

All of the craftspeople use new technology for additional purposes, but not as a replacement for the practical training.

In the SEN-context I asked Tone and Siri if they used new technology in their transmission, and they explained that they use social media like Facebook and internet, as many of the users has problems communicating with words. Tone tells me that the users enjoy to see pictures of themselves together with others, and that it’s a low threshold for the users to write something.

Except for this example they don’t use any particular new technology in their training or when teaching crafts. They do other things like go to the nearest village to find inspiration or look at a magazine.

3.12 Observations of transmission

I spent a day together with Shan, Robin and Rote in order to observe the interaction between the three of them, and pretending to be a “fly on the wall”. The workshop was a huge building with plenty of space. In the middle of the building the timber building dated to year 1600 was situated. On a table beside the old building Shan had put the tools that was to be used. The tools present were the same kind of tools that were used when the building was made more than 400 years ago.



The tools used in the workshop

They are working independently with different tasks, and without Shan interfering if not asked to. Shan comments this afterwards: “There is no reason for me to draw for them. They have to do it themselves and axe after the marks.”

The two learners are working independently while Shan is working on something else. Letting them try on their own, but to me it seems like he is keeping an eye on them.

Occasionally it seems to be time for reflection. I note that they talk a lot, and that they are discussing together, all three of them, different solutions and choices. An immediate reflection is that this kind of knowledge is definitely not silent.

When there is a lunch-break Shan has brought his iPad and shows some examples from a relevant project he has participated in on Iceland, the Audunarstova-project where they built a replica of a timber construction from year 1314, and which was erected in the small village Holar north on Iceland. There are several reflections around the table.

Robin is a bit late that day, and did not arrive as early as Rote. Until then Rote was the one that had Shan's full attention, and I could see how he enjoyed it. After Robin attended, it looked to me that Shan was giving him a bit more attention. It also seemed to me that Robin was the most experienced of the two when using the axe.

It might have been a coincidence, but it could also be an example of the challenge of teaching more than one at the time in this context.

3.13 Observation of transmission in a SEN-context

I was lucky to spend a day at the Ringsaker AO-centre for work and education in Brummundal. More contextual information of this centre is to be found in Chapter Two. My observation took place in the weaving section. The craft processes in this section included weaving, doing embroidery and knitting. I met two main challenges in doing this study. First, As soon as I had arrived, two of the users walked out of the room, maybe because I represented something strange and

new. And maybe I made them a little embarrassed. Anyway I tried to be unobtrusive, and sit down trying to act like a fly. One of the users came back after a while, but the other one went to another section (pottery) to stay there. Second the users noticed I was there, and physically included me in the work. The result was that my position changed from being a fly on the wall to participating observation, where I interacted in the training in a Fredrik Barth-tradition. First I was encouraged by one of the users to help her put the thread in the eye of the needle, and I repeated this several times during the day when she needed help. Later I was challenged by another user to help her make knots for her weaving.

All of the users were gathered around a table and they worked with their tasks under guidance from the teachers. There were three teachers together with six users. The atmosphere was relaxed and social and they talked about boyfriends (they were all ladies), animals and hairstyles. At the same time they all seem concentrated and focused on their work. It appears to me that what Siri told me about the importance of about creating a safe framing for a good learning environment, fits well with the reality. We should also keep in mind that Siri told me that there is a valuable output for the users to get out of their apartment and meet others. In this context I understood social dimension to be very important.

The situation is very different from my observation in Tinn, where the participants where more quiet when using their axes, and there were less room for talking about other things than crafts they where doing. I suggest the situation at the AO-centre where the users where gathered around a table, invited more to small-talk.

In Chapter Three I have discussed the case studies. In particular I have paid attention to the relation and interaction between the learner and the teacher. In this relational context I have paid attention to the conversation and communication in the learning, and explored the individual view on this through interviews. I went out in the field, into the craftspeoples workshops, and I have presented the findings made through interviews and observation. In Chapter

Four I will compare the craftspeople voices with each other, and with the theory cited in Chapter Two.

4. Chapter Four

Discussion

While Chapter Three was dedicated the case studies, I will, in Chapter Four, discuss and compare my findings in the Chapters Two and Three. I will compare what I experienced and learned from the interviewees with each other and with the theory presented in Chapter Three in order to answer my research question on *how to understand transmission of practical crafts, from a theoretical and a practical view, and in a SEN-context?*

4.1 One to one

My hypothesis is that there are two people, a novice who wishes to learn a craft skill and an expert, a master craft practitioner. The novices aim is to bring his practical craft skill at least up to the level of the expert, and potentially above it (Wood, 2006, p. 132).

In order to answer my research question I challenged all of the craftsperson's to describe the best situation and setting for learning. The message was very clear from all of the interviewees. They all clearly preferred one to one as the best way to teach practical crafts. Franco says:

-The training has to be practical, where I show the learner step by step. And we keep on until the result is good. In the end they should be able to restrain it them self. In this process one to one, teacher and apprentice, is the ideal.

He also add that he could have had more apprentices than one, but in that case they would need to have more masters.

Shan agrees. He claims that it is a huge difference between teaching 1, 2 or 3 students:

-The result is better when it is one to one, and easier to make sure the students learn what they should learn.

He tells me that when he was doing his crafts certificate as an apprentice he was put together with an older craftsman who could, and that he learned one to one.

-There is no doubt that the best way to transmit craftsman's knowledge is 1:1 with a practical approach. In a one to one-situation one gets to try all grips and ways. I consider this to be best both for teacher and student.

Namo agrees with the two others:

-To teach one to one is absolutely the best way.

She claims that when there is thought one to one it is easier to discuss, and that when one is teaching more than one they will be on different stages, which makes it more difficult to teach. Further she says that mistakes happens more rarely with one to one because the learner have her full focus. Besides one to one gives a different contact between the teacher and the student.

Han ga opp å forklare det meste.
 Hans hendeg viste mine hendes.
 Til slutt måtte han gjøre det samme
 ned ned.

Hinne best.

1:1
 Distansere barn og linje. kan fungere
 i gruppen.

Hvordan løse den boka?

Gjør noe lignende. Nytt i alle
 å beskrive. Trenger å bli vist.
 Hindret ledning 1:1. Høye tallet
 den å være "dine hendes".
 Tiden er vår beste venn.
 De som er her er utviklingsprosser.
 Men lærerne deres er ofte 100%.
 Anvendelsesvis.

Gjennom igjen.
 Hendene huskes og repeteres
 Selv om hodet ikke
 henger med.

From my notes

When I asked Shans students, Rote and Robin on their experience and preferences, they answer that they both think its nice that there is just the three of them. A small group is good, Robin says. Rote disagrees slightly with Robin at this point:

-We are two, but it works better one to one.

This fits well with my own observation in situ. As I pretended to be a fly on the wall and observed the training it seemed to me that Robin was the one with the best skills, and that Shan automatically turned his major attention towards him, as he seemed more able to receive. This observation could explain why Robin felt comfortable being two apprentices and why Rote were in favour of a one to one situation.

The Norwegian Directorate for Education explains that in the Norwegian Law for Education there is no rules for the maximum number of students' per teacher in the classes teaching practical crafts. It used to be a limit earlier, but this was changed in 2003 (email, June 15th, 2018, appendix No.3).

The experienced teacher at Lillehammer High school, explains that in the 1970s, the dimensioning became 12 students or 15 students in vocational education. There could occur some local variations. In the 1980's, the dimensioning became; Basic course 15 students, second year 12 students and, third year, 12 students. From 1994, the dimensioning was adjusted to 16 students at both the second and the third year. He writes in an email:

-As the class size increases, the students will have less time «one to one». My opinion is that 12 students correct dimensioning. This both in terms of training, and safety at the workshop or construction site. One must remember that this is youth between 16 to 18 years old. (email, June 18th, 2018, appendix No.4).

This indicates that there is a contradiction between what was pointed out from the craftspeople as an ideal learning environment (one to one) and the situation at Lillehammer high school, currently with 16 learners per teacher. In order to secure and increase quality in vocational training one should therefore consider to reduce the size of the classes, OR make more attractive for small business in the field of crafts to include apprentices.

The one to one model is also preferred in a SEN-context. At Ruskin Mill Trust the apprentice model is important in order to secure the students individual development of physical, emotional and cognitive. In the Practitioners guide they emphasise the model:

The apprentice model is maybe the most ancient of all educational models. We know it from parenting where the child imitates the adult from the earliest stages. The traditional apprenticeship are essentially based on the same principle of imitation and has been applied over centuries, particularly in the crafts and vocational fields (Ruskin Mill, 2013-14, p.28).

4.2 The role of the master

Common for all the masters mentioned by the interviewees is their experience and insight in the crafts. The fact they had the experience has been crucial making them good teachers. This is a contradiction to what Otto Salomon is claiming in *The theory of educational Sloyd*:

Experience however proved that the ordinary workman was not suited to teach. If the teacher is bad, the instruction is bad, and the school is bad. If the teacher be good, the instruction is good, and the school is good (Salomon, 1898, p.69).

In order to justify Salomon's view he points out this statement in a context where Sloyd is more about the transformative aims than in order to educate coming master carpenters:

But from a sloyd point of view, the amount of technical skill is not so much importance, inasmuch as education, and not skill, is aimed at (Salomon, 1898, p.69).

Another important issue mentioned is the Masters attitude to the crafts. Shan points out that it takes time to transform the attitude to a practice and the way we understand and read our surroundings. As I understand Shan correct, he emphasize the Masters ability to establish a transformative learning process that change us as humans and in particularly the way we interact with nature.

The ability to interact with and understand nature is also underlined by Sennet who emphasize how crafts brings us closer to what he describes as the natural world. He suggests that we need the interaction with nature in order to find balance in our lives. Sennet claims that sustainable means closer to nature:

Sustainable suggests living more at one with nature, as Martin Heidegger imagined in his old days establishing an equilibrium between ourselves and the resources of the world (Sennet, 2008 p.12-13).

In this context it is interesting how Shan's two learners both emphasise how he helped them to read and understand nature. Robin explains:

-He (Shan) has taken us out in the woods, where we are collecting suitable materials and roots. We are learning read the woods. What are suitable and what is not? Looking at the quality in the right materials.

Why did the situation when Shan took his two apprentices out in the woods made such a significant positive impression on both of them? The experience of the apprentice's reference to nature is an issue highlighted by Sennet when he claims that we need the interaction with nature in order to find balance in our lives (Sennet, 2009). In this context Shan was their experienced guide on the path.

In *Practically Minded* Aric Sigman explains the benefits of a green curriculum (Sigman 2015), based on the rich experience from Ruskin Mill Trust. He claims that a green learning environment has a positive impact on students both in general and in a SEN-context.

Recent research has found that even small doses of outdoor physical activity can have significant effects on mental health (Sigman, 2015, unpaginated).

Namo brings up *chemistry*, when she underlines the importance of a good relation between the master and herself. This is also underlined by Shans two apprentices, Robin and Rote who praise the learning environment, and the good relation between the three of them.

In our own European tradition the relation between the master and the apprentice reflects that the Master possess something of value that the apprentice is absorbing.

In a workshop, the skills of the master can earn him or her the right to command, and learning from and absorbing those skills can dignify the apprentice or journeyman's obedience (Sennet, 2009, p.54).

In the introduction, I mentioned my observations in Japan where this was emphasised in the training, with 12 years practical training in the workshop one to one with the master. Examples like these shows how importance the relation between the master and the apprentice is of huge importance. Shan says:

-The chemistry between teacher and learner is important. The best is to teach one that you works well along with.

Common for findings in all the interviews was the importance of the Masters ability to lead the learners into a path and give them a lust for more. This is also confirmed by John Dewey:

It is his (the educators) business to arrange for the kind of experiences which, while they do not repel the student, but rather engage his activities are, nevertheless, more than immediately enjoyable since they promote having desirable future experiences (Dewey, 2015, p.27).

I recognize Robins description of how he is experiencing his Master, Shan, in the way Eugen Herrigel describes the Masters role in the process from the learners point of view. It does not have to be that far from the Master of

Archery in Japan to a master of traditional carpentry in Norway. When reading Eugen Herrigel, it could as well have been Robin describing Shan:

-I continued practicing. The Master followed my efforts attentively, quietly corrected my strained attitude, praised my enthusiasm, reproved me for wasting my strength, but otherwise let me be (Herrigel, 1999, p.19).

The master-Apprentice model are also relevant in a SEN-context. At the Ruskin Mill they use the apprenticeship learning as one of their bearing principles in their Practical Skills Therapeutic Education (Ruskin Mill Trust, 2013-14). The model is also used in training of practitioners at the Mill. One of the practitioners explains the method when had his training:

“I was very lucky to have been an indentured apprentice from 18-22 years old. I was told “Watch and learn. Try and learn. Show others how to do it and learn. And then take what you have learned and use it wisely” (Ruskin Mill Trust, 2013-14, p.30).

Ruskin Mill Trust use the term *Contemporary Apprenticeship Learning* when describing how they are developing students physical, emotional and cognitive abilities through the engagement of hand, head and heart. “The intention is to create communities or practices where tutor and student engage in a mutual learning process through conscious guidance and role modelling” (Ruskin Mill Trust, 2013-14).

These examples show how the master-apprentice model are applicable in different context, and preferred by Master craftspeople in Japan and Norway, by the learners interviewed and in a SEN-context, at the Ruskin Mill Trust.

4.3 Practical skills first

Far from wishing to waken the artist in the pupil prematurely, the teacher consider his first task to make him a skilled artisan with sovereign control of his crafts. (Herrigel, 1999 p.41)

Herrigel describes the Japanese way, which might seem a bit strict, but mentioned by all the craftspeople I interviewed there is the need for learning the basic artisanship through repetition and training over a longer period. Shan puts it this way:

-The experience of the learner is really important. Its easier with them who are more experienced and therefore learn more easily. (.....) One has to learn the basics first.

If I refer to Jon Bojer Godal and the expression *å herme*, he explains how knowledge is built gradually over a period when the son, Håvard, is mimicking/interpreting his father's moves in the woods, and gradually acquires knowledge. Håvard is not trying to invent something or be creative, he is too busy mimicking his father, the lumber jack.

Tesfaye compares crafts with one learning to use a bike. For one that has never learned how to balance on two slim tires of rubber and manoeuvre through the streets, it might seem tempting to lay down in bed with a cup of coffee reading a book about how to bike, and learn the art of biking once and for all. But that book, according to Tesfaye, can never be written, as the knowledge it takes to learn how to bike, is incorporated as routines in our muscles, in our balance, in our view and our ears. The majority of all the small, advanced movements our body does when we are biking are done unconsciously, based on our previous experiences.

Richard Sennet use the example of playing violin as an example on how repetition is important in order to expand the skills and improve the technique. He explains it with something he names the Isach Stern rule:

The great violinist declares that the better your technique, the longer you can rehearse without becoming bored. There are Eureka! Moments that turn the lock into practice that has jammed, but they are embedded routine (Sennet, 2008, p.38).

In the interviews with the craftsperson's Namo, Shan and Franco they were all almost fundamental on this point: The best way to transmit crafts is thru a practice in a workshop or in the woods over a longer period of time, with the necessary time to rehearse. All their examples on how they learned themselves and developed their skills was taken from a practical context.

There was also the feedback from the two learners, Rote and Robin. They both praised the learning situation where they could work with Shan over a period of time. Robin says:

-It's good to be in the workshop, there is crafts all the way. It's a good mix between independence and help when we need it, and it's much better that taking a course or a class.

He further describes the transmission as unacademic and directly, and explains that within the ordinary educational frames one gets to taste or get a glimpse of different ways to do things, but with Shan the learning is comprehensive, deeper, and thorough.

At Ringsaker A.O-centre Siri and Tone emphasize the practical approach as in particular useful in a SEN-context, as it have a broad range of impacts on the users. Siri explains:

-When we are working with practical crafts we are strengthening the users motoric functions, we are, concentration, movements, strength, keeping the body moving, as one working on a weave chair, or as with another doing embroidery, training her finer motorical movements.

As one can see there are several reasons for learning and teaching crafts through practice. But both the theory I have investigated and the interviews I have facilitated, they confirm that the principle of a practical approach to learning are preferable for some learners.

Letters and words are useful, but not all knowledge are accessible through language – a lot of knowledge is hidden in the body, and can exclusively be transmitted through the hands (Tesfaye, 2013, p.23).

Nevertheless, when understanding the practical approach when learning crafts, there have been emphasized three factors that is in particular important in order to provide the necessary output of the practical training:

- The possibility for mimicking one that knows
- The need for repetition
- A necessary amount of time needs to be provided

4.4 Research in Crafts

There are several definitions on research. In my Oxford Advanced Learner's dictionary, the term is explained as:

Investigation undertaken in order to discover new facts, get additional information etc. (Hornby 1974, p.718).

When I collected the contextual information and asked Shan how he had learned he mentioned *research in crafts* as a main source for his learning. As mentioned in the introduction it would be interesting to identify *research in crafts*. Is there a parallel universe for developing crafts as knowledge on a higher level? So Shan explained that would like to have the possibility do more research in order to move on as a craftsman:

-There is still questions I ask myself, that I would like to investigate. I want to move on and develop my own knowledge. Many people says that things are in a certain way, but I would like to check it out in practice, and confirm for myself that I am right. Try it and see if it is correct. Several claims never get checked.

Namo also use the term research in her crafts. She explain that she like to get back to the old garments again and again, and she always finds something new:

-One can read a text up and down, but its in the meeting with the tradition bearers and by exploring the original garment where I reveal new information. To explore and to do research is a very important part of the crafts.

Namo underlines that she need to see the original in order to understand why the garment gets its shape and that it takes knowledge and experience to ask the right questions:

-It happened that I take a step back in order to verify so called truth and my own judgements. For example as with textile cutting where I suddenly think that "This cannot be correct!". Then I go back. Draw the pattern with different methods in order to get the best fundament. This is research work.

Shan and Namo clearly explains how they both, as craftspeople, they are working with research through a systematic investigation and study of materials and sources in order to establish facts and reach new conclusions, even if its outside of the academic institutions. Both Namo and Shan express that they wish they had more time to do research and investigate their crafts. And when Shan points out that several claims never get checked he also indicate that there is a need for research in crafts.

In their testimony both Namo and Shan points out important ways of developing knowledge in the field on a higher level through research *in* crafts.

According to their claims, craftspeople do research today, *in* crafts, and should be given the opportunity to increase this activity. Their understanding of tools, the traditions, materials and tool-marks give them a possibility and advantage in order to explore a field that might be hidden for the academic world. Shan puts it this way:

-I would have liked to have the opportunity to do more research, and move on as a craftsperson. The ideal situation for me would be 1/3 ordinary work, 1/3 restoration work and 1/3 teaching. In order to teach others one have to move on and develop on one's own too.

Jon Bojer Godal points this out in an article from 2007 that crafts should be equal to academic subjects in Universities and Colleges. Mainly because academics need better to understand what it's all about, and a parallel to the fact that craftsperson's need to study Norwegian, History and English, In his article "*Do the expression action borne knowledge help us to a future for the craft?*" He explains why:

-Arachnologists, ethnologists as well as architects and engineers need the introduction to practical work (Falk et al 2007, p. 22).

4.5 New technology

The interviews and observation indicates that the use of new technology has a limited function in the training. Shan use his computer to show some pictures from relevant restoration projects in the lunch break, and Namo uses her tablet for translation of names on different types of stitches when teaching foreign students. Franco has established a web page for promotion of his products.

In the SEN-context Tone and Siri explains that they use facebook and social media as a tool in their work, but *not* related to the crafts training itself.

This indicates that from my interviews and observations the new technology is almost absent in the vocational training. All of the interviewees emphasize the practical training in situ as the most fruitful environment for learning, preferably in a one to one situation.

In Chapter One I highlight to John Shotters toolbox which he refers to as our ways of understanding (1.1. Transmission of crafts). The interviews and observations provides evidence that the most important tool kit for learning crafts is the embodied practice of the craftsperson's, transferred from one craftsperson to another.

4.6 What can academia learn from crafts?

There is a famous story about Isaac Newton and when he made his theory about the movement of objects it is said that he understood this when an apple fell from the tree and to the ground (or sometimes in his head) and through an "Eureka"-moment he suddenly understood the principle of gravity. We must assume apples fell to the ground before Newton, and re-continued to fall after Newton. And the gravity has probably been there all the time. This is an example on how theory aims to understand practice.

In my introduction, I asked the question if academia could learn something from traditional transmission of crafts. From my findings there is a few things I would like to highlight:

First of all the individual approach where one is facilitating the training to the learner. The one to one method where the master is carefully guiding the apprentice individually, letting the learner unwrap the knowledge when it's due, is highlighted by all of the artisans interviewed, and in particular by Shan. Through this model, one is structuring a natural environment for active learning in contradiction to a passive receiving in a classroom or in an auditorium.

Referring to John Shotter (p.19), we might use the term *embodied tool kit* when describing the transmission of complex crafts knowledge such as boat building and weaving. The interviews and observation shows how embodied tools provides a deep understanding and have proven their effectiveness. According to these findings the embodied toolkit might represent a potential that could be used also in an academic context.

4.7 What is being produced?

Traditionally the goal for traditional crafts has been the artefact, things that we need for everyday use. Today traditional crafts suffers from generic threats like industrialization and urbanization. Crafts play a different role than it used to do. In a modern society, the market for handcrafted products and objects have decreased. People do not anymore *need* to buy handcrafted dresses when they are in need of clothes. Instead, they can walk into the nearest mall and buy something industrial made for 1/50 of the price.

Namo sells exclusive, handmade, traditional clothes. That is just one part of her trade. She also does teaching. She gives lessons both individual and for classes. The teaching is also a part of what she produce. Namø travels around in Norway teaching others who want to learn her secrets.

We remember that Shan said that he wanted to spend 1/3 of his time with normal production, 1/3 teaching and 1/3 doing research. He does a lot of teaching and is, as Namo, sought after in different contexts. He has been doing workshops all over Norway, and for UNESCO in Georgia several times. He has participated in several publications and books, among them for the Directorate for Cultural Heritage and for Norwegian Crafts institute.

The UNESCO 2003 Convention on Safeguarding the Intangible Cultural Heritage is mainly concerned with the *skills* and *knowledge* involved in artisanship rather than the craft products themselves. Rather than focusing on preserving craft objects, safeguarding attempts should instead concentrate on encouraging artisans to continue to produce craft and to pass their skills and knowledge onto others, particularly within their own communities. There are several expressions of traditional artisanship like tools; clothing and jewellery; costumes musical instruments and household utensils, and toys. Norway ratified the convention in 2007, and Ministry of Cultural affairs is responsible for the implementation.

At Ringsaker AO centre they have a small shop where they sell what they are producing, like slippers blankets, pillows and cups. Nevertheless the main result is something else. It gives the users a possibility to get out of their house and experience a meaningful day. As we remember Tone mentioned the example with the user that was transformed by chopping wood. Her ADHD-symptoms vanished and she could for the first time sit down and eat with the others.

Tones observation is supported by Sigman in *Practically Minded*, where he refers to an evaluation of the effects of 49 after-school weekend activities where scientists has compared the learning environment effect by comparing green outdoor activities with an indoor setting. The results were highly impressive:

The American Journal of Public health study has found that exposing children with ADHD to outdoor greenery significantly reduces their symptoms (Sigman 2015, not paginated).

The researchers could also prove that among children *without* ADHD, inattention and impulsivity were reduced. Their conclusion was that all boys and girls need to be outdoors, in the nature and in a green environment.

Otto Salomon is clear that sloyd is education of the formative kind, and he has listed all the formative aims and positive impact of sloyd. For Salomon the reason for teaching sloyd in primary school is not in order to educate carpenters:

Carpentry is a trade, and the principles which underlie it are entirely utilitarian, whereas Sloyd is solely a means of Formative Education” (Salomon, 1898, p.1).

This clearly indicates that there are several *reasons* and *aims* for transmission of crafts in our society:

First there is the recognized bearer who transmits his or her knowledge to a new craftsperson, and the knowledge is regarded as something of cultural value, according to the UNESCO 2003 convention. If the bearer pass away the knowledge disappears. By ratifying the convention the government has made a commitment to support the safeguarding of traditional crafts on different levels, and recognized the living knowledge as a Cultural Heritage.

Another reason for transmission is the craftspeople who make beautiful, well-made things and objects which people actually buy in a market, like bowls or blankets. It could also be knowledge needed in order to maintain or restore a house, a stave church or a castle. In Norway this is a huge market, for example for carpenters or painters who has specialized in traditional crafts. In this case we need to transmit traditional crafts in order to support the market with

objects or qualified knowledge in restoration work. The protection of cultural heritage is heavily supported by the State with different mechanisms.

It has been indicated through my interviews and observation that in the SEN-context transmission of crafts has a mighty transformative power, and has a great impact on the people with special needs. Siri and Tone points this out, and they both find support in Salomon and Sigman. In the interview Tone explains how the users learns how to interact with others, use their body, improve their motor skills, and how a person heavy influenced by ADHD and Asperger thru crafts has made huge improvements.

At the Ruskin Mill Trust the importance of meaningful activities and the item being made are emphasised. The Practitioners guide (2013-14) suggest that confidence and self-esteem develops through visible achievement:

We can only imagine the feeling of a young student after creating their first functional item. This wave of satisfaction and legitimate pride may serve as a driver for completing other tasks and dedicating him or herself to other meaningful activities (Ruskin Mill Trust, 2013-14, p.48).

There are also other examples which have not been explored in this thesis, but should be mentioned as they are a part of the big picture: It's the education in primary school, where Salomon has described how sloyd in primary school are developing the children. Tone have also mentioned in the interview that the impact of crafts in primary school was important for her. There is the master-apprentice training on a craft-certificate level, and there is the training taking place in vocational schools. Finally there are the all the parents and grandparents who are teaching their children and grandchildren to knit scarfs and to whittle flutes, the cultural transference that keeps the cultural heritage is alive.

The examples above clearly indicate how the state in different ways support the market for transmission regardless of whether it is training of crafts persons for protection of cultural monuments or vocational training in a SEN-context.

The examples above showing how crafts can be used and are needed for different purposes in our society, as for restoration, in education, as a formative tool, for developing knowledge, skills, capacity, or as a therapeutic measure. This clearly indicate that there is several reasons for passing on crafts in our society and shows how the transmission takes place in different contexts and with different purpose. The items and the objects are not alone as the goal for the transmission.

4.8 Comparing methods and approach in the transmission

I have stated the reasons for learning and teaching crafts can be many and wide ranging. When I started to work on this thesis I expected significant differences in transmission methods to emerge, in particular when comparing the master level with Namø, Shan and Franco, and the methods used at Ringsaker A.O.-centre by Tone and Siri. But to my surprise it turned out that the principles for methods and approach are more or less the same. For example all of the interviewees preferred a one to one learning situation, and all the interviewees emphasised the need for a practical learning situation, independent of if it was traditional crafts training or in a SEN-context.

All of the interviewees preferred clearly that the approach should be of a practical nature. Shan formulates his experience like this: "I am sure it is OK to explain things theoretically, but actually it has no mission. The practice, to show, is the only right way." Franco agrees: "Practical! I show the learner step by step. And then we keep it going until it becomes good."

Also all of the interviewees preferred a one to one model. Namø says:

-To educate in a one to one situation is absolutely the best way. Eventually in as small groups as possible. When the model is one to one it is easier to discuss. When one teach more they are often on different levels, and it makes the education more difficult.

Unfortunately, as we know, crafts in the primary school is sometimes organized as big classes. Since the beginning of slöjd in the Nordic schools, already in the end of 19th century, Solomon estimates a proper number of pupils to be from 6-20, with 20 as an absolute maximum. It all depends on the pupils age and experience, and of course on how experienced the teacher are:

The teacher who are unaccustomed to teach slöjd will probably be unable at first to manage with ease more than 6-8 pupils, especially if they are beginners.” (Salomon, 2013, p.18).

But even in primary school slöjd has to be thought individually, and Salomon admits that the teacher has to be aware of this:

No teacher, however, ought to let his desire to increase the number of his pupils induce him to take more at one time than he can manage in a thoroughly satisfactory way” (Salomon, 2013 ,p.18).

Namo also tells me about a situation where she learned to make a particular woman’s hat from Røros. She was in the process together with the tradition bearer and she was about to tighten a seam. But how much? The bearer taught her that she had to feel it herself, by herself. “One has to *feel* it”, Namø says. “When I am transferring this to others, I am back there”.

Shan adds that he sometimes has to be like a psychologist: “I have as a principle that I praise the good work first, and then I explain what is not so good afterwards.”

Siri at Ringsaker A.O. centre does exactly the same method. She praise the good work first, and gives an explanation.

When I did the observation of Shan and his two learners I noted that they were working for themselves with Shan keeping an eye on them from a distance. He explains:

-There is no use in *me* measuring and drawing. They have to do it themselves, and follow with the axe.

In other word Shan leads them on the way, but the apprentices have to walk it themselves. Siri use the same technique; She is present and together with the learner, but the users has to do the *work* themselves.

4.9 Questions based on my findings

From my findings I have tried to dig deeper in four questions I formulated in my introduction. The questions where:

- Is the preferable way to pass on crafts is through practice?
- Is the best model for teaching and learning crafts in an one to one relationship?
- Does craft have a strong transformative impact?
- Does the new technology in transmission of crafts contribute to the craftspeoples toolkit and how?

I will explore these questions one by one, and later follow up in my recommendations: Questions are important as they contribute to knowledge and research in the future.

4.9.1 Is the preferable way to pass on crafts is through practice?

Two principles have been repeated and highlighted as in particular important. These principles are the same when Namo is teaching the different stitches in a traditional dress, or when Siri is teaching how to make a toilet map at the Ringsaker A.O-Centre in a SEN-context.

The first principle is that all of the craftspeople interviewed highlight how they have learned, and teach, through a practical approach, in situ, in a context which what Jon Godal describes as *action borne knowledge* in an article published in *Maihaugen Yearbook 2007*. Godal explain the term like this:

What we name action borne knowledge is this repeated meeting, the continued enshrined in each one of the work based meeting between personal experiences and role models (Falk et al 2007, p.12).

But as I have learned there are some important principles I have explored in the material that need to be highlighted in order to provide a sustainable environment for the practice:

- There has to be a master / tradition bearer / skilled craftsman present, that gives the learner a possibility for mimicking techniques, movements and attitude.
- There needs to be an environment for repetition. Without this possibility the learning output will not be sufficient. This point was in particular emphasized by the two learners. The introduction usually provided thru a class or attending a course would not contribute to building knowledge. It would just turn out to be a taste.
- It is also important that the necessary amount of time need to be provided in order for the learner to really absorb the knowledge.

4.9.2 Is the best model for teaching and learning crafts one to one?

The second principle is that all the craft persons interviewed are clear that the best model for teaching and learning crafts is one to one, like the way the traditional Master teach the apprentice in the workshop. This principle is highlighted both in *Zen in the Art of Archery* (Herrigel, 1999) and in the interviews with all of the crafts persons, learners and the teachers. Shan says:

-The one to one model works best, where the one who teach can have full attention directed to the one learning. One should not think that two are too much, but there is a huge difference.

Franco agrees:

-The best way to learn the trade is to be in a workshop with some all foxes, like me, who are versatile, and learn the trade one to one.

He explains that several students struggles when they are doing the 3rd year in Vocational school and not in a real workshop. He claims that they might learn the process, but they will not get the knowledge into their fingers. In a workshop its an everyday routine to do 3000-4000 welds in one operation. The amount of training is important, according to Franco. He explains further that several of the students who are doing their last year in school will have trouble passing exam and get a crafts certificate:

-When the pupil does not find a position as an apprentice and has to do the last year in school it goes wrong. It does not work. Too limply.

Today there are, according to Norwegian Directorate for Education, no limitation for the number of learners per teacher in a class in vocational education. It could be fifteen; twelve or it could be six. In Lillehammer vocational school the current situation is sixteen learners per teacher. Even if

this is understandable from an economic point of view, this fact is in contradiction to what the craftspeople, the teachers, the learners suggest as the best way to learn, and which provides the best environment for learning. In this context statement from the craftspeople would be a strong argument for facilitating for apprentices not in schools, but *in* real workshop, *in* the trade. In particular, as Franco suggest, in an environment with experienced masters combined with production.

In the SEN-context the benefits of the apprentice model is highlighted by Ruskin Mill Trust (Ruskin Mill Trust, 2013-14) through their model, where the Contemporary Apprentice Learning model is a bearing principle in their methodology for education.

The intention is to create communities or practice where tutor and student engage in a mutual learning process through conscious guidance and role modelling (Ruskin Mill Trust, 2013-14, p.31).

4.9.3 Does craft have a strong transformative impact?

Already in 1898 Otto Salomon pointed out the transformative powers of practical crafts. When he writes about the sloyd it is not the bird houses or cutting boards that is the goal, but the formative impact:

It gives a taste for rough labour as distinguished from clerkly accomplishments; it cultivates manual dexterity, self-reliance, accuracy, carefulness, patience, perseverance, and especially does it train the faculty of attention and develop the powers of concentration. (Salomon, 1898, p.1)

This is confirmed by Tone and Siri at the Ringsaker A.O. centre, who gives several examples on how crafts has a wonderful transformative impact on the users at the centre. This is also what Dr.Aric Sigman points out in *Practically Minded*:

Craft courses score highly in terms of providing students with creativity, independence, determination and problem-solving skills (Sigman, 2013, unpaginated).

The potential of crafts as a transformative represent a huge potential on several levels. The positive impact it has on the users at Ringsaker A.O. –centre has been mentioned. There is also other types of institutions, like nursing homes, hospitals, elderly centres, prisons, and of course the schools on different levels, where crafts represent a wonderful potential. I will point out in a following paragraph, when I summarize the consequences of my findings and make some recommendations.

4.9.4 New technology is over-rated

-If it ain't broken, don't fix it (American saying).

As demonstrated new technology is on its way into Norwegian education with full speed, on all levels we should be aware of the risk of disturbing a well-working method handed down from generation to generation. All of the interviewees claims that the best way both to learn and to teach crafts is in situ, in a practical setting, and one to one. According to the craftpersons the new technology is used in a quite limited way, and when, just in order to support the practical transmission.

The concern in this case is that there is an offensive digital educational strategy on the move, as pointed out earlier, which could introduce changes to the training, which might be helpful in order to speed up the production, but on the other hand decrease and interfere with the hands work, which is really the core of the practical crafts. We have discussed the reasons for transmission of crafts earlier, and we learned that there is so much more than just the objects produced. The outputs and the value might as well be in the making. In that context we should be aware that when new technology opens

for possibilities, it might as well also take the interesting attractive parts away from the process and the crafts. Franco puts it this way: “For me modelling is the really fun thing in the trade. I don’t want to outsource that to a computer!”

4.10 Consequences of my findings and contributions to knowledge and further questions

My findings might be useful in different contexts, which mentioned in the introduction of this thesis. First, I have been looking at possibilities at the Norwegian Crafts Institute where I work. The findings confirms passing on traditional crafts to a new generation enriches knowledge , but at the same time understanding that there is a potential for doing some adjustments and a good reason for looking at some new possibilities.

In my professional role

The findings clearly indicates that the preferred model for transmission of crafts is practical, in situ, and one to one, between crafts persons. When the Norwegian Crafts Institute is organizing our projects we are also emphasizing the documentation part as a part of our model. The material accumulated over the years are significant, and takes a lot of resources both to produce and to maintain. Pictures and documents, films and audio recordings need to be digitalized. This might be a result of the institute’s location at a museum, where documentation and storage of material is a part of the tradition. Nevertheless there is nothing in my findings which indicates that this material is helpful passing on crafts to a new generation. What has *proven* to be helpful is the interaction between the tradition bearer and the new crafts person over a period of time. As pointed out earlier there need to be an environment for repetition or it would just turn out to be a taste. It is therefore important that the necessary amount of time need to be provided in order for the learner to really absorb the knowledge.

The consequence of this finding might lead to an allocation of resources and a revision of the institutes methodology and the way we are working in the field.

In the light of my findings, I see that there can be too much focus on the products and the things as the one aim of the crafts, which might be a bit conventional way to look at it. The UNESCO convention for Safeguarding the Intangible Cultural Heritage is one example of another way of looking at living crafts, as living knowledge, and an important part of our cultural heritage. In this context it's the craft persons knowledge that is valuable, and need to be handed over to a new generation. When the craft person is replacing the work of the hand with machines and computers in order to compete with the industry, one risk that valuable knowledge handed over from generation to generation, will vanish. For Norwegian Crafts Institute, we should be aware of this dimension when we select, and construct our projects.

My findings indicate a potential market for crafts used as a powerful tool for well-being, healing purposes, and in a SEN context. These findings are important, as crafts have proven to have an almost magic transformative impact, as demonstrated from the examples from Ruskin Mill (Ruskin Mill Trust 2013-14) and my observations and interviews at Ringsaker AO-center. These findings are also supported by theory (Sigman, 2015). Crafts in a SEN-context could represent an interesting market for artisans that should be further developed and explored. In Norwegian Crafts Institutes work, the SEN-context would represent a new path to walk, and a new possibility that could be explored.

Political reasons

As there is an ongoing political discussion on transmission of crafts related to implementation of the UNESCO 2003 Convention for Safeguarding of the Intangible Cultural Heritage in Norway, the safeguarding tools is lively debated. A piece of our cultural heritage is disappearing every day.

The knowledge of hands must be stubbornly and deliberately delivered from generation to generation, otherwise it will be lost. The West Africans point this out in the saying: An old craftsman is like a Library on fire. (Tefaye, 2013, p.21)

The findings indicate that in the practical transmission and the interaction between the bearer and the new craft person cannot be over-rated and should be emphasized when introducing safeguarding measures. This is both in the spirit of the convention and according to the feedback from the artisans. This knowledge should be reflected in the way we organize the transmission of crafts to a new generation, and in our methodology.

Politically there are several challenges in our society where crafts can play an important role. There is a huge potential for practical crafts in the school system, in a SEN-context, in health care, for well being, for inclusion, and as a preventive activity. Politicians might not be able to heal the world with crafts, but they may be able to improve the social and cultural life a lot. I will present some possible measures in the following paragraphs that will help the politicians to make the right priorities.

The status of crafts in our society

-It's the human hands that makes us the most intelligent animal (Tefaye, 2013, p.21).

The reason for crafts has changed. As repeatedly pointed out in the previous text, crafts are more than boats, cups and chairs. The findings in this thesis indicate how crafts are so much more: It's living cultural heritage, it's transformative, it's therapy, it's healing of ADHD, it's environmental friendly, it's conservation of tangible heritage, and its production of items and things. And finally it is as Mattias Tefaye points out, in *Wise Hands*:

The philosopher Anaxagoras from the antique Greece claimed very precisely, that it is the human hands that makes us the most intelligent animal. It's the hands to blame, that it's us, and not the hippos or the anteaters that rules the planet (Tesfaye, 2013 p.28).

Measures could be introduced in the school and university system in order to re-establish a recognition of crafts in our society. To strengthen and develop practical crafts in primary school would be important of several reasons, and not least an introduction of research *in* crafts on a higher performing level. I will introduce these measures in the following paragraphs.

Recognizing research in crafts

It was pointed out by both Shan and Namo that they wanted to do research in their crafts. Both of them have previously been working as scholarship students within their crafts for three years, which means they both are experienced, both in their crafts as such, and that they are experienced in using methods suitable for research in crafts.

Research is often understood as a systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions. Craftspeople on a high performing level would be capable to do research in their fields. As Shan explained in the interview:

-I would have liked to contribute in order to bring it (the knowledge) further, but then I would need time to do research. There is still things that I am wondering about and that I would like to investigate. I do want to move on and build knowledge. Two months a year would be perfect for doing research. There should be organized a mechanism for this purpose.

Shans idea is brilliant. There should be introduced a mechanism for research in crafts where craftspeople can apply for a number of work months for this

purpose. I think it is important to emphasize that the research in crafts should be performed by craftspeople. According to the UNESCO 2003 convention there is a need for safeguarding traditional crafts, and that safeguarding measures should be community based. In this case I suggest the community should be understood as the community of craftspeople. If a research program in crafts should be organized within the frames of the academic institutions one might risk that the mechanism easily could turn out to be research *about* crafts, according to the academic tradition.

Changing the education

The typical classroom is a fake reality, and the children crawls it and therefore loose their engagement (Tesfaye, 2013, p.33).

In primary school, practical crafts has a great potential. Not necessarily because we need more craftspeople, but as Salomon has described it so well, the transformative impact crafts has on children:

It's purpose is not to turn out Carpenters, but to develop the mental, moral, and physical powers of children; and it is the most effective instrument yet devised for securing this development (Salomon, 1898, p.1).

In my introduction I introduced the publication *Practically Minded*. Here, Sigman support Salomon, and connects it with education outdoors:

The researchers also pointed out to “substantial research conducted” among people without ADHD showing that inattention and impulsivity are reduced after exposure to green natural views and setting (Sigman, 2015, unpaginated).

The transformative impact is a strong argument for introducing more practical crafts in primary school, but we should also keep in mind that in

some cases crafts in school will be important as an inspiration for children to choose crafts as a path in life.

Currently there are being built new schools without rooms dedicated to sloyd, tells Stinna Højgaard. Of course, we have complained to the Ministry, but with no success. It's clear that as time goes by and the practical subjects has been abandoned, more children have challenges catching up (Tesfaye, 2013, p.31-32).

Too often we see how practical crafts are losing the competition vs basic subjects such as mathematics and science in the school system. In order to re-establish the status of crafts in our society, the ability to give priority to practical crafts in primary school will be an important statement.

In vocational education the experiences from the interviews show that the learning will improve when the training is organized one to one. This is clearly stated both by the learners and the bearers. A possibility is organize more of the practical training outside the schools and in real workshops with real craftspeople. In that case, as Namo points out, the governmental support to small businesses that takes apprentices, need to be increased, if they shall be capable to do this job. This will be in particular important for the small and rare crafts, where there sometimes is just a handful of practicing craft persons left.

Crafts in a SEN-context and as a therapeutic tool

The experience from Ruskin Mill clearly demonstrates that their method *Practical Skills Therapeutic Education* provides a safe environment for people to learn, grow and develop, and how crafts can be used as a therapeutic tool making it possible for the student to contribute positively to their environment. "The intention of the student journey through Ruskin Mill is to enable progression and integration into society" (Practitioner's guide, 2014-15, p.21).

My interviews and observations at Ringsaker A.O. centre shows how transmission crafts can have such a strong positive impact on people with special needs, and a true transformative effect. This finding also finds support in Salomon and Sigman who both emphasize the formative impact of sloyd and other crafts on the learners. It clearly show how crafts has a potential as a transformative tool in a SEN context, both in dedicated and in ordinary schools. The use of crafts can be a powerful therapeutic tool in a wide range of contexts and on different stages in life:

Craft based activities have been employed clinically to improve cognitive functioning and peripheral symptoms in patients with mild to moderate senile dementia of Alzenheimer type (Sigman, 2015, unpaginated).

Sigman points out the benefits and the experiences of using crafts as a therapeutic tool in different contexts. Both in theory and in my fieldwork I find evidence that shows that crafts can have a healing effect. The strong impact of crafts is also clearly indicated through the observation and interviews at Ringsaker A.O. centre pointed out in Chapter 3.8 where Tone claims that manual work actually reduces the symptoms of ADHD and Asberger's according to her own observations.

Despite commercialization and industrialisation, crafts should be welcomed with respect, not because we need the products, but because our society desperately need crafts. In special education, in therapy, as healing and for preventing diseases (Sigman, 2015).

5. Chapter Five

Summing up

My aim with this thesis has been to understand transmission of practical craft, both from a theoretical point of view and from the practical side. I wanted to explore transmission in general, in a SEN-context, and to examine the material as a whole, in order to see what can be learned.

In Chapter Two I investigated theorists who describes crafts and transmission from their perspective. I introduced and discussed methodology to be used collecting empirical data and how I selected the interviewees. I presented Ruskin Mill Trust and Ringsaker AO-centre, and the methodology and principles used by Norwegian Crafts institute. My experience led me to my research question, *How to understand transmission of practical crafts, from a theoretical and a practical view, and in a SEN-context?*

In Chapter Three I moved out in the field, to the workshops, in order to listen to the craftspeople's voice. In this chapter, I presented the findings from interviews and observations. The observations and the interviews gave me an insight in the complexity in the transmission. And it was possible for me to absorb the information without too many distractions and filters.

It came clear to me that in order to answer my research question it was important to look at both the pedagogical principles suggested by the interviewees, and the output of learning craft in a broader view. In the introduction I formulated four key questions which I have in particular discussed in Chapter Four:

- Is the preferable way to pass on crafts through practice?
- Is the best model for teaching and learning crafts in a one to one relationship?
- Does craft have a strong transformative impact?

- Does the new technology in transmission of crafts contribute to the craftsperson's toolkit and how?

The key questions are rooted in the *why's* which I have listed in the introduction, and I suggest they are important for understanding crafts in a specific way.

I would suggest it is easier to describe an artefact or an object than the embodied crafts. Going back to my research question, the term *practical crafts* has therefore been helpful as a guideline in order to steer clear of distractions and concentrate on the practical transmission and interaction. Nevertheless it can sometimes be hard to separate the artefacts and the embodied practice, as the physical world contains important references for the practical crafts. For example when Namo showed me a fabric, or when Shan showed me an axe. As supporting artefacts the artefacts and tools has therefore been important in the communication. In the spirit of Jon Shotter (p.19) we might say the artefacts represent a second layer in the embodied tool kit.

In order to identify and understand practical crafts the interviews show clearly how the transmission is a personal thing, between individuals, and how the relation and the trust between the learner and the teacher is crucial for the exchange of knowledge. Shan has described how he introduces his two apprentices to experience and interpret nature in a new way, and see it with different eyes. When the practice involved the master Shan, taking them out in the woods, it was described by his two learners with pride and enthusiasm. I associated it with a sacred initiation ritual where they had achieved a new level.

If I had chosen to do my interviews by email or phone I would probably not have been capable perceiving this important dimension. My strategy of choosing a personal one to one situation for the interview in situ, helped create a friendly and atmosphere where I could absorb, not just the words, but also body language, eyes and tone. As suggested by Cohen (Cohen et al, 2011) I needed to “chew it in my mouth” in order to really understand.

My findings indicates that the best way both to learn and to teach crafts is in situ, in a practical setting, and one to one. In vocational education the interviews indicates that the quality of the learning will improve when the training is organized one to one or in smaller groups. All the learners, the teachers, and the bearers, presented in this thesis reflect this point. In Chapter One I wrote that Norways ratification of the UNESCO convention for Intangible Cultural Heritage calls for a deeper understanding of Safeguarding through transmission. When planning and organizing future design of safeguarding measures for traditional crafts, this thesis provides important principles.

Also in a SEN-context, the one to one model for crafts training seems superior, and at the Ruskin Mill this is emphasised as an important principle in their curriculum. The success of this model is confirmed by the British Governments Office for Standards in Education (Sigman, 2013-14, unpaginated).

Based on my findings I suggest that this experience should be emphasised when education in crafts is organized and sizes of the classes are considered in the future. A consequence should be to look into the possibility of both making the classes for vocational training smaller, and organize practical education in businesses and workshops, together with experienced masters. Preferably one to one. As I have described in the previous section: The process of learning crafts is embodied and personal.

The impact of the nature as the environment for learning crafts is emphasised by both Robin and Rote, and find support in Richard Sennet when he suggest that we need the interaction with nature in order to find balance in our lives (Sennet, 2009). The benefits of a green curriculum is also well explained by Aric Sigman (2015), and the experiences from Ruskin Mill Trust (2013-14). Tesfaye classifies the classroom as a “fake reality” (Tesfaye, 2013). The findings indicates a potential in organizing education outdoors, outside the classroom, on different levels, not just for crafts, but other subjects.

In section 4.4. *Research in Crafts* Shan suggest to introduce a mechanism for research in crafts where craftspeople can apply for a number of months work for this purpose. Shan suggest that there are still white spots in the map of crafts that need to be explored:

-There is still questions I ask myself, that I would like to investigate. I want to move on and develop my own knowledge. Many people says that things are in a certain way, but I would like to check it out in practice, and confirm for myself that I am right. Try it and see if it is correct. Several claims never get checked.

Shans idea suggest that the research in crafts should be performed by craftspeople. This is an idea that should investigated more detailed.

My investigations has further convinced me that practical crafts has a great potential in primary school. Not necessarily, because we need more craftspeople in the future, but as Otto Aaron Salomon described so well more than 100 years ago; Slöyd is a powerful instrument devised for securing the development of the children's mental, moral and physical powers. Through embodied craft we develop capacities through the interaction between body, material and tools: Senses, movements, observation, accuracy are all important skills and tools for children and adult to experience and develop.

My investigation indicates how learning and practicing crafts can have a strong positive impact on people with special needs, and a true transformative effect. Research at Ringsaker AO-center and at the Ruskin Mill Trust (Ruskin Mill Trust, 2013-14) provides solid evidence for the practical crafts as a powerful tool in the special needs curriculum. In the SEN-context my findings clearly indicate that crafts contribute to special education; therapeutically, developing body-eye coordination, and preventing disease. (Sigman, 2015).

My findings demonstrate how crafts are more than making artefacts. Crafts improves us as individuals and brings a quality into our lives. Based on historical research we

might say that crafts are what makes us human. They bring health and well being into our lives, and it link us with nature. Crafts help us connect with the past and connect us to the real world. Through crafts we develop our capacities and we are given the possibility to share knowledge with our communities (p.10). Crafts teach a new generation life skills to meet the challenges in their future.

Crafts might not save the world, but they have potential to improve our lives.

6. Chapter Six

Reference list

I have chosen literature with three different perspectives:

- Theoretical support in my practical planned fieldwork. How to implement the interviews and the observation in an appropriate way, and ethical considerations.
- Theoretical support to understand the learning process, and to help me understand what I really observe. Hopefully this literature will give me a tool and terms in order to describe
- Theoretical support to understand the use of crafts and experiences in a SEN-context.

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7. Appendix

1. The interviews
2. Approval from NSD – Norsk senter for forskningsdata AS on February 2nd 2018.
3. Email from Norwegian Directorate for Education, June 14th 2018
4. Email from a teacher at the Lillehammer High School June 18th, 2018

7.1 The Interviews

All the interviews are completed and written in Norwegian, while the quotes used in this Thesis are translated into English.

Shan

Intervjuet i Tinn

- Restaureringstømrer
- 57 år
- Norsk
- Mann
- Lært av eldre folk, gjennom arbeid, gjennom håndverksforskning

Hvorfor/hvordan ble du håndverker?

Jeg valgte håndverket fordi det passet bra med å overta gård. Jeg trives med å bruke hendene og med å være ute i naturen.

Jeg trives med å skape. Se et tydelig resultat av arbeidet jeg utfører. Jeg begynte egentlig ikke med restaureringsarbeid før i 1991. Jeg jobbet i et tømrerfirma som så for seg en nisje. Dermed

kom jeg med i Riksantikvarens middelalderprosjekt. Jeg syntes dette var så interessant at jeg fortsatte.

Jeg trives med å skape. Har drevet med teori, og, men det trives jeg ikke med på samme måte.

Det er en veldig tilfredshet når jeg er ferdig, og har arbeidet med restaureringsprinsippene slik at jeg ikke forringer kvaliteten i den gamle bygningen. Føler jeg har vært med å skape noe varig. Jeg er også tilfreds når jeg skaper, og med å jobbe med eldre verktøy.

Fortell meg om dine læremestre

Først var det H gjennom middelalderprosjektet til Riksantikvaren. Han var sentral i å bygge opp håndverkskunnskap i Norge og i bruk av restaureringsprinsipper.

J var min mentor i forhold til tre og materiallære da jeg var håndverksstipendiat ved Norsk håndverksinstitutt. Dette er grunnlaget for det jeg kan. Jon hadde stor betydning for det praktiske arbeidet i stipendiatordningen.

P var en av nestorene i laftekunnskap i Norge. Det jeg lærer av han var basiskunnskap om det jeg kan om lafting, gammelt verktøy og sliping. Også om holdningen til håndverk og håndverkskunnskap.

Med holdning mener jeg for eksempel når jeg lærer videre, å forklare slik at en får respekt for håndverket og kunnskapen som ligger i den. For eksempel det med å være nøye med verktøy. Det skal være skarpt! Eller når du er i skogen. Finne emne når det er et tre som passer. Et skaft. Dette er en holdning det tar tid å gjøre til en praksis.

P var litt spesiell. Hvis vi var flere samlet kunne han sette de som gjorde, eller svarte, feil, skikkelig på plass.

Hvordan lærte du håndverket ditt?

Når det gjelder familien kommer jeg ikke fra en håndverkerfamilie. Fatter var lærer. Jeg lærte vanlig snekring gjennom å lære av andre 1:1. Jeg har fått mulighet til å lære av eldre folk. Jeg begynte å snekre tidlig.

Enhver byggeplass er en læringsarena. Jeg er privilegert som har fått være stipendiat og har deltatt i Norsk håndverksinstitutt's opplærings- og dokumentasjonsprosjekter. Dette var en fin

måte å lære på, og det var mye 1:1. Jeg synes det føles bra både å lære og å lære bort. Evnen til å få en god dialog er mye større når man er to.

Det finnes all verdens kurs og seminarer i dag. Da jeg var i læra ble jeg plassert med en eldre håndverker som kunne, og jeg lærte 1:1. En får ikke praktisert nok på et kurs. Få personer er alltid bedre. For stort blir sosialt men ikke faglig.

Det har vært en glede å lære av gamle folk. Jeg husker økseseminaret Norsk håndverksinstitutt arrangerte i Rissa. De gamle tok seg god tid. Vi fikk tid til å lære.

Utvikling

Når du kan mye, så lærer du mindre på kort tid. Fint å jobbe med yngre folk som har en innfallsvinkel der jeg kan plukke opp noe.

Fremdeles lærer jeg mest gjennom praktiske oppdrag, men jeg kan fremdeles lese en bok. Jeg stoler imidlertid ikke på det før jeg kan gå ut i skogen og sjekke om det stemmer. Gjennom prøving. Det føles ikke riktig å formidle kunnskap jeg ikke har prøvd ut.

Jeg skulle gjerne hatt muligheten til å forske mer, og komme videre som håndverker. Nå er oppgaven først og fremst å lære videre. Det ideelle for meg er 1/3 vanlig arbeid 1/3 restaureringsarbeid og 1/3 opplæring av andre. For å ha noe å lære andre må en komme videre sjøl og. Jeg synes håndverkskunnskapen / seminarene er mye det samme som på 90-tallet. Som med J og X på Dovre. Skulle gjerne bidratt til å ta den videre, men må da ha tid til å drive forskning. Det er fremdeles ting jeg lurar på og som jeg kunne tenkt meg å undersøke. Jeg vil gjerne videre og spisse kunnskapen. 2 måneder i året ville vært ideelt til å finne ut ting leg lurar på. Det burde vært en ordning for spissing av kunnskap.

Mange sier at slik er det, men jeg liker å sjekke det i praksis, og bekrefte for meg sjøl at en har rett. Prøve ut og se om det stemmer. Mange påstander får en aldri sjekket.

P hadde *gjort* det. Han kunne så mye og hadde prøvd det meste i praksis. Det var det som var så bra med han. Han hadde vært med å kjørt tømmer siden han var 8 år og fått med seg mye.

Lære til andre

Jeg bruker egne erfaringer hvor jeg har lært selv og erfaringene med hvordan jeg har lært selv, fra H, J og P. Når det er håndverk er det viktig å demonstrere. Gå grundig gjennom. Om å gjøre å være grundig. Hvis du hogger et laft feil må du bytte hele stokken. Å demonstrere er viktig: Måten å stå på, måten å holde verktøyet, skryte litt først og ta det som ikke er så bra etterpå. Der er det stor forskjell på å undervise 1, 2 eller 3. Det gir et bedre resultat når det er 1:1, og enklere å følge med på at de utfører det de skal. 2 burde være maks.

Når det gjelder håndverksstudiene i høgsolen skulle det vært mer praksis. Det er sikkert greit å kunne forklare ting i teori, men det har egentlig ingen misjon. Det praktiske – å vise – er den eneste rette måten.

Erfaringen til den som lærer er veldig viktig. Det er enklere med de som er mer erfarne og dermed lærer raskere. Det er enklere å lære ne som kan lafte å lafte et nytt laft, enn en som aldri har lafta før. Man må lære det grunnleggende først.

Jeg bruker ofte eksempler i bygningen vi arbeider på. Bruker egentlig ikke teori, men viser gamle prosjekter som kan være relevante. Som Audunarstova-prosjektet. Jeg tar ofte med PCen i lunsjen for en fagprat. Se jeg har nå er lærevillige. De kan bruke håndverktøyet og er i rundt 40/50 år. De jobber for museet på Rjukan med ansvar for vedlikehold av mye eldre bygningsmasse. Godt at de blir mer sjølstendige. De er fokuserte og interessert.

Jeg har tatt de med ut i skogen. Funnet emner til torvkroker, felt tre med øks, og laga bord.

Det kan ofte gå litt for fort når jeg lærer bort. Det er viktig å kunne ta seg tid. Å tenke for mye produksjon vil ofte gå ut over læringen.

Ellers er det viktig med kjemien mellom lærer og elev. Det beste er en du funker godt med. Når du er lærer må du være psykolog, og. Man må behandle folk forskjellig. De er på forskjellig nivå. Som lærer er det veldig viktig å skape nysgjerrighet og entusiasme. Det er ikke alltid lett, men spesielt viktig.

Derfor er det viktig å ha noen oppdrag i blant som nesten kan være som en premie. Det skaper nysgjerrighet for faget. Og det er moro for meg og.

I vår hadde vi et slikt prosjekt med fylkeskommunen. Videregående. Det er viktig å ta seg av de som er yngre. Skape nysgjerrighet. Viktig å smitte interessen til folk i ung alder, selv om interessen kanskje ikke er der akkurat da, kan de bli litt opplyst om hvordan ting var før, hva slags verktøy som ble brukt før, osv.

Jeg har som prinsipp at jeg skryter av det som er bra først, og sier fra om det som ikke er så bra etterpå.

1:1 modellen fungerer best, der den som lærer bort kan ha full oppmerksomhet på den som skal lære. Man skulle ikke tro at to er for mye, men det er stor forskjell. Min erfaring er da at man må gi de hver sin oppgave. De kan for eksempel drive i hver sin ende på et laft, ellers gjør den ene allting. Jeg er ikke i tvil om at den beste måten å overføre håndverkskunnskap på er 1:1 i praksis. Selv om du er en liten gruppe lærer håndverkere best gjennom egen erfaring og prøving. I en 1:1 situasjon får en prøvd alle grep og måter. Jeg mener dette er det beste både for lærer og elev.

Noen er mer frampå. De som ikke er så frampå får heller ikke lært noe. Det er viktig å kunne stoppe arbeidet og kunne forklare / vise. Fint å vise bilder fra andre relevante prosjektet eller arbeidssituasjoner. Og det er mer interessant for meg som lærer. På denne måte kombinerer jeg de tre måtene i det praktiske arbeidet hele tiden; praksis, teori og forskning. Dette er det jeg kaller den Haslestadiske læringsmetode.

Mål

Jeg jobber mye i tommer. Dagens håndverkere jobber bare i centimeter. Er nok litt gammeldags, men jeg legger om hvis jeg jobber med yngre folk. Da er det for det meste engelske tommer, men i stavkirkeprogrammet bruker vi norske tommer. Jeg har ingen tradisjon i å bruke kroppen som mål.

Jeg har lurt på dette med at delene i stavkirkene er ulike. Kan det være at håndverkerne i sin tid har brukt sin kropp? For eksempel tommer med litt forskjellige bredder?

Med P var det tommer det gikk i. Han brukte skrapen. Jeg bruker skrapen. De to læregutta mine i prosjektet har fått hver sin skrap, men jeg vet ikke om de bruker den.

Ny teknologi

Tar ofte med PCen og viser eksempler fra tidligere prosjekter i pausen. Eller et nettbrett.

Namo

Intervjuet på Vingnes

- Bunadmester
- 58 år
- Norsk
- Kvinne

Har grunnutdanning i tekstil. Jobbet som hjemmeprodusent og for Husfliden. Tok fagbrev i Kjole- og drakt i 1980 og fagbrev som bunadstilvirker i 2003. Har jobbet for Husfliden i Lillehammer og på Hamar. Fra 2008-2011 var jeg håndverksstipendiat ved Norsk håndverksinstitutt. Fint å ha Kjole og drakt i bunnen, fordi jeg drar veksler på det mht tilpasning og enkelte sømteknikker.

Hvorfor og hvordan ble du håndverker?

Det har jeg holdt på med hele oppveksten fra jeg var liten. Både mor og tante drev med tekstil, og jeg lærte, og ble påvirket, av begge. Jeg heklet slips til pappa da jeg var bare 4-5 år, og jeg sydde min første kjole allerede før jeg begynte på skolen. Sydde også kjole da jeg var 12, den ble faktisk ganske fin, men det var ikke noen bunad, det var fashion! Da syntes jeg bunad var litt sidrompa. Jeg hadde drevet systue i Rælingen et par års tid, og begynte med noen mannsbunader hjemmefra. Syntes det var fine stoff. Etterhvert ble jeg introdusert til bunad.

Fortell om din læremester / dine læremestre?

Den store er R. Hun kunne så mye. Også mer enn kun håndverket. Hun hadde mye kunnskap om gamle måter å gjøre ting på, blant annet lærte hun meg mye om hvordan stingene formes plagget. Da forsto jeg at det var dette jeg skulle drive med. Jeg traff henne på husfliden, der hun var leder for bunadsnemnda. Spesialist på tekstiler og aktiv i Norsk Fokedraktforum. Håndverket i de gamle plaggene var så sentralt for henne.

L fra Sunnfjord er en annen jeg vil nevne. Hun lærte meg å forme i et kraftig ullstoff. Tredimensjonalt. Det har vi gjort nå i sommer.

Andre som er viktige å nevne er S som har lært meg å sy Røroshue. Jeg skulle stramme en søm. Hvor mye skulle den strammes? S lærte meg at det må en kjenne selv, ved egen hjelp. En må kjenne det. Når jeg viderefører dette til andre, så er vi der igjen.

I tillegg er det de mange som har lært meg mye i Setesdal. Jeg har lært av mange. Tradisjonsbærere og fagpersoner har vært åpne for å svare og vise, og at kjemien har vært god har nok vært viktig for at jeg har kunnet lære.

Hvordan lærte du håndverket ditt?

Som sagt begynte det hjemme med påvirkning fra mor og tante. Deretter var det jo skolen og fagutdanningen, og så har jeg selvsagt lært mye gjennom å arbeide. For å bli god er mengdetrening og erfaring avgjørende. Men avgjørende har det nok vært å få arbeide sammen med tradisjonsbærere jeg har møtt på min vei, og som har vært villige til å dele kunnskapen sin. Jeg tar fremdeles kontakt med fagpersoner og tradisjonsbærere, og jeg lærer fortsatt! Masse! En blir aldri 100% utlært.

Hvordan fortsetter du å utvikle deg?

Som håndverker som skal leve av det er tiden er begrenset. Det er i grunn litt synd, og jeg håper jeg ikke stagnerer!

Jeg liker å undersøke, gå tilbake i de gamle plaggene. Jeg kan gå tilbake gang etter gang, og det er alltid noe nytt. Jeg kan ha laget et mønster etter et gammelt plagg, der jeg plutselig lurar på om den som har sydd dette før meg også har tatt mønster etter et plagg. Når jeg går tilbake kan jeg lese alt mulig rart. Man kan lese skriften opp og ned, men det er gjennom møte med tradisjonsbærere og å undersøke selve plagget jeg avdekker nye ting. Jeg må ha plagget! Å undersøke, og å forske er en veldig viktig del av håndverket.

Jeg studerer nå Vestfold, og jeg må se originalen. Gjenstanden! For å forså hvorfor plagget får den fasongen den får. Det krever kunnskap for å stille de riktige spørsmålene. Det hender jeg etterprøver både oppleste sannheter og egne vurderinger. For eksempel dette med snitt, der jeg plutselig kan tenke at «dette kan ikke være riktig!» Da går jeg tilbake. Tegner av mønsteret med ulike metoder for å skaffe meg et best mulig grunnlag. Dette er forskningsarbeid. Som

håndverker er det begrenset hvor mye jeg har tid til spennende utfordringer som dette, selv om det gir meg mye. Det neste nå er skinnbuksa.

Hvordan lærer du til andre?

Jeg har holdt masse kurs! De samme kommer igjen og igjen. Det er for eksempel en dame fra Lom som kommer og kommer.

Jeg har ikke lærling. Det er av to grunner. Jeg har ikke plass, verkstedet er for lite, og jeg har ikke økonomien til det. Men jeg skulle gjerne hatt det, og det hender jeg har noen her en dag eller en helg.

Å undervise 1:1 er absolutt det beste. Eventuelt så små grupper som mulig. Når det undervises 1:1 er det lettere å diskutere. Når man underviser flere er de ofte på ulike ståsted, og det gjør undervisningen vanskeligere. Feil skjer også sjeldnere med 1:1 fordi den som lærer har mitt fulle fokus. 1:1 gir dessuten en helt annen kontakt.

Når jeg holder kurs med 6-8 personer synes jeg ofte det blir på grensen.

Mål

Jeg bruker vanlig målebånd med cm mål. Når jeg har et plagg måler jeg selv, og det er ikke noe problem.

Før brukte de gjerne en tråd som de slo knuter på. Jeg har aldri møtt noen som bruker tråd med Knute på i min tid. Bare hørt om det.

Ny teknologi

Jeg bruker mye bilder for å vise og gjerne også for å kommunisere etterpå med kursdeltagerne.

Problemet er bare at, som for eksempel, når jeg får et spørsmål fra Lom så er det vanskelig å kommunisere via et digitalt bilde. Så de kommer hit. Da er det lettere å rettlege.

Jeg går ikke inn på Youtube og slikt. Det hender jeg bruker nettet, men da er det for å sjekke for eksempel hva ulike sting heter på engelsk om jeg har utenlandske elever. Det er utrolig hva man kan formidle uten å kunne språket.

Franco

Intervjuet på Lillehammer

- Mann
- 58 år
- Gullsmed/smykkedesigner
- Norsk
- Lærte i Gøteborg. I et stort firma. Tok svennebrevet der (100 mann) Fantastisk lære plass.

Hvorfor

Liten tilfeldighet. Utlysning av lære plasser. Evner det var fokusert på. Alle som var potensielle kandidater fikk jobbe med en mester i to dager.

Interesserte meg jo. Ville egentlig bli gullsmed. Siste dagen i 9.klasse så jeg dette i avisa. Hadde akkurat fylt 16 år.

Faren min var et geni på sitt felt, en multikunstner. Har blitt inspirert til å tenke kreativt. Vokst opp i et skapende miljø.

Læremestre

Gutta som satt på verkstedet den gangen... Vi var 10-15 mann på gullavdelingen. En del gamle rever som virkelig kunne faget, og det var jo av de en lærte. Kurt var en skarp en. Hadde ikke EN bok. Det var praktisk. Utelukkende praktisk. Slik var det i Sverige den gangen.

Etter svennebrevet dro jeg til gullsmedhøgskolen i København for å lære formgivning i gullsmedfaget. Spesielt husker jeg A. Fantastisk type! Var veldig inspirerende. Så deg! Flink. Hadde et formspråk.

Flyttet til Oslo. Begynte hos en gullvareprodusent L som formgiver. Veldig fin tid. Satt og lagde modeller. 4 år. Reiste jorda rundt og dro til Lillehammer der jeg begynte å produsere smykker for salg hos andre. Hadde ikke noe volum. Så åpnet det seg en ny verden på Fabrikken. Håndverksbiten jeg brenne for. Har det optimalt her. Skulle bare hatt litt mer kunder. Det er ikke så mye som skal til.

Hvordan fortsetter du å utvikle deg?

Er så heldig at jeg har to unger som er skrudd sammen på samme måte som meg. Å være kreativ er et overskuddsfenomen. Kreativitet kan læres. Må ikke nødvendigvis være medfødt. Jeg har egentlig ikke så mye kontakt med faget. Sitter på min tue.

Mye på grunn av tilbakemeldinger at jeg får kunder. Krysser teknikker. I fremgangsmåten. Nye kombinasjoner av kjente teknikker. Resultatet blir en ny setting. Sitat-smykkene (Han viser de fram). Generelt kan du si det å sette kjente ting sammen i en ny kombinasjon. Smykker. Gullsmykker: Det meste er gjort.

Samarbeidet med begge barna mine som er utdannet som industridesignere. Til sammen.....Ja, du skulle bare visst!

Skulle jeg gjort ting om igjen ville jeg kommet på et lag så tidlig som mulig. 3-4 gullsmeder hadde vært ideelt. I stedet for å sitte å knote for meg selv. Må ikke glemme det vi har lært.

Gleder meg til å få en lærling og lære opp nye. Man må lære faget før du kan bli kunstner. Krype før man kan gå.

Hvordan lærer du til andre?

Praktisk. Jeg viser lærlingen steg for steg. Holder på til det blir bra. Til slutt skal de klare det selv.

En til en er det ideelle. Selvsagt kunne man ha hatt tre lærlinger, men da måtte man hatt flere mestere. Når en skoleelev ikke får lærlingeplass og må ta siste året på skolen går det galt. Det funker ikke. Alt for slapt!

De lærer nok prosessen, men de får det ikke inn i fingra. På et verksted er dette hverdagen. Må kunne gjøre 3000-4000 loddinger i en operasjon. Mengdetreningen er avgjørende. Det å lære seg gullsmedfaget på i dag. Beste måten å lære faget er å være på et verksted der en har noen gamle rever, som meg, som er allsidige og lære faget en til en.

Mål:

Jeg bruker millimetermål og hundredeler, og for dette har jeg spesielle redskaper. Bruker fjørmål til å måle tykkelse. Bruker øyemål for å sette inn steiner over en hvis avstand. Med erfaring går det bra.

Har ikke hørt om skrupler.

Ny teknologi

Jeg har nettbutikk.

Bruker ikke ny teknologi i produksjonen, men elementer av data. Det er kanskje noe for den som er ung, men for meg er modellering noe av det morsomste ved faget. Vil ikke sette bort det til en datamaskin! Har hatt mye diskusjoner med selgere som skal selge meg slikt utstyr.

Viktig for meg å kunne skrive for hånd. Ikke bare på tastatur.

Generelt

Burde vært enda bedre til å legge til rette for en lærling. Jeg skulle ha hatt en lærling for lengst, men jeg har ikke råd. Tettere oppfølging mellom skole og håndverksbedrift! 1 dag i uka i tre måneder. Hvis de viser at de er interessert.

Skal en være lærer, men ikke får betalt? Føler virkelig jeg kunne bidratt. For eksempel:

-Prio uke på ungdomstrinnet

-VK1. En dag i uka over en periode.

Rote

Intervjuet i Tinn

- Mann
- 44 år
- Opprinnelig fra Karmøy
- Instrumentmaker / musikkelektronikk

Jobber på industriarbeidermuseet. Ansvar for laftahus ved museet. Vil lære å lafte skikkelig av en som kan det. Begge er med Shan. Vi er to, men det fungerer bedre en til en. Sånn type læring som dette egner seg ikke for å være for mange. 3 måneder. Dialog. En helg / uke / 14 dager.... 3 måneder er bra! Men kunne vært enda lenger. Om han forteller eller viser ting. Får øvd. Kan lafte nå. Har vært med hans før. Har utbytte av det. Lært spretteteljing. Men jeg trenger en god øks. Målet mitt er å bli trygg på lafting selv om jeg vet hvordan det laftes i utgangspunktet.

Har alltid drevet med håndverk, tre og elektronikk. Alltid! Bygningsvern avr tilfeldig. Jeg ble ansatt og begynte høsten -13. Det å lage noe, skape noe. Fint å prøve noe og få det til. Noe som trekker. Fint å fikle, men å gå å lage ting! Bestefar laget alt sjøl. Gammal chief.

Shan er en veldig bra lærer. Tålmodig. Fordelen er at vi driver med det samme. Holder et halvt øye med Shan. Så lærer du noe av det au. Spør jeg om noe, kommer han med en gang.

Mest vant til å bruke stemjern og høvler. Navar og pjål er. Største problemet er å bli vant til øks.

Gull med Shan er at han har så god peiling. Kan ta sjumilsteg sammen med han. Slippe å finne ut alt selv.

Har pløyd gjennom en del litteratur. I følge Shan stemmer det rett og slett ikke. Han forklarer hvorfor. Mange av feilene følger i i nyere verk. Teori / praksis. Shan har stor materialkunnskap.

Så har vi vært ute i skogen! Hentet grodde knær til torvholdere. Felte med øks og sletthogde en planke.

Jeg har alltid slipt høvelstål og stemjern. Er flink til å slipe. Første jeg gjør er å kappe av skaftet og slipe på nytt. Eggverktøy skal skjære!

Når det gjelder mål bruker jeg bare tommer eller centimeter. Shan finner fort ut om noen skjønner hva han snakker om eller ei.

Ny teknologi

Mye vas. Folk legger jo ut alt mulig! Tar ikke alt for god fisk. Kunne sikkert godt brukt det mer. Sagastua. Blir fort litt overfladisk. Vanskelig å få med seg det som egentlig er viktig. Ikke laget for å formidle hvordan man gjør det.

Den modellen vi lager nå kunne vært dokumentert på video: Finndalslaft med skjult kinning. Laget gode videoer. Laget kurs. Det er et behov der ute. Det skal ikke så mye til.

Hadde to lærere i Moss som var bra. En dansk møbelsnekker og en tysk orgelbygger, orgelbaumeister!

Gode håndverkere. God materialkunnskap, tre. Gode til å formidle det! Det hjelper ikke å være god håndverker / dårlig pedagog. Personkjemi. Funker det ikke så funker det ikke.

Robin

Intervjuet i Tinn

- Mann
- 50 år
- Jobbet for Hydro. Mye bygning. Reiste til Oslo.
- Så ble det ledig på Tinn museum, og jeg var interessert. Fikk jobb der i 2004.
- Tak / taktro osv.

Er håndverker. Valgte når jeg var 16. hadde tenkt å bli bilmekaniker, men broren min sa: «Du er så flink at du må bli møbelsnekker». Lage ting! Det var innertier. Tradisjonsmøbler. Kjøpte gammelt verktøy. Både bygninger og interiør.

Vi er heldige som får være med en kapasitet som Shan

Motivasjon er viktig for læring. Museet må være interessert. Det satses på oss. Shan er en kapasitet å lære av. Shan er fin fyr. Lugn. Kan veldig mye. Kropp og hender. Må gjøre ting mange ganger. Det er god trening. Rett på. Ser at det trengs (gamle bygg trenger stell). Liker å få til ting. Gjøre noe andre synes er viktig.

Driver med noe folk synes er viktig. Dypt. Det er et fag med mange muligheter. Et stort landskap. Ikke bare i mindre deler. Det er skogsbruk, materialkunnskap, verktøybruk.

Fint at vi er få + Shan. Vi redder et bygg i læringen. Shan sier: «Driv med den stokken». Legger en plan. Fordeler oppgaver. Viser. Selvstendigheten. Kan spørre når han er der. Drøfte i forkant, veiledning og gradvis overtagelse. Neste stakk!

Bekreftelse. Kikker. Hva må vi passe på? Skrape i meddraget. Gir oppgaver. God trening. Stavkirker. Film. Detaljer / løsninger på kirken. Kompliserte og artige ting.

Har vært med i skogen! Når vi tar grodde emner og røtter. Lese skogen. Hva egner seg og hva ikke. Hva var det vi gjorde? Ser på materialkvaliteten. Lesing. Hvordan la vi nevra eller pluggen. De beste borda. Sortere og tenke igjennom.

Og så ser vi på gamle bygg. Ser spor etter endringer. Bygninger som har havnet et helt annet sted. Lite bastant. Det beste estimatet. Forsøker å sette ting i system. Ser hvor mye sleivhogg som har vært gjort før. Vi forbedrer! Tettere laft for å holde bygningen sammen. Noen hjørner er bedre enn andre

Bruker både engelske og gamle norsk / danske tommer. Spørs hva slags jobb en er på. Tatt igjen buer på et bygg før svartedauden. Veldig mye er omtrent. Når blir det nøyaktig? Det ser ikke galt ut.

Mest tommer når vi kommuniserer med Shan. I perioder bruker vi norsk/dansk tommostakk. Får et ganske godt øyemål. Selv om en ikke ser eller vet, har de vært der. Kan gå litt om hverandre.

Hva gjør en lærer god?

Flinkere håndverksmessig. Kan gjøre noe jeg ikke kan. Fleksibel, Dynamisk. Kan lære bort samme tingen på litt ulike måter. Individuelt. Resultatet skal se sånn og sånn ut.

Prøve ut ulike måter. Allsidig. Superpraktisk ute på byggeplass. Ikke perfekt. Rolig, samme hva som skjer. Det som har skjedd har skjedd, om det ikke ble slik det skulle. Veldig løsningsorientert. Går videre. God stemning!

Å være to med Shan synes jeg er helt topp. Alltid noe å lære. En tar til seg nye ting. Hele tiden åpne for å lære nye ting. Drøfte ting. Shan har prøvd ting før og har oversikten over teoretiske ting. Han forklarer seg i korte greie vendinger. Ikke mye utenomstakk. Veldig opptatt av detaljer. Imponerende rask.

Han kan SE det du holder på med. Tolker. Stopper opp og viser. Det blir en blanding av detaljer og framdrift. Effektiv formidling, uakademisk og direkte. Shan er tospråklig og tilpasser språket til publikum. Oppmuntrende og flink til å gi tilbakemelding

Blir god gjennom øving og å bruke verktøy. Hardt å bruke tradisjonelt verktøy men samtidig er det artig å kopiere noen gamle.

Fint å være i bygningshallen. Blir mer håndverk for pengene. En god blanding av selvstendighet og hjelp når vi trenger det. Bedre enn kurs.

Det er variasjoner hele tiden. Skole er litt for mye innom der man får et innblikk. Dette er helhetlig. En kan lære nye ting. Alle stikker er forskjellige. Det er forskjellige utfordringer. Tre hele måneder!

Har vært med tidligere på et annet bygg. Leier inn Shan til å jobbe på våre bygg på museet. Viktig å gå gjennom nok, og bruke Shan som veileder. Faget er så bredt og dypt. Det er ALLTID en vri vi ikke har tenkt på når Shan kommer og leser spor.

Vi lærer å lese skog og materialer. En får også justert seg sjøl: «*Litt* geitved er ikke greit».

7-8 prosjekter på Tinn Museum. Shan er så dyktig med øks! Han viser hva som kan gjøres med den. Øksemann de lux!

Siri

Intervjuet i Ringsaker

- 32 år
- Fra Lier
- Kvinne
- Blomsterdekoratør med mesterbrev
- Yrkesfaglærer design og håndverk
- Kommunikasjonsrådgiverutdanning
- Barnehagepedagog

Jobbet ved Ringsaker AO-senter i litt over ett år.

Bakgrunn:

Vokste opp med bestemor. Lærte om blomster. Bestemor var håndverker. Vevde, malte. Hun tok med meg. Rolig og fin. Lot meg prøve og feile. Når jeg gikk på skolen var jeg ingen kløpper teoretisk. Jeg visste allerede da at jeg skulle bli blomsterdekoratør. Jeg gikk på Veia. Det var det jeg ville lære. På Veia hadde jeg en fantastisk lærer som så meg for den jeg var og lot meg lære på den måten jeg trengte. Jeg ble lagt til rette for. Jeg tror det var det som gjorde at jeg senere fikk toppkarakterer på høyskolen. Å se elevene er utrolig viktig.

Da jeg jobbet i skolen følte jeg at det var lite tilrettelagt for hver enkelt elev. Et møte med en gutt som hadde spesielle behov som jeg fikk mye av ansvaret for. Vi lagde drinker til maten. Stilige fargekombinasjoner og glass. Jeg skrev logg. Det var en kjempefin gutt. Da fikk jeg interessen for å jobbe med SEN, og det å legge til rette for hver enkelt ut fra hver enkelts behov.

Jeg kan være streng og sette krav, men må ha dialog. Ellers kommer en ingen vei. Jeg gir ros, men det skal være en begrunnelse. Smil og humor. Hente tennbriketter, lim. Føle seg trygg, gjøre avtaler. AO senteret har en stor betydning for hverdagen til brukerne.

Når jeg lærer bort, for eksempel å sy toalettmapper. Brukeren velger farger og setter strimlene sammen. Er med, og tilstede. Jeg setter kun nåler. Vi snakker om det muntlig i kombinasjon med praksis.

Her er det to ansatte på seks brukere, 1:1 og delvis også 1:2. En begynner på en prosess, og en annen fortsetter. Hver gjør deler av prosessen. Tilrettelagt, slik at det blir et felles produkt. Kan være artig å involvere keramikk og la dem prøve.

Jeg har tenkt på dette med å gi felles beskjeder via en tavle. Kunne være en fast rutine og struktur. Kanskje et årshjul med sommer, høst, vinter og vår? Farger. Kunne også tenke meg å jobbe mer med butikken. Få flere brukere til å være med i butikken og ha butikkdag alene.

Hva er produktet?

Det viktigste er mestringen til brukerne. God arbeidssituasjon. De eier produktene vi lager. Klart det er viktig med kvaliteten på produktene, men det viktigste er mestringen. Trygge rammer. Sosial kompetanse og mestringen.

Håndverket er bra for det motoriske. Konsentrasjon, bevegelse og styrke, holde hele kroppen i gang, som med vev. Eller X som broderer som er finmotorikk. Jeg tror det estetiske, fargebruken, gjør noe med deg!

Håndverket er også fint for å lære telling. Trykker på kalkulatoren. Vi lager tepper, og brukerne lager lapper. Et teppe består av 70 lapper. Sju farger. Ti blå. Skriver på en gul lapp. Setter en strek for hver til det er 70 streker. Vi teller også tennbriketter og måler med målebånd.

Og så lærer vi kundebehandling og sosial kompetanse, Pakke inn pakker er bra for motorikken. Være med i butikken, møte kunder. Starte litt enkel bedriftsklære. Bruke tavla. Jeg merker at når X er med meg i butikken kopierer hun meg. Til og med toneleiet mitt.

Progresjon / endring

X syr. Hun har utviklet seg. Før satt hun på en stol og ville ikke gjøre noen ting. Nå gjør hun fire oppgaver på en dag.

Y er knakende flink til å sy. De er begge ivrige og motiverte. Det er viktig at de trives med det de driver med. Og så er det lurt at de bruker kroppen på flere måter.

Ny teknologi?

Nei. Det går mest i det tradisjonelle her.

Men vi har hatt en inspirasjonstur til Moelv og vi har sett i blader. Det er viktig å tenke tilrettelegging. Jeg har laget en treplate som er mal til forkle. Det er viktig med variasjon og nye oppgaver.

Tone

Intervjuet i Ringsaker

- 61 år
- Kvinne
- Pedagogisk leder
- Spesialpedagog
- Håndverkslærerutdanning
- Jobbet som veileder i håndverk / husflid i 15 år

Tone strikker mens vi prater. Hun forteller at hun ble interessert tidlig. Elsket forming på skolen. Moren min strikket.

Jeg gikk på husflidsskole. Gikk på lærerhøgskolen på Blaker, der jeg hadde både tre, metall og keramikk. Særlig tre er jeg interessert i. «Lære med hendene, og ikke med ord». Læreren holdt mine hender når jeg skulle dreie. For at jeg skulle forstå. Han ga opp å forklare det muntlig. Til slutt måtte han gjøre det sammen med meg. Hans hender viste mine hender.

Først og fremst undervisning en til en, men noe kan nok noe fungere i grupper. For eksempel diskusjon om form og linjer.

Hvordan lærer du bort?

Jeg gjør noe lignende som læreren min den gangen. Nytter ikke å beskrive. Trenger å bli vist. Håndveiledning en til en. Holde rundt dem og være «deres hånd». Selv om hodet ikke alltid henger med husker hendene, og repeterer. Selv om de som er her er regnet som utviklingshemmet er hendene deres ofte 100% funksjonsdyktige.

Jeg har en bruker som er nesten blind. Nytter ikke å beskrive. Hun vet at kniven er skarp. Holder hendene hennes, kniven og løken. Så hun kjenner hvor ting er. Det ligner på da jeg lærte å dreie. Står ved saga og kapper. Det går ikke med klasseromsundervisning. Må være en til en.

Motivasjonen er viktig. Kartlegge hva vedkommende kan fra før. Kunnskapsnivået. Jeg lar de prøve. Sjekker talenter, og har ansvar for flere avdelinger.

Som lærer, er pedagogen eller håndverkeren viktigst?

Det er viktig å huske at dette er en tjeneste for brukerne. Da må en ha evnen til å se mennesket. Mulighetene i hvert enkelt menneske. Ofte er det lurt å ikke vite alt. Det beste er å starte med litt blanke ark. Det kan hende de endrer adferd. Vil jo at det skal gå bra!

Det er viktig at brukerne får en meningsfull hverdag, og kjenner gleden over å komme ut av huset og treffe andre. Det er fint når de gleder seg til å stå opp

Gruppearbeid er viktig. Viser at vi er avhengige av hverandre. Sammen lager vi et fint produkt. En For å lage en keramikk-kopp er det 20-30 prosesser.

Ellers er utstillingene motiverende, og det å lage fine produkter som kundene kjøper. Kontakten mellom kunden og produsenten er viktig. Vi lager god kvalitet, og ikke B-varer. Annethvert år har vi en stor utstilling. En hovedutstilling. Neste er i mai 2018

Gjennom håndverket lærer brukerne en masse ting!

- Lærer å oppføre seg. Det sosiale
- En bruker med sterk ADHD/Asberger ble flyttet over til hardt håndverk, vedproduksjon. Hun fyller nå 10-15 sekker.
- Hun bruker musklene sine. Blir varm og sliten
- Klarer å sitte ned å spise

- Bedre motorisk
- Anfallene hennes er nesten borte

En fin ting ved å jobbe med håndverk er at det blir noe av. Et fint produkt. En selvfølge som er vanskelig å få til med «papirproduksjon.»

Ny teknologi

Vi har tatt i bruk sosiale medier som facebook. Det er en glede for mange å kommunisere med bilde når de ikke kan kommunisere med ord. Spesielt setter brukerne stor pris på bilder av seg selv sammen med andre. Det er også lav terskel for bruke facebook. Man kan skrive bare litt. Dette kan ha en finpedagogisk effekt.

7.2 Approval from NSD, Norsk senter for forskningsdata AS



Synnøve Myklestad
Postboks 400
2418 ELVERUM

Vår dato: 02.02.2018

Vår ref: 58049 / 3 / HJT

Deres dato:

Deres ref:

Vurdering fra NSD Personvernombudet for forskning § 31

Personvernombudet for forskning viser til meldeskjema mottatt 31.12.2017 for prosjektet:

58049	<i>Overføring av håndverkskunnskap - og hvordan kan det brukes i en spesialpedagogisk kontekst</i>
<i>Behandlingsansvarlig</i>	<i>Høgskolen i Innlandet, ved institusjonens øverste leder</i>
<i>Daglig ansvarlig</i>	<i>Synnøve Myklestad</i>
<i>Student</i>	<i>Eivind Falk</i>

Vurdering

Etter gjennomgang av opplysningene i meldeskjemaet og øvrig dokumentasjon finner vi at prosjektet er meldepliktig og at personopplysningene som blir samlet inn i dette prosjektet er regulert av personopplysningsloven § 31. På den neste siden er vår vurdering av prosjektopplegget slik det er meldt til oss. Du kan nå gå i gang med å behandle personopplysninger.

Vilkår for vår anbefaling

Vår anbefaling forutsetter at du gjennomfører prosjektet i tråd med:

- opplysningene gitt i meldeskjemaet og øvrig dokumentasjon
- vår prosjektvurdering, se side 2
- eventuell korrespondanse med oss

Vi forutsetter at du ikke innhenter sensitive personopplysninger.

Meld fra hvis du gjør vesentlige endringer i prosjektet

Dersom prosjektet endrer seg, kan det være nødvendig å sende inn endringsmelding. På våre nettsider finner du svar på hvilke [endringer](#) du må melde, samt endringsskjema.

Opplysninger om prosjektet blir lagt ut på våre nettsider og i Meldingsarkivet

Vi har lagt ut opplysninger om prosjektet på nettsidene våre. Alle våre institusjoner har også tilgang til egne prosjekter i [Meldingsarkivet](#).

Vi tar kontakt om status for behandling av personopplysninger ved prosjektslutt

Dokumentet er elektronisk produsert og godkjent ved NSDs rutiner for elektronisk godkjenning.

Ved prosjektslutt 15.05.2018 vil vi ta kontakt for å avklare status for behandlingen av personopplysninger.

Se våre nettsider eller ta kontakt dersom du har spørsmål. Vi ønsker lykke til med prosjektet!

Dag Kiberg

Håkon Jørgen Tranvåg

Kontaktperson: Håkon Jørgen Tranvåg tlf: 55 58 20 43 / Hakon.Tranvag@nsd.no

Vedlegg: Prosjektvurdering

Kopi: Eivind Falk, eivind.falk@handverksinstituttet.no

Personvernombudet for forskning



Prosjektvurdering - Kommentar

Prosjektnr: 58049

Du har opplyst i meldeskjema at utvalget vil motta skriftlig og muntlig informasjon om prosjektet, og samtykke skriftlig til å delta. Vår vurdering er at informasjonsskrivet til utvalget er godt utformet.

Du opplyser om at rekruttering skjer via eget nettverk. Personvernombudet legger til grunn at frivilligheten ivaretas og minner om at dette kan være problematisk når en rekrutterer gjennom eget nettverk hvis det er et avhengighetsforhold mellom den som rekrutterer og informant. Vi ber deg derfor være ekstra oppmerksom på dette.

Personvernombudet forutsetter at du behandler alle data i tråd med Høgskolen i Innlandet sine retningslinjer for datahåndtering og informasjonssikkerhet. Vi legger til grunn at bruk av mobil lagringsenhet er i samsvar med institusjonens retningslinjer.

Prosjektslutt er oppgitt til 15.05.2018. Det fremgår av meldeskjema/informasjonskriv at du vil anonymisere datamaterialet ved prosjektslutt. Anonymisering innebærer vanligvis å:

- slette direkte identifiserbare opplysninger som navn, fødselsnummer, koblingsnøkkel
- slette eller omskrive/gruppere indirekte identifiserbare opplysninger som bosted/arbeidssted, alder, kjønn
- slette eller sladde bilde- og videoopptak

For en utdypende beskrivelse av anonymisering av personopplysninger, se Datatilsynets veileder:

<https://www.datatilsynet.no/globalassets/global/regelverk-skjema/veiledere/anonymisering-veileder-041115.pdf>

7.3 Email from the Norwegian Directorate for Education

Eivind Falk

Fra: Monika Thollesfsen <Monika.Thollesfsen@udir.no>
Sendt: 15. juni 2018 10:02
Til: Eivind Falk
Emne: SV: Om møtene i morgen

Hei Eivind,

Opplæringsloven har ikke regler for maksimalt antall elever i klassene. Det hadde den tidligere, men dette ble endret i 2003. Se dagens lovtekst i opplæringsloven kapittel 8 om organisering av undervisninga.
<https://lovdata.no/dokument/NL/lov/1998-07-17-61>

Kunnskapsdepartementet har laget en veileder til organisering av elevene i grupper som vi viser til på våre nettsider.
<https://www.udir.no/regelverk-og-tilsyn/finn-regelverk/etter-tema/Innhold-i-opplaringen/Organisering-av-elevne/>

Jeg vil gjerne ha kopi av studien.

Hilsen Monika

Fra: Eivind Falk <Eivind.Falk@handverksinstituttet.no>
Sendt: fredag 15. juni 2018 08:51
Til: Monika Thollesfsen <Monika.Thollesfsen@udir.no>
Emne: SV: Om møtene i morgen

Hei Monika

Takk for sist. Jeg har, i samarbeid med Høgskolen i Innlandet, intervjuet noen håndverkere om hvordan læringsutbyttet/læringsssituasjonen har vært best, og har i den forbindelse to små spørsmål til deg:

1. Er det en norm for lærertetthet i VGS for praktisk opplæring (yrkesfag)?
2. Har denne normen endret seg over tid?

Du skal selvsagt få en kopi av studien når den er ferdig.

Med vennlig hilsen

Eivind Falk
Instituttleder

Norsk håndverksinstitutt
Senter for immateriell kulturarv
Mob. 991 50 852 / 906 38 213
www.handverksinstituttet.no

Stiftelsen Lillehammer museum
Maihaugen, Lillehammer Kunstmuseum, Norges Olympiske Museum,
Bjørnstjerne Bjørnsons hjem Aulestad, Sigrid Undsets hjem Bjerkebæk,
Norges Postmuseum, Norsk håndverksinstitutt
www.lillehammermuseum.no

7.4 Email from a teacher at the Lillehammer High School

Eivind Falk

Fra: Martin.Knudsen@oppland.org
Sendt: 18. juni 2018 15:00
Til: Eivind Falk
Emne: SV: Antall elever pr. lærer i praktiske byggfag

Hei! Har tatt en prat med de andre på byggavdelingen. På -70 tallet ble dimensjoneringen 12 elever eller 15 elever på yrkesfag. Det kunne være noen lokale variasjoner (hensyn). På -80 tallet ble dimensjoneringen; Grunnkurs 15 elever , Vk1 12 elever og Vk2(tredje året) 12 elever. Denne dimensjoneringen varte fram til «Reform -94 ». Fra -94 ble dimensjoneringen justert til 16 elever både på Vg1 og Vg2. Håndtverksfagene har som tradisjon med en til en opplæring, dette for at man må være tett på («den tause kunnskap»). Når klassestørrelsen øker så vil elevene få mindre tid «en til en». Min mening er at 12 elever riktig dimensjonering. Dette både i forhold opplæring og sikkerhet(HMS) på verkstedet eller byggeplass. Man må huske på at dette er ungdom mellom 16 til 18 år.

Mvh. Martin Knudsen
Lillehammer VGS

Fra: Eivind Falk <Eivind.Falk@handverksinstituttet.no> kunnskap
Sendt: torsdag 14. juni 2018 14.17
Til: Knudsen Roger Martin - Lillehammer videregående skole, avd. Nord <Martin.Knudsen@oppland.org>
Emne: Antall elever pr. lærer i praktiske byggfag

Hei!

Takk for hyggelig prat forrige uke ang. forskningsprosjektet mitt. Kan du sende meg en epost der du forteller meg hvor mange elever det er pr. lærer i praktiske fag, og hvordan dette har endret seg over tid? Eventuelt hva du synes om det, og hva du mener ville være best.

Det trenger ikke være noen avhandling. Et par-tre setninger holder i lange baner.

Helst så raskt som mulig.

Med vennlig hilsen

Eivind Falk
Instituttleder

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Norges Postmuseum, Norsk håndverksinstitutt
www.lillehammermuseum.no

