

The personal in the professional

A Q-methodological study of the students' subjective experience of how Experts in Teamwork facilitates the development of personal competence.

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Front page: Own illustration, inspired by Skau's competence triangle (2011)
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"Hello!" said Piglet, "what are you doing?"

"Hunting," said Pooh.

"Hunting what?"

"Tracking something," said Winnie-the-Pooh very mysteriously.

"Tracking what?" said Piglet, coming closer

"That's just what I ask myself. I ask myself, what?"

"What do you think you'll answer?"

"I shall have to wait until I catch up with it," said Winnie-the-Pooh.

(Milne & Shephard, 1995, p. 34)



Figure 1 Winnie-the-pooh and Piglet on a journey of discovery
(Milne & Shephard, 1995, p. 34; Shepard)

Abstract

The purpose of this study has been to explore students' subjective experience of learning and development in Experts in Teamwork (EiT), with a focus on personal competence. The basis for the study has been the question of research; *How do students experience Experts in Teamwork facilitating the development of personal competence?*

This research is a Q-methodological study, where 36 participants have conducted a Q-sort. This means that they did a sort of 36 statements on an array from most agree (+5) to most disagree (-5), in a quasi-normal distribution form. The statements were obtained from a research design based on Fisher's balanced block design. The participants Q-sorts were the basis for the factor analysis.

The factor analysis of the data set, conducted by PQ-method-2.11, gave a four-factor solution founded on statistical and theoretical criteria. The different factors represent the most prominent point of views that were present amongst the participants. The different factors were; Factor 1: *Personal development, feedback and group experiences are valuable to me.* Factor 2: *I trust the system to facilitate my learning through theory-based learning.* Factor 3: *I want feedback and group work, but I don't trust the system.* Factor 4: *Theory-based learning is what I prefer. Group work is scary.* In the thesis these findings are discussed in relation to the theoretical frames; personal competence, experiential learning, mindset and self-understanding. The aspects that are highlighted are what I have found to be most prominent and that could contribute to give a holistic picture of the data set.

Acknowledgements

Writing this thesis has been a journey of discovery. In many ways it has been like groping in the dark. You do not really know where you are going, or what you are looking for, you just have to trust the process. For me, trusting the process has not always been easy. I think this thesis has challenged me in more ways than what I thought it would. But because of this, the learning outcome has become even bigger.

This thesis is for me a closing to a long journey. Not just the journey of this semester, but the journey of 6 years of studying. I am very grateful for all the things I've learned, experienced and discovered over these years. Especially, has the experience of being a part of the fellowship at the counseling program been meaningful to me. I would like to thank the teachers, but most of all my fellow students for everything we've shared and given each other. You have thought me so much.

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As this thesis is done, this journey ends. New adventures and new journeys will begin. I'm thankful for what these years have given me and I look forward to start on something new and unknown. Finally, I will step out of this "thesis existence" and back to a more normal existence.

Lene, May 2012

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Abbreviations

EiT = Experts in Teamwork

NTNU = Norwegian University of Science and Technology

1 Introduction

During my time as a counselor, student personal development has had a central role. Throughout the years of studying I have collected valuable experiences as well as knowledge that have led to gaining personal competence. In particular, the experiential learning at the counseling program has given me this increased competence through facilitating personal learning. I see this as one of the most valuable things I have acquired as a student at Norwegian University of Science and Technology (NTNU). I have already seen how this is and will be important for me in the future, in both personal and work relations.

Today's job market demands a lot of you as an employee (Kegan & Lahey, 2009; Skau, 2011). These demands are more likely to increase than decrease. This pushes us as future employees, and current employees, to stretch ourselves; learn new skills, gain new knowledge and develop our personal competence. Skau (2011) argues that you cannot take the personal out of the professional. This thesis is meant to focus and highlight the personal part of the competence development.

Experts in Teamwork (EiT) is an interdisciplinary course that is mandatory for most of the students at master level at NTNU. EiT's aim is to give students an opportunity to gain insight to the patterns of behavior and approaches in interdisciplinary project work and an increased self-understanding (Sortland, 2011). In line with Skau's (2011) definition of the term personal competence, EiT as a course aims to increase this for the student.

EiT's theoretical framework is based on experiential learning. In my own experience, experiential learning can feel like a journey of discovery. You do not always know where you are going or what you will learn. This journey can give new insights, new knowledge and new skills. But it could also be intimidating bringing out defense mechanisms and insecurities. I believe that a lot of students experience EiT in these various ways.

From my point of view, EiT's vision is very interesting with regard to their intentions of the students' learning outcomes. Even though these intentions are good, I have the impression that the students reach the learning goals to various degrees. From 2011-2012 I have been employed in EiT as a teaching assistant¹. My employment in EiT and conversations with students have given me reflections and aroused a curiosity around the students' experiences of

¹ In Norwegian called a undervisningsassistent. The teaching assistant is responsible for follow-up of the learning assistants and reports to the EiT staff.

the course. As a future teacher and a counselor I have a broad interest in learning, an especially in terms of personal development. These interests, theories and experiences have led to the theme of this thesis.

1.1 The intention of the study and the research question

In this thesis the subjective experiences of the students in EiT will be investigated. This will be seen in relation to how EiT facilitates the development of personal competence. It is the aim of the paper to investigate “*how do students experience Experts in Teamwork facilitating the development of personal competence?*”

The intention of this research is to promote a greater insight in which factors the students in EiT experience to affect their learning. This understanding can hopefully contribute to how the course can approach the students in a way that is beneficial for the intended learning outcomes. For me as a counselor, it is interesting and helpful to look at different individuals’ experience with a theme in order to be better able to understand others in this context in the future. These are some of the aspects which counseling is concerned with. I have an interest in competence development and see EiT’s work as a part of raising this among students. I also believe that a greater insight in competence development can be useful for me in a future work life.

1.2 Conceptual clarification

In my understanding there are some concepts that stand out as important in this study. I will shortly present them here, before a more thorough presentation in chapter 2. These are the concepts; *personal competence, personal development, self-understanding, the subject-object principle, mindset, theory-based learning, traditional university education, and experiential learning.*

A professionally competent person has knowledge and competence in these areas; theoretical knowledge, work-specific knowledge and personal competence (Skau, 2011). In this thesis I focus on *personal competence*, described as who we are as a person towards ourselves and in interaction with other people. It is not connected to a specific profession, but it is a combination of human qualities, abilities, attitudes and skills (Skau, 2011).

Personal development, in this context, is seen as a qualitative change in a person’s way of thinking, self-understanding, action competence and ways of being (Skau, 2011). The term *self-understanding* is the understanding you have of yourself as a communicator and what

developmental opportunities you experience having. It is not given by nature, but as a result of a construction process (Nygård, 1993). I have highlighted three areas that affect our self-understanding in this thesis; the system, the group and ourselves as persons.

The subject-object principle is described as an important part of the capacity to reflect. Kegan and Lahey (2009) describe that the facets of experience that we are subject to “have us”, while “we have” the things that are object to us. The facets of experience that are object to us, we are able to reflect over and consider.

Within this thesis, the term *mindset* is utilized according to Dweck’s (2008) definition. The mindset is the beliefs that you adopt for yourself, and which we paradoxically are aware of and unaware of. These beliefs have a strong impact on our lives (Dweck, 2008).

Theory-based learning is used as a term for the imparting of knowledge. The teaching activity related to this learning has the purpose of imparting as much knowledge as possible of a certain type of subject. Other names for the same type of learning is also used; transmission model, banking education and knowledge based learning (Imsen, 2009; Moxnes, 2000). Related to this, the term *traditional education* is used. This refers mainly to lectures which traditionally has been a lot used as a learning activity within the university setting.

Experiential learning involves reflection over one’s experience, to be able to put words into the experience, as well as evaluating the patterns of action (Johnson & Johnson, 2009). This type of learning is facing the future and the present. It gives the learner room to create their own learning.

1.3 The thesis’ structure

This thesis has seven main chapters. Chapter 1, *Introduction*, which you are reading now, introduces the thesis, presents the research question and the intention of the research. It also puts the theme in a context by presenting the course Experts in Teamwork (EiT) at NTNU. Because EiT has an essential role in the thesis, an understanding of this course is seen as important. Chapter 2 is a presentation of the *Theoretical framework* where I outline theory related to the research design, as well as other relevant theory. In chapter 3, *Methodological approach*, Q-method as a research technique in general and present how I proceeded in this study in specific. The *Factor presentation* is presented in chapter 4. Here I will outline the results from the data collection together with my interpretation. Chapter 2 and chapter 3 make up the basis for the *Discussion* in chapter 5. The discussion examines the aspects that were

made visible through the data analysis and interpretation in relation to the theory presented. Chapter 6, *Conclusion*, summarizes the discussion and explores possible areas for further research. I will end the thesis with an exploration on *My Role as a Researcher* in chapter 7, where I examine any potential bias and possible alternatives for how this research could have been carried out.

1.4 Contextualization – Experts in Teamwork (EiT)

It is integral for the reader to have a thorough understanding of the organization and main concepts surrounding EiT, a course offered at NTNU, as this research is based on this. The following section outlines the course in detail touching on EiT's importance, the learning goals, their work approach and its organization.

1.4.1 EiT

EiT is a mandatory course for most of the students at master's level at NTNU. The intention is for students to apply their academic competence in interdisciplinary project work in order to learn teamwork skills necessary for working life (EiT, 2012). In EiT's course description (2012) it is stated that: *“the aim is that through team-based reflection, the student will gain increased insight into patterns of behavior and approaches (“ways of being”) that are required to achieve positive results in interdisciplinary project work” (p. 1)*. A final purpose is to strengthen students own academic identity through team interaction.

EiT (2012) describes teamwork skills for students as: being aware of how they communicate, plan, decide, solve tasks, handle disagreement and relate to professional and personal differences in the team. These skills also enable students to apply basic concepts and methods from group theory by relating and allowing students to put into practice the concepts in real-life situations. The skills are practiced through constructive feedback provided from the team members.

1.4.2 EiT's importance

The universities' assignment has traditionally been to develop and administer knowledge on the highest level in the community. This has been a goal in itself and not as a part of the preparation for working life (Gulbrandsen, Johannessen, Sortland, & Æsøy., 2006). Today, the university wants to adapt to the social working environment. This has become more evident in NTNU's strategy (2011). NTNU wants to cooperate with the private and public sector to develop the kind of competence that the society needs. The strategy also describes

NTNU as a university with a high interdisciplinary profile who is in active pursuit of strengthening this even further (NTNU, 2011).

EiT was founded in 2001 after a request from the industry and commerce sectors. It was their thought that the students should obtain experience in cooperative groups that are interdisciplinary, as well as be provided with an opportunity to practice their own academic competence by solving complex assignments (EiT, 2011a). EiT aims to meet these requests, and as a result has increased capacity, through growing in size, allowing students to gain work-specific competence in interdisciplinary cooperation.

1.4.3 Learning goals in EiT

According to an article written by the EiT leader, Bjørn Sortland, EiT has both personal and professional development as a goal (Gulbrandsen, et al., 2006). In EiT's course description (2012) they formulate the following learning goals:

- *The student can apply and communicate their own academic competence, and contribute to realizing the benefits of the team's interdisciplinary breadth.*
- *Students can develop effective team interaction by reflecting on cooperative situations, and by applying basic concepts and methods from relevant research areas (p. 1).*

EiT also aims to give the individual student knowledge about groups, increased self-understanding and practice in skills that are important in an interdisciplinary project work (EiT, 2011a). Not only is it in EiT's own learning goals, but it is also a goal for NTNU to educate students that are able to work across the disciplines and cultures of learning (NTNU, 2011).

1.4.4 The organization of EiT

The course is organized in villages. There are two main categories of villages; intensive and semester-based villages. In the intensive villages the course is carried out during 3 weeks in the start of the spring semester. The semester-based villages use 18 weeks from the start of January to carry out the course. A village holds around thirty students in addition to a village leader² and two learning assistants³. The village has a certain theme, which the village leader is in charge of. The students are divided into groups, or teams, of 5-6 students. These teams

² The village leader is responsible for the implementation of the village. In Norwegian called a landsbyleder.

³ In Norwegian called a læringsassistent.

are meant to be a mix of gender and interdisciplinary background. The groups have fifteen working days to work together on a project report, related to the theme. In addition to this they write a process report that describes their collaboration process and the cooperative relations in the team. In the final grading of the students, the two reports are evaluated as equally important.

The village leader has the main responsibility for implementation of the course, while the learning assistants focus on the group process. This means that the learning assistants are responsible for facilitating the groups and holding process-related activities, such as reflection and feedback exercises. The village leader and the learning assistants have been trained in advance through various courses.

1.4.5 EiT's work approach

The theoretical framework that EiT uses is experiential learning (Sortland, 2011/2012). The students learn teamwork skills through their experiences and the basis for learning is the reflections that are made over these concrete experiences (EiT, 2011a). Team members reflect together on the effects of their own patterns of behavior and approaches in the group. Team-based reflection is therefore a basis for developing the group work. EiT uses Kolb's learning cycle as a part of employee training. Experiential learning will be detailed later in the theory section.

The theoretical foundation has consequences for the pedagogical approach. The emphasis is on understanding the development of the group interaction through observing and reflecting on others and your own behavior in the group. This means that what actually happens in the groups is the base for each individual to reach the learning goals.

Due to the collaborative and interdisciplinary nature of the course, EiT is considered to be different than other courses offered at NTNU. The relation between the village leader and the student is less distanced than in many other courses. In the course the student groups are responsible for forming their own project instead of being given a research question. The students are also responsible for finding empirical evidence and theory relevant for their research question. The students themselves are responsible for the progression of the product and process report while the village leader and the learning assistant are available to help the group process.

The learning activities are also somewhat different than in other courses. At the start of the semester, the village leadership arranges activities allowing the students to get to know each other. They also chart out the competencies of the team and develop proposals for their project (EiT, 2012). After a project approval from the village leader, the group continues to work on this throughout the period. The learning assistants facilitate the team as they work. This involves being observed and receiving feedback on the interaction in the team. The students write a personal log as well as a group log.

1.4.6 Earlier research on EiT

EiT has been subject of research in different occasions, both by students, external actors and the organization itself. EiT conducts a yearly poll evaluating the students' attitudes, experiences and the outcomes of the course. They also evaluate the employees at EiT, the village leaders and the learning assistants. This poll is quantitative and less rich in the students' experiences than what I aim to investigate. I have therefore only used this poll as an inspiration for my design.

In 2005 the Norwegian institute for studies of research and education (NIFU STEP) completed an evaluation of EiT. This evaluation was directed towards the student's experiences, as well as the village leaders and the learning assistants experiences (Hovdhaugen & Aamodt, 2005). This evaluation was based on a poll and interviews, and was a more broad exploration of EiT on an early stage. Their main impression was that EiT succeed to a certain extent to give the students what they call generic knowledge. There have also been written different theses on themes related to EiT. The students motivation, attitudes and expectations was looked at by Roger Andre Frederici (2007). Marianne Slåtten (2008) put a focus on the job the learning assistants did as facilitators. To be creative in EiT was studied by Ewa Koziel (2009). Recently Monica Selbekk (2011) wrote a thesis on how learning assistants facilitates conflict.

2 Theoretical framework

The students' experiences of EiT are diverse and complex. I will in this chapter outline the theoretical foundation that I chose for my research. Parts of the theory are related to my research design based on Fisher's balanced block design. This design is presented more thoroughly in chapter 3. The design has three effects with subsequently two, three and two levels. The levels and the effects in the design are based on my experiences and reflections working with EiT, theory gained through studying counseling and other theory of relevance.

Effects	Level 1	Level 2	Level 3
Mindset	Growth	Fixed	
Self-understanding	Individual (intra)	Person (inter)	System (impersonal)
Type of learning	Theory-based	Experiential	

Table 1 The research design, based on Fisher's balanced block design.

First, this thesis' theme will be put into a context of why competence development is important in today's work life. Skau's (2011) term personal competence will be outlined as well as theory on personal development and Dweck's (2008) term mindset. The perspective on self-understanding is also accounted for. Mindset and self-understanding are the two first effects outlined in this research design. In the final section of the chapter, two types of learning, theory-based and experiential learning will be discussed. Type of learning is the third and last effect in the design.

2.1 Positioning the theme

Today's society puts increasing demands on professionals at work and private persons (Illeris, 2003; Joiner & Josephs, 2007; Kegan, 1994; Skau, 2011). There are rapid changes in the society which involves globalization, multiculturalism and progress in technology leading to greater challenges in all of life's areas, but also tremendous possibilities. Due to these fast changes, the work today requests different abilities than earlier. Skau (2011) divides the professional competence into the three areas; theoretical knowledge, work-specific knowledge and personal competence, and argues that we need certain personal abilities, skills and insights. Flexibility and adaptability is considered to be valuable, and so is the ability to make good choices, even under stress, awareness of values and persistence. Words such as proactive, creative, critical, independent and cooperative which often are inserted in job postings illustrate these demands. It is predicted that tomorrow's work will be less dependent on academic achievements and more on the ability to lead oneself, cooperate with others,

relational competence, creativity, and ability to handle adversity. In other words: personal competence and social intelligence are part of today's necessary skill sets (Skau, 2011).

2.2 Personal competence

Personal competence deals with who we are as a person towards ourselves and in interaction with others (Skau, 2011). It also concerns who we enable others to be in the meeting with us and what we can offer on an interpersonal level. It is not connected to a specific profession, but it is a unique combination between human qualities, abilities, attitudes and skills, which we more or less intuitively adapt to professional relations. This form of knowledge is personal, subjective, unique and experience-based and it arises through an experience and our reflection on this experience (Skau, 2011). Theories and concepts used in this reflection can be created by others and utilized by many. The important thing is how you use these theories and concepts to give light to your own thoughts and experiences. The experience comes first and is the most important source of understanding. Skau (2011) sees personal competence as an important part of becoming a competent person for a job.

Skau (2011) lists sixty-seven concrete examples of how personal competence can appear. I have chosen to highlight some of these in particular within this thesis. In relation to oneself as a person Skau (2011) explains that personal competence can be shown as; a willingness to learn and develop as a person, good knowledge of yourself, personal safety, inner calmness and steadiness. On an interpersonal level Skau (2011) gives examples like; the ability to admit your own weaknesses and faults and to apologize, to be open and clear as a person, ability to give and receive feedback, to believe in others competence and resources, the ability to appreciate that others are different from you, to challenge yourself and others, and the ability to trust others and to cooperate. In the next section the connection between personal competence and personal development will be explored.

2.3 Personal development

Personal development is not just a personal issue, but a demand in today's society (Skau, 2011). We are whole as a person, and who we are affects us in all the different aspects of life. The development can therefore never be just private (Rogers, 1965; Skau, 2011). Over time, a change of who we are as persons, always takes place, whether we ourselves are conscious of it or not. Even though a personal change happens, the course, depth or the quality of the change is not given. These processes can both contain growth, but also decline. In this perspective, it is our responsibility to make the most valuable grow, and the least valuable be

impaired. Skau (2011) explains personal development as a qualitative development. This implies that there comes about a qualitative change in person's way of thinking, self-understanding, action competence and way of being. Through becoming something different than we were, through learning to understand life, ourselves and our relationships in new ways - we grow as persons.

The work of personal development is not just creating a bliss or giving you a liberating feeling, even though it can be thought of as such (Skau, 2011). This is a process which can be painful and frustrating, if taken seriously. To avoid these kinds of fears and vulnerabilities we often close our eyes and hold on to the old ways of understanding and acting. Schein (1973, cited in Moxnes, 2000) emphasizes this and explains that the search for new personal learning, the need for growth, only wakes up when we feel sufficiently safe, and have enough control over the world, to stand the anxiety that will follow the process of growth. Kegan (1994) uses the terms challenge and support to highlight this tug of war between feeling safe enough and also challenged enough to grow. These two, challenge and support, must go hand in hand for development to happen (Kegan & Lahey, 2009).

That personal learning and growth can be a painful process is also stressed by others (Illeris, 2003; Rogers, 1965). All personal learning involving a change in self-perception and self-image, is threatening and will produce resistance and often as a result, a defense mechanism. To give up on the defensive attitude and actions can be a challenging task. There are people that never take these risks and therefore miss out on possible learning (Moxnes, 2000).

Skau (2011) lists different measures that could contribute to personal competence development. One of the first principles she mentions is raising awareness and using each other to learn about ourselves. Using each other to learn about ourselves is related to giving and receiving feedback. Skau (2011) believes that this feedback is necessary for development. Raising awareness is also mentioned by Kegan (1994) as an important aspect. In relation to this, he emphasizes the aspect of the subject-object principle.

The subject-object principle is seen as an important part of the capacity to reflect (Kegan & Lahey, 2009). One could say that the facets of experience that we are subject to "have us", while "we have" the facets of experience that are objects to us (Kegan, 1994). We generally have problems naming and reflecting upon things that we are subject to. That would require the ability to stand back and take a look at them. In contrast, the things that are object to us

can be seen, considered, questioned, shaped and act upon. Although we necessarily have many parts of our world that we are subject to, the key point of development involves moving facets of experience from subject to object. The more facets of experience we are able to take as objects, the more complex our worldview becomes because we can see, reflect on, be responsible for, and act on it (Kegan, 1994; Kegan & Lahey, 2009).

2.4 Mindset

According to Carol S. Dweck (2008), the view you adopt of yourself profoundly affects the way you learn and lead your life. She strongly believes in the power of people's beliefs. These beliefs that some which we are aware of, and some which we are unaware of, are what she calls mindset. She describes two types of mindsets; the fixed mindset and the growth mindset. These make out the two levels within the research design.

The fixed mindset is characterized by the belief that your abilities are carved in stone. This creates an urge to prove yourself over and over again. A person with a fixed mindset believes that he only has a certain amount of intelligence, and a certain personality, so he ought to prove that he has it. This results in an evaluation in every situation. Did you fail or succeed? A person with a fixed mindset will see what happens as a direct measure of their competence and worth (Dweck, 2008). The growth mindset is based on the belief that you can cultivate your qualities through your efforts. This means that your initial talents, aptitudes and interests can change and grow through application and experience. The growth mindset is characterized with the passion for stretching and giving effort to your actions (Dweck, 2008).

There is also a big difference in the way that the two mindsets respond to learning (Dweck, 2008). People with a growth mindset seize the chance to learn because they believe that the success is about learning. In contrast, people with a fixed mindset do not want to expose their shortcomings so they avoid it. This is how the fixed mindset makes people into non-learners. These beliefs are a part of how we see ourselves in relation to others; they are a part of our self-understanding.

2.5 Self-understanding

The same way that perceptions, attitudes and expectations affect how we live, self-understanding has an important impact for our life. Self-understanding deals with how we construct our relation to the world and our place in it (Nygård, 1993). An important part of the self-understanding is how the person looks at him or herself as a communicator and what

developmental opportunities the person experiences having. This can be seen on three different levels (Allgood & Kvalsund, 2010). The level of the individual (intrapersonal) reflects the inner individual understanding the person has of him- or herself. The person level (interpersonal) directs the attention towards the individual's experience of him- or herself as a between-human actor or participator. *Who am I in relation to you? How do I see myself in the meeting with you?* This level represents a self-understanding in a relational- and group perspective. A question on this level might be: *How do I see myself in the meeting with you and the others in the group, and what arises between us?* The last level is how the person sees themselves as a part of the system which he or her is a part of (Allgood & Kvalsund, 2010; Kvalsund & Meyer, 2005). *How do I understand myself as a part of an organizational unit and the leaders of this?* An underlying notion to this term is the constructivist understanding where the individual constructs their own self-understanding. The individual also has the possibility to reconstruct their understanding and there are multiple things affecting it (Nygård, 1993). In the design, the three levels outlined of a person's experience of self represent the three levels in the last effect; self-understanding.

2.6 Type of learning

In the design I have chosen to differ between two types of learning. Traditionally, the university has facilitated theory-based learning; EiT on the other hand focuses on experiential learning. These types of learning will be presented below.

2.6.1 Theory-based learning

In most of the pedagogical directions, the imparting of knowledge is central (Imsen, 2009). Teaching activities based on theory-based learning has the purpose of imparting as much knowledge as possible of a certain type of subject. Moxnes (2000) uses the term knowledge based learning for the same type of learning I would call theory-based learning. The theory-based learning wants to pass on existing facts, knowledge and procedures. It faces the past and the knowledge is often imparted through a teacher who sets the goal and organizes the material so it is logical. The teacher is the expert which gives the right answers and the truth (Moxnes, 2000).

2.6.1.1 Banking education

The term banking education was a term introduced by Paulo Freire, in the influential book *Pedagogy of the Oppressed*, to describe and critique the traditional education system (Freire & Nordland, 1999; Imsen, 2009). As the name refers to, the students are seen as an empty

container which educators can deposit knowledge into. He further emphasizes that instead of communication, the teacher issues communiqués and makes deposits which the students patiently receive, memorize, and repeat. Freire described this as a reinforcement of the lack of critical thinking and knowledge ownership in students, which in turns reinforces oppression (Freire & Nordland, 1999). Carl Rogers' (1978) description is almost the same. The teacher is the professor of knowledge and the students is the recipient, and the lecture means poring knowledge into the recipient. Imsen (2009) reviews this type of education as transmission pedagogy. She notes that amongst the theorists there is no one fronting this type of pedagogy. Some theorists especially stress the imparting of knowledge, but they have always had other objectives than just knowledge implementation.

Argyris (1991) uses the terms espoused theory and theory in action to describe the gap of what is being advocated for and what is actually being done. He says that people consistently act inconsistently, unaware of this gap. This gap though, can lead to a defensive reasoning of why things are done the way they are. This way they can avoid the embarrassment or threat. Kegan and Lahey (2009) found this kind of gap in a medical school. The reason seemed to have basis in assumptions that the students required a highly structured teaching to learn, with a focus on the amount of information that is taught rather than on what they actually learned from it. This was rather opposite than their espoused learning vision (Kegan & Lahey, 2009).

Kvalsund (2009) argues that in traditional pedagogy, at least in higher education, the focus has been on the cognitive dimension. This has lead to a value basis on development and learning within the intellectual understanding, rather than on emotional development, action- or practice-oriented knowledge, and on competence- and ability-development (Kvalsund, 2009).

2.6.2 Experiential learning

Unlike banking and traditional education, which faces the past, experiential learning is oriented toward the here and now, and the future. This type of learning also evoke a wish for the learner to put up his or her goals and makes the learning feel useful and important (Moxnes, 2000). It gives meaning to what is going on and what will happen. This meaning-making has been noted by Grendstad and Sandven (1986) and it can only be done by the student him- or herself.

Experiential learning is connected to the processes of change within oneself, which have been brought to awareness through one's own experience (Kvalsund, 2009). Instead of solving old problems, new problems arise encouraging the learner to ask questions about certain truths. Feelings are deeply involved with this type of learning, and this is seen as an important part of it. Learning this way can be challenging and also lead to anxiety. Theory-based learning, on the other hand, is not linked with anxiety because the uncertainties are minimized. This anxiety makes the learner search for a trusting learning environment where he can take chances and experiment (Moxnes, 2000).

Various models have been introduced by numerous theorists to explain experiential learning. Kolb (1984) uses a four-stage model to explain the learning cycle. His model on experiential learning clarifies that different demands are placed on learners. EiT uses experiential learning as a theoretical framework and further uses this type of model to illustrate the framework to both students and employees.

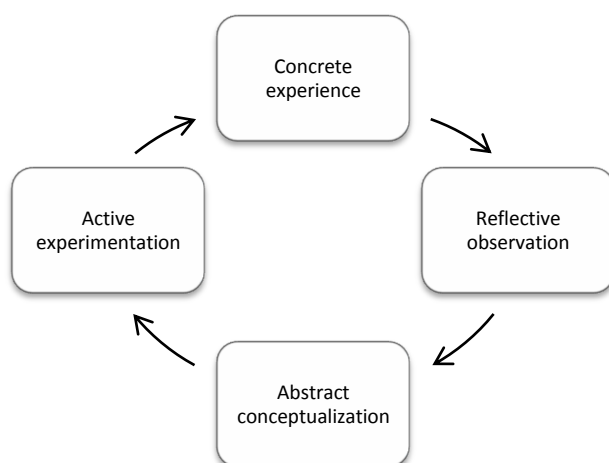


Figure 2 Kolb's learning cycle (Kolb, 1984)

Sortland (2011/2012) describes this model in relation to the group work in EiT (figure 2). *Concrete experiences* means learning from specific experiences through dealing with being open and involving oneself fully in the project work. To be willing to reflect over one's own actions and behaviors when involved in a group context is called *reflective observation*. *Abstract conceptualization* concerns the recapitulation of the group's action patterns, ways of being and to describe

them in an adequate way with relevant supporting theory. The last stage is the ability to change and shape new action patterns for a better cooperation in the group. This is called *active experimentation* (Sortland, 2011/2012).

2.6.2.1 Experiential learning in groups

Johnson and Johnson (2009) argue in their book *Joining Together*, that developing group skills is a hands-on process. This makes experiential learning important (Johnson & Johnson, 2009). They argue that "*experiential learning involves reflecting on one's experience to generate and continually update an action theory that guides the effectiveness of one's*

action” (Johnson & Johnson, 2009, p. 45). Kurt Lewin (cited in Johnson & Johnson, 2009) has highly influenced theories of experiential learning. His research highlights the importance of active participation in groups in order to learn new skills, develop new attitudes and obtain new knowledge about groups. His research demonstrates that learning is achieved most productively in groups when the members interact and then reflect on their mutual experiences. In this way the members could spark one another’s insight and creativity in obtaining conclusions about groups dynamic. The emphasis is on the students’ own experience in order to learn about group dynamics, on discussing mutual experiences to increase mutual learning and creativity, and on behaving democratically in structuring learning situations (Johnson & Johnson, 2009). The teamwork is also strongly influenced by the given external structure. The organization of the groups, structure, power and value system can either promote or inhibit the cooperation in the team (Levin & Rolfsen, 2004)

2.6.2.2 Experience vs. the experiential learning

We experience different things all the time in our everyday life. Moxnes (2000) points out that there is a distinction between the experience in itself and the experiential learning. Experiential learning is first and foremost social learning, which gives leaning about oneself and oneself in relation to others. Self-insight and wisdom accumulated throughout one’s life can only be learned by living in and drawing benefits from it yourself. Experiential learning is therefore personal and important to each and every one of us, making it difficult to communicate it to others. Even though the experience is the same, the learning for each individual is different (Moxnes, 2000).

3 Methodological approach

It is the intention of this research to investigate how students experience Experts in Teamwork (EiT) facilitating the development of personal competence. According to Exel and Graaf (2005), Q-methodology provides a foundation for the systematic study of subjectivity, fittingly with my wishes for the study. Therefore Q-method was chosen to investigate the students' experiences. This chapter outlines and describes Q-methodology as a research method and how this method was utilized in my research.

3.1 Background for Q-method

Q-methodology was developed and introduced in 1935 by William Stephenson (Brown, 1993; McKeown & Thomas, 1988; Thorsen & Allgood, 2010). Stephenson's research was critical to reducing people's thoughts, feelings and actions to objective measurements as the contemporary scientific tradition had a tendency to do. He therefore developed Q-methodology as an alternative to this tradition, where the main purpose was to study human thoughts, meanings, attitudes, values, perceptions, and experiences of one's own world. He wanted to do this from people's own perspective so that nuances in preferences would stand out (Stephenson, cited in Thorsen & Allgood, 2010). Q-methodology is now a research technique to collect data, as well as an analysis method as a basis for scientific investigation of subjectivity (Thorsen & Allgood, 2010). Subjectivity is the main focus of this research and in this context refers to a person's communication of his or her point of view (Brown, 1980; Thorsen & Allgood, 2010). In this way, subjectivity is always anchored in self-reference. To make subjectivity an object for research, Q-method uses both qualitative and quantitative techniques.

3.2 Concepts and stages in the research

The procedures and concepts necessary to understand a Q-methodological study will be explained in the following section. Van Exel and Graaf (2005) divide a Q-methodological study into the following steps: definition of the concourse, development of the Q-sample, selection of the P-set, Q sorting; analysis and interpretation. I will replicate these steps in the following to present the method and my research.

3.2.1 Definition of the concourse

In Q-method the concourse refers to the flow of communication around a certain theme (Brown, 1993; Thorsen & Allgood, 2010; Van Exel, 2005). This can be described as ordinary

conversation, discourse and commentary of everyday life. The term *concourse* is often used in Q-methodology for the collection of possible statements that are available surrounding one theme. This could include attitudes, values, meaning, and perceptions, all of which are expressions of subjectivity. The ideal situation would be that the *concourse* contains all relevant aspects of all the discourse (Van Exel, 2005). A verbal *concourse*, relevant for this research, can be obtained through interviews, participant observation, and popular literature to name a few. The aim of the *concourse* is to find a set of representative statements that could be used further in the research. It is up to the researcher's judgment to draw these. There are various methods of approach and due to the time consuming nature of the research, the researcher often uses an experimental design to find what is called a Q-sample (Allgood & Kvalsund, 2010).

Within this study, the *concourse* was initially selected due to an increased interest and curiosity of the subject matter. I had previous experience and knowledge of EiT and took various measures to define the *concourse* for this research. There are various types of literature about EiT which I had the opportunity to investigate. Additionally, my previous work in EiT gave me great insight to the ordinary conversations on the theme. Further, I arranged a focus interview with three people from the EiT-staff, in order to get a wider impression of the *concourse*. The conversation was recorded for later use.

I experienced this to be very useful. It made me evaluate the *concourse* I had already gathered and it gave me statements that were less artificial. Even though this helped me, I could tell the resemblance in the EiT-staff points of view and my own. This made me unsecure whether I had a representative *concourse*. Partly because of this I arranged several pilot sorts which will be presented in section 3.2.2.1.

3.2.2 Developing the Q-samples

A selection of statements from the *concourse* is defined as a Q-sample or Q-set (Brown, 1993; Thorsen & Allgood, 2010; Van Exel, 2005). Statements in Q-method are open and give the opportunity to represent subjectivity as subjective meaning. The statements are not facts but opinions and meanings. The number of statements in the Q-sample depends on the research (Van Exel, 2005). I chose to use a Fisher's balanced block design to refine the *concourse* and develop the Q-sample.

3.2.2.1 The research design

Fisher's balanced block design is often used in Q-methodology to structure and balance the statements (Allgood & Kvalsund, 2010; Kvalsund & Karlsdóttir, 2009). The design is two-dimensional, with effects and levels. Effects and levels represent a table with effects vertically and the levels horizontally. Different designs can be chosen for the same concourse, leading to different Q-samples. This is not seen as a problem because the chosen design is only a logical construct used by the researcher (Van Exel, 2005). The aim is to always arrive at a Q-sample that is representative for the wide range of existing opinions on the topic, independent of the starting point. The second reason why the choice of different design is not a problem, is that the participants eventually give meaning to the statements by sorting them (Van Exel, 2005). When the Q-sample is found, the statements are edited where necessary, randomly assigned with numbers, and printed out for Q-sorting.

My research design to structure and balance the Q-sample was based on the theory presented earlier in this thesis and is presented below (figure 3). The theory used in the design is connected to the students' experience of the course, learning and development, and was chosen based on my experience, knowledge and the intention of the study. The research design is an operationalization of the concourse.

Effects	Level 1	Level 2	Level 3
Mindset	Growth (a)	Fixed (b)	
Self-understanding	Individual (intra) (c)	Person (inter) (d)	System (impersonal) (e)
Type of learning	Theory-based (f)	Experiential (g)	

Table 2 The research design, based on Fisher's balanced block design.

The first effect is Dweck's (2008) term *Mindset*, which is divided into the two levels; growth (a) and fixed (b). The second effect is *Self-understanding* which is divided into three levels; individual (c), person (d) and system (e) (Allgood & Kvalsund, 2010). The last effect in the design is *Type of learning* which differs between the levels: theory-based learning (f) and experiential learning (g) (Freire & Nordland, 1999; Kolb, 1984; Moxnes, 2000).

My research design has 3 effects with 2, 3 and 2 levels respectively, giving me twelve different combinations of the different cells. The combinations are based on one cell from each effect (ex. acf, bdg). The Q-sample balances out when the same number statements to each combination are produced (Allgood & Kvalsund, 2010). These combinations are the background for finding statements. I decided that three statements for each combination

would be necessary, or thirty-six statements in all. To find these, I produced around 70 statements, which were then reduced to 36, based on how they matched the design and how natural they sounded. These 36 statements were subsequently edited where necessary, and randomly given numbers. It should be mentioned that all statements were made in Norwegian (appendix F), since the participants in the study were Norwegians. The ready-made Q-sample was then translated into English.

The Q-sample will be subject to a Q-sort. The procedures for this are more thoroughly outlined in section 3.2.4. In connection to the development of the Q-sample it is relevant to mention that I conducted some pilot sorts with the edited Q-sample. There are various reasons for doing a pilot sort. For one, the Q-samples can easily become unbalanced if the researcher has not been aware of this issue in the process of making them. The statements can seem unbalanced even though the researcher produces the same amount of statements in each combination due to other reasons.

Prior to the data collection, six pilot sorts⁴ were arranged. Counseling students with a connection to EiT participation in and carried out the first pilot sorts. These were done in order to see how each and every statement functioned, as well as to figure out how the balance between the statements was. Between some of the pilot sorts I made some adjustments. The outcome exhibited a skewness against the negative side. In order to obtain another point of view, an assumingly unbiased participant was asked to do a pilot sort. This resulted in a sort with a better balance of statements. This meant that either the Q-samples were unbalanced, or the initial pilot sorters point of view gave the impression of unbalanced Q-samples.

To further determine balance, I asked two from the EiT staff to do a pilot sort. Seeking out contradictory statements in each of the cell combinations allowed for balance to be checked in the Q-statements. Allgood and Kvalsund (2010) argue that this method is a good way to determine inner congruence in the sorts, as well as keeping a balance in the Q-sample. As a result, I decided that some of the statements needed to be changed from negative to positive, while others were evaluated to be balanced enough to go through with the Q-sorts with the P-set.

⁴ A pilot sort is a preliminary study.

In relation to this I would like to mention that my subjectivity connected to EiT naturally affected my design and the statements. When I found it hard to produce some of the statements it was hard to tell if it was because of my point of view or a difficult design. The skewness also brought up a question in the same direction. The researchers subjectivity is said to be no problem, or not to be avoided in the research, but that the researcher should be aware of it in the process (Thorsen & Allgood, 2010).

3.2.3 Selection of the P-set

The P-set is the participants in the Q-methodological study. The size of the P-set depends on the Q-samples (Thorsen & Allgood, 2010). The aim of a Q-methodological study is not to generalize to the population; because of this it is not necessary to have many respondents. Thorsen and Allgood (2010) argue that the number of participant should not exceed the number of statements. At the same time McKeown and Thomas (1988) note that the number of participants ultimately depends upon the nature and purpose of the study. It is also important that the P-set is representative for the culture where the concourse is drawn from. The P-set is therefore not random (Van Exel, 2005). The respondents need to be theoretically relevant to the research question. Within this research, all students in EiT were relevant for the P-set. Due to my employment in EiT, the students were easy to contact during their days in the village (working days). The semester-based villages started 11th of January and finished the 25th of April. This research started in January so the students in the intensive village were not an option as respondents. As a consequence, data collection was done in late March when the students had an opportunity to experience development, and in time for me to finish my thesis.

The P-set I chose is also called an extensive person-sample, which means that there is no special effort made to complete a representativeness across respondent characteristics, since the purpose was to explore the attitudes in the population (McKeown & Thomas, 1988). I intended to get a broad collection of participants from different fields of study as well as a mix of genders. This decision was to ensure that there was a large enough sample in the event that participants did not go through with the Q-sort, against their initial intentions. In order to cover various perspectives, I assigned myself to four different villages, and asked for interested participants one to two weeks before the actual data collection. Participants were asked their participation preference, in order to make it as convenient as possible. I emailed the interested participants in advance to remind them of the upcoming data collection.

On the day of data collection, the participants were engaged in various ways, some participated by mail, some did the sort after school and others did the sort while I was present. Ultimately, there were thirty-six participants in the study, unevenly from the different villages. The participants were given pseudonyms.

3.2.4 Q-sorting

The general procedure of the Q-sort requires that the P-set is presented with a set of statements (Q-sample) from the discourse, and rank them from “agree” to “disagree”. Brown (1993) states that “...*the fact that the Q-sorter is ranking the statements for his or her point of view is what brings subjectivity into the picture.*” (p. 94). This practice allows the participants to objectify their subjectivity (Wolf, 2010).

In the start of the Q-sample sort, a condition of instruction is given as a guide for participants (Van Exel, 2005). The condition of instruction is meant to focus the participants attention by putting weight on a condition – or situation – which the participants is asked to be aware of (Wolf, 2010). In addition to the condition of instruction, the participant is also provided with a score sheet and a suggested approach for the Q-sorting task (Van Exel, 2005). The score sheet is a sorting pattern which is often of a quasi-normal distribution form. The score is often on a range from “most agree” (+5) and “most disagree” (-5). The quasi-normal distribution is a recommended tool for more nuanced and systemic comparison and evaluation of the statements (Allgood & Kvalsund, 2010). The score sheet used in this research had a range from +5 (most agree) till -5 (most disagree) and a quasi-normal distribution allowing for thirty-six statements (figure 3). The participants were asked to draw distinctions on the basis of psychological significance. This means that the statements the Q-sorter placed on the far right side (+5) and the far left side (-5) of the distribution, are assumed to be most important to the participant. This way, the statements are less and less important, having less psychological significance, as the score moves further towards the middle of the range (Allgood & Kvalsund, 2010).

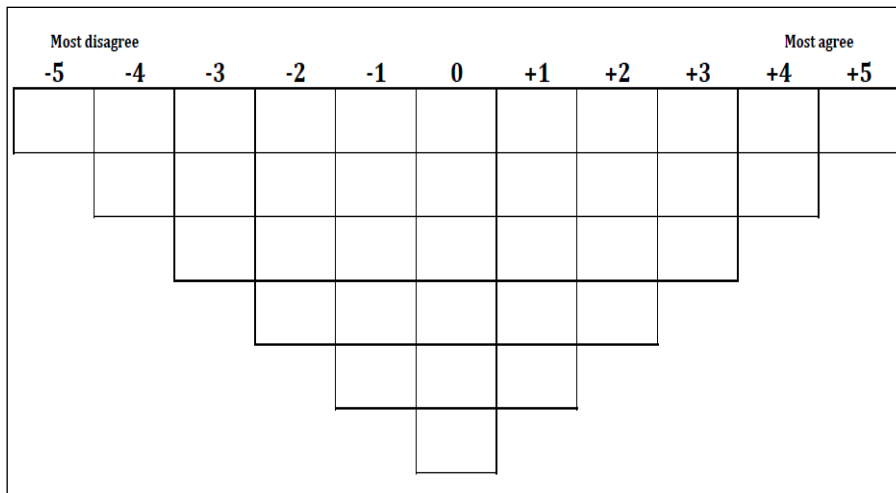


Figure 3 Sorting pattern

Prior to the sorting in my study, the statements were given randomized numbers. The participants were given the information letter and a consensus form, instructions for the sort with the condition of instruction, sorting pattern and the Q-sample to do the Q-sort (appendix G and H). In this research, the condition of instruction was (appendix H); *what is your personal experience of group-work in Experts in Teamwork?* Most of the participants received everything necessary on the day of the data collection; in addition, some required material to be mailed out.

The instruction for the sorting (appendix H) was quite thorough, instructing how participants are to do the sort. First, the participants were asked to divide the statements into three piles, one “agreement” pile, where statements were to some extent agreed with, and another “disagree” pile, where statements were to some extent disagreed with, and finally a pile with two-values, signifying a meaning of nothing to the participant. After completing this, the Q-sorter was asked to do a more nuanced sort, beginning with the two extremes and working her or his way towards the middle. The instruction tells the Q-sorter to write the numbers correlating with each statement in the form at the end of the sort. Initially, I wanted to be present when all the participants did the sorts, in case an issue arose. For various practical reasons, this was not possible in each of the circumstances. All the participants were told to contact me if there were any questions. Van Exel and Graaf (2005) argue that though this type of method seems to require a face-to-face follow-up, it is not required and this does not seem to impact the result. The Q-sort that the thirty-six participants carried through was the foundation for analysis.

3.2.5 Factor analysis and interpretation

The Q-sorts are the basis for the factor analysis. McKeown and Thomas (1988) describe the factor analysis as the foundation of the Q-methodology since it comprises the statistical means by which subjects are grouped, or even more accurately, they group themselves through the Q-sorting process. The Q-sorts are plotted into a software program that is available to perform the analysis. In this instance, the PQ-method-2.11 was used in order to do the statistical procedures (Schmolck, 2012). The most important elements will be presented below.

3.2.5.1 Factor analysis

PQ-method-2.11 uses correlation and Q-factor analysis to find the results. It first examines a correlation matrix between all the Q-sorts (Brown, 1993). This matrix represents the level of agreement or disagreement between the individual sorts (Van Exel, 2005). The Q-sorts correlating highly with each other may be considered to have a factor similarity. Factors are then drawn out of the correlation matrix. In this study, it resulted in eight unrotated significantly factors.

The next step of the analysis is the factor rotation. The original set of factors are rotated to arrive at a final set of factors (Van Exel, 2005). This rotation can be done according to statistical principles or a judgmental (theoretical) rotation. There are different statistical rotational schemes that can be utilized, however, the varimax method, or orthogonal rotation, is probably the most frequently used (McKeown & Thomas, 1988). In this study an orthogonal rotation was used. The participants that belong to one factor are highly correlated with one another, but uncorrelated with the sorts in other factors (Brown, 1993). In this way, one could say that the number of factors is therefore purely empirical and dependent on how the P-set sorted. Yet, there is some reason why this number is not necessarily just empirical. McKeown and Thomas (1988) explain that a variety of statistical criteria and alternatively, theoretical criteria, can be employed in making this decision. The most common statistical criteria is the use of eigenvalue. This is the sum of its squared factor loading. The factor is considered significant when the eigenvalue is greater than 1.00. Using this criteria might lead to overlooking factors that are not significant, but theoretically interesting (McKeown & Thomas, 1988).

Various factor solutions were attempted (4, 3 and 2) in the analysis of the data in this study. A two-factor solution had too high correlation between the factors and a lot of mixed loadings.

A mixed loading means that a participant had a high correlation with more than one factor. This occurred with the three-factor solution as well. With a four-factor solution there was only one participant loading on the fourth factor. Even so, there is reason to believe that this factor represent an important point of view. In addition to this, the correlations between most of the factors were very low. Except for the correlation between factor 1 and 3 where it was 0.7547 (table 4). The arguments for choosing this factor solution are consequently both statistical and theoretical. The explanatory variance shows that the four-factor solution captures 68% of total meaning expressed by the participants Q-sorts (appendix B).

Before the last step of describing and interpreting the factor analysis, the factor scores are calculated (Van Exel, 2005). A statements factor score is a method of averaging the scores given a statement by all the Q-sorts associated with the factor (Brown, 1993). This results in a factor array. If the factor was a person, the factor array is the presentation of how the persons Q-sort would have looked like (appendix C). These factor arrays also show distinguishing and consensus statements. Distinguishing statements are statements that are sorted significantly different in the various factors, and therefore contribute to the differences between the factors. Consensus statements are those that do not differ between any of the factors. The arrays are the basis for interpretation.

3.2.5.2 Factor interpretation

There is no clear instructions on how to proceed with the interpretation of the factors (Kvalsund, 1998). The interpretation is meant to find meaning or a point of view that is laying in the factors. How this is done is decided by the researcher (Kvalsund, 1998). The statements and the factor arrays is the basis for the description and the interpretation of the factors and their content of meaning. In Q-method the principle of abduction is also very strong. Abduction in this context refers to the arising of new ideas based on the researcher ability to acquaint oneself with the Q-sorters mind (Wolf, 2010).

I will now describe how I chose to proceed with the interpretation. I started with the statements with biggest psychological significance (+5/-5, +4/-4), and worked my way towards the middle of the factor array (appendix C). The aim was to look at the other statements position according to each other (Thorsen & Allgood, 2010). Here, the distinguishing statements and the consensus statements were used as well to clarify the main differences and the similarities (appendix E). The area in the middle of the sorting pattern (0) was also explored because this could give valuable information.

3.2.5.3 Follow-up Interviews

Brown (1980) notes that a follow-up interview gives the participant an opportunity to deepen his reasons for ranking the statements. The interview can reinforce and bring to light certain aspects of the sort. I conducted four follow-up interviews with the participants that best defined each factor to get a greater understanding of the factors. I brought the factor array for each factor and used this as a basis for the conversation. The interviews were done after I had roughly analyzed and interpreted the factors. In this way, the interviews helped me to test out the interpretation I had done and gave me new aspects to consider.

3.3 Quality of the research

The quality of a research is traditionally measured in validity and reliability. There are also some considerations in connection to these two terms in Q-methodology, even though validity is seen as less important (Kvalsund, 1998). In addition to these terms I will explore ethical questions related to this study. Reflections on my role as a researcher and limitations of the research are also related to the quality of the research, and will be addressed in chapter 7.

3.3.1 Validity

The validity of a research refers to the ability to actually measure what you intended to (Ringdal, 2007). The question about validity is not given much attention in Q-methodology because the subjectivity is investigated in Q-method where there are no external criteria to measure the participants' perspective against (Kvalsund, 1998). A potential problem could result from the lack of honesty from the Q-sorter while doing the sort. This could arise from looking at others and comparing while doing their sort, other interruptions or simply the problem of being true to yourself. The last problem could also be the issue of a conflicting real and ideal self. The real self is how we experience ourselves to be in this moment and where the ideal self represents what we want to, should have or could have been (Kvalsund, 2003). There is also a question about the participants' level of awareness of their own feelings and meanings. In the analysis of the Q-sorts the researcher has to assume a certain level of consistency. A way to secure this consistency would be to have the participants read the instruction for the sort properly before they start the sort (Kvalsund, 1998). The condition of instruction is also meant to increase the validity because it directs the participants' attention in the same direction. The condition of instruction was explicitly mentioned to the participants in this study. It is also worthy to mention that many of the participants sat very closely while doing the Q-sorts. This might have affected the validity of the study.

3.3.2 Reliability

The reliability of the research refers to level of accuracy of the measurements. This means that the measurements give the same result (Ringdal, 2007). In Q-methodology, the reliability deals with how reliable the Q-sorts, factors, factor loadings and the factor scores are (Kvalsund, 1998). Brown (1980) points out that experience has indicated the reliability coefficient normally ranges from 0.80 and upward, which is an acceptable chance of achieving the same result the second time. The more people defining a factor increase the reliability. This leads to a lower error estimation resulting in a greater certainty of the factor score (Kvalsund, 1998). Based on the number of participants in my study, this gave the reliabilities shown in table 3. A follow-interview also increases the reliability by having your interpretation confirmed (member checking), which was the case for this study.

Factor	1	2	3	4
No. of defining variables	16	4	7	1
Average Rel. Coefficient	0.800	0.800	0.800	0.800
Composite Reliability	0.985	0.941	0.966	0.800

Table 3 Factor characteristics

3.4 Ethics

There are demands in all scientific research from the researcher that he or she will have to behave according to ethical principles (Thagaard, 1998). There are three main principles important in Q-methodology, as well as qualitative research in general.

3.4.1 Informed consent, confidentiality and consequences.

The basis for every research project is to have informed consent from the participants (Thagaard, 1998). This means that the participants should be informed about the aim of the research, in addition to the main characteristics of the project. Within this project all the participants were instructed to read the informational letter (appendix G) before signing a consensus form. The information letter had details about the research and the formalities in addition to an emphasis on the voluntarily aspects of the participation.

Confidentiality is an important part of the ethics in research. The principle about confidentiality implies that the participants can claim that all the information given is being treated confidentially before and after the research is completed. This also implies that the researcher is responsible for preventing any use of the information which could harm

individuals who takes part in the research (Thagaard, 1998). Because my research involved individuals and the information they gave me, I reported the research to the Norwegian Social Science Data Services (NSD). The application was approved (appendix I). The data collection was then carried out in connection with the respondents' names. The reason for this was to find a way back to the respondent if they were potential candidates for a follow-up interview. The participants were informed of this before signing the consensus form. To obey the principle of confidentiality, it was necessary to ensure that no third party was able to access the data. As mentioned, the informants have been given pseudonyms in the thesis. Further, revealing data was deleted after the termination of the thesis.

4 Factor presentation

In this chapter I will describe the factors' characteristics, attitudes and attributes which contribute to each individual factor. After the analysis with PQ-Method version 2.11 I had a four-factor solution (Schmolck, 2012). Out of 36 participants there were 16, 4, 7 and 1 participants that loaded significantly on the respective factors (appendix B). There were 8 participants that did not define any of the factors. Their loadings on the factors are called mixed loadings. This means that they have high loadings on more than one factor. These will therefore fall out of the analysis. This does not affect each individual factor in another way than the contribution of making each factor more clear by reducing the correlation between the factors (Kvalsund, 1998). The table in appendix B shows the participants factor loadings⁵.

	Factor 1	Factor 2	Factor 3	Factor 4
Factor 1	<i>1.00</i>	0.2558	0.7547	0.0421
Factor 2	0.2558	<i>1.00</i>	0.1580	0.2325
Factor 3	0.7547	0.1580	<i>1.00</i>	-0.0234
Factor 4	0.0421	0.2325	-0.0234	<i>1.00</i>

Table 4 Correlation between factors.

The correlation between the factors indicates the amount of similarities amongst the factors (table 4). The correlation coefficients in this study are very low, except for the case between factor 1 and 3. This correlation is 0.7547, which is fairly high. This makes these two factors harder to differ in the analysis. The high correlation means that they have a lot in common, but there are also some elements that differentiate them.

I will continue to present the different patterns and attitudes that the defining participants in each factor seem to have by using the procedure presented in the method chapter. I will present each factor alone first and try to point out the most important elements. What was expressed in the follow-up interviews with David, Andrew, Betty and Johnny, is included in the factor presentation. The factor array which is the basis for the analysis is presented in appendix C. The chapter ends with a recap of the main differences and similarities between the four factors. The statements written in *italics* are the distinguishing statements of each factor (appendix E).

⁵ The table was left in the appendix B due to the size of the table.

4.1 Factor 1 – Personal development, feedback and group experiences are valuable to me.

Sixteen of the participants load significantly high on factor 1 (appendix B). These were Sharol (0.6529), Doris (0.5363), Thomas (0.7465), James (0.7371), Paul (0.6370), Richard (0.7398), Sandra (0.6819), George (0.6647), David (0.8402), Susan (0.6582), Robert (0.7049), William (0.8128), Jennifer (0.7121), Mary (0.7746), Michael (0.6760) and John (0.5678). The parenthesis behind each name indicates the persons loading on the factor. This means the level of their subjective experience that is explained by the factor (McKeown & Thomas, 1988). David is the participant that best define the factor because he has the highest loading in factor 1.

The important elements in factor 1 seem to be the experience of EiT as a useful course and the engagement in learning and development. There is also a willingness to cooperate and to both give and receive feedback. This is appears in the statements that are placed on -5/+5, and -4/+4, and in the distinguishing statement nr.12.

1. To reflect on how I am and how I can develop is central in EiT. I believe this is important for me to succeed in a future job (+5)
- 14. Focus on reflections prevents my learning and development (-5)*
- 5. I like the fact that EiT facilitates my development (+4)*
- 7. EiT is a very different topic at NTNU that stops me in my personal development (-4)*
- 12. It is especially meaningful and rewarding to reflect on shared experiences in the group (+2)*

This interpretation is also supported by David in the follow-up interview. He noted that EiT had introduced something different to the education at NTNU. The benefit for a future job was mentioned more than once. These presented statements also represent inner consistency because statement number 1 represents the opposite of statement 7. This indicated that defining participants in factor 1 are positive to EiT, as well as they believe the course can lead to learning and development on their behalf. It is also emphasized that this is valuable to them. That it is helpful to reflect is emphasized in the factor array. The placement of number 14 on -5 indicates that reflection is seen as a big part of this development.

There seems to be an underlying theme that they want and are able to change. The statements with the words limitations or prevailing conditions are placed in the centre of the factor array.

19. Normal university teaching is what I prefer, because it enables me to consider my limitations and choose subjects I know I can handle. (0)
20. I find that NTNU facilitates my learning in an efficient manner through traditional teaching based on my assumptions.(0)
30. I trust the fact that the EiT-staff and village leaders, through active learning, facilitate what I should learn out of my ability. (0)

The factor score on statements 19, 20 and 30 is an indication that these statements do not mean anything to the participants or felt two-valued. David did not say anything particular in this direction. Even so I believe that this could be underlying in the sorting. Q-method could have the impact of making the implicit explicit (Kvalsund & Allgood, 2010). This could be the case of just that. I also recognize this as a growth mindset where you do not think you have limitations and where development is important to you (Dweck, 2008). This can explain why these statements are placed at 0.

This also reinforces the understanding that the participants that define factor 1 want and probably feel the need for feedback to see them as they are or to see new sides of themselves. David supported this and pointed out that there rarely are opportunities for doing this in other parts of the education. Even though it could feel uncomfortable, it was desirable. It is likely to think that this is also seen as a mediator for development. The importance of sharing experiences in the group and to receive feedback also appears in the statements placed in +3 and -3.

6. By having others telling me how they perceive me in group, I can confirm how I am as a person. (+3)
11. Creating my own learning through listening and sharing experiences with others in a group helps me to learn about myself and become motivated to develop. (+3)
- 27. I do not see the point in others being the ones to decide if I succeed or not in a collaboration (-3)*

The new element that stands out in the last distinguishing statements is the acknowledgement that normal teaching at NTNU is not enough for those who define factor 1 to develop and grow as persons.

- 32. The normal teaching at NTNU is not enough for me to grow and develop as a person (+1)*

4.2 Factor 2 – I trust the system to facilitate my learning through theory-based learning.

Factor 2 is defined by 4 participants; Kenneth (0.6096), Peter (0.5991), Andrew (0.8108) and Mark (0.6304). There are only boys defining this factor and Andrew is the participant that best defines the factor with a score of 0.8108.

It seems like the preference for traditional teaching, a negative attitude towards EiT and the reluctance for personal development and group skills are elements that are apparent in factor 2. The preference for traditional university education is strongly emphasized by the statements to the far left and the far right in the factor array (appendix C).

13. Through traditional university teaching, I have a good chance to succeed. (+5)

4. To receive information from an expert in one area stands in the way of good discussions with others and for me to learn about myself. (-5)

20. *I find that NTNU facilitates my learning in an efficient manner through traditional teaching based on my assumptions.* (+4)

35. I prefer lectures and experience that I together with others can learn and grow in this way. (+4)

Andrew reinforced this understanding strongly in the follow-up interview. He advocated that there must be a reason why the university education mainly consists of lectures. He trusts the system to have thought this through and that this will give him the knowledge he needs. This indicated that the persons that define this factor like the traditional teaching that the university offers and believes that this is an effective way to learn and develop as professionals. This is even further emphasized with the presented statements in +4 (20 and 35).

Statement number 26 draws a new element into the analysis. It gives the impression that the participants that belongs to factor 2 are not afraid to work in a group.

26. *When I am in a group I am often afraid that others will reveal what I cannot. It is one of the reasons why I like working for myself.* (-4)

Andrew explains that he could work with others to acquire knowledge on certain themes, and he is not afraid to admit his lack of knowledge in the group. Even so he finds EiT challenging, not because of the challenge working in the group, but because the knowledge is so diffuse, or unclear. This seems to be a general attitude in the factor. They want concrete knowledge, like a blueprint. This is further amplified by statement number 3.

3. The fact that EiT does not give us a blueprint, I experience as that good for me and my development. (-3)

Statement 22 (-4) is divided in two. Andrew confirms that he likes lectures, but they do not give him reflections on how he wants to be as a person. Neither is this desirable. The opposition against personal development is apparent. It is prominent that the participants have negative feelings towards the mix of personal development and learning with their study at NTNU. This is also emphasized by statement 19.

22. Listening to a lecture gives me thoughts about how I want to be as a person. (-4)

19. *Normal university teaching is what I prefer, because it enables me to consider my limitations and choose subjects I know I can handle.*(+3)

21. *I think in general that NTNU takes measures to facilitate my learning and development.*

EiT is an exception to this. (+2)

The word limitation could be understood in many ways. Andrew explains that his thoughts goes mainly to the limitations he has in relation to the course, that is, theoretical knowledge. He emphasizes that he does not chose courses he is not so good at. This implies a limited attitude towards gaining new knowledge that could be present in this factor. Statement 21 indicated that participants that define factor 2 thinks that NTNU facilitates their learning. This reinforces the strong preference for traditional teaching. In line with this way of thinking, EiT is seen as an exception of the facilitation of learning.

It is also evident, as noted earlier, that the participants that belong to this factor are not particularly engaged in gaining personal competence. They seem to be very engaged in acquiring theoretical knowledge related to their profession, but do not believe that what EiT has to offer is a part of this. This is prominent in the statements that are places in the middle of the factor array.

24. *It is unnecessary that NTNU arrange for me to get personal feedback. I'm not going to change anyway.* (0)

18. *Through various experiences in EiT I can learn and adapt to a future job, by having my thoughts made visible.* (0)

Andrew strongly emphasized that he does not want NTNU to have anything to do with his personal development, and therefore he does not think that they should facilitate feedback either. His response to personal development or change was that it takes a lot of him to

change as a person. He also comments that EiT mainly has good intentions, but he thinks that it should be voluntary. This seems to be a further explanation to the interpretation that has been presented.

4.3 Factor 3 – I want feedback and group work, but I don't trust the system.

Factor 3 is defined by 7 participants. Betty (0.8459), Lisa (0.7351), Maria (0.6261), Daniel (0.5649), Carol (0.6061), Donald (0.6339) and Barbra (0.7381) define the factor, where Betty best defines the factor with a factor score of 0.8459. The main elements in this factor seem to be that they enjoy working together with others and receiving feedback, but this does not mean that they necessarily are positive to EiT. There also seems to be a distrust to the system. This is emphasized by the statements with highest psychological significance (+5/-5, +4/-4)

- 2. It motivates me to get feedback from others, so that I can see new sides of myself. (+5)*
- 22. Listening to a lecture gives me thoughts about how I want to be as a person. (-5)
- 23. The most important thing for me is to discuss theory with others so that we can acquire this knowledge together. (+4)*
- 9. Teamwork is very difficult and I feel unsafe and insecure. (-4)

In the follow-up interview with Betty she emphasized this. She likes working in groups, and feels that when she discusses with others her potential to learn is bigger. This way she can be active in the learning process. The negative attitude towards theory-based learning is also prominent (20, 32). It seems like the factor 3 participants do not think that this type of learning facilitates development or learning.

- 13. Through traditional university teaching, I have a good chance to succeed. (-2)*
- 20. I find that NTNU facilitates my learning in an efficient manner through traditional teaching based on my assumptions. (-2)*
- 32. The normal teaching at NTNU is not enough for me to grow and develop as a person (2).*

Feedback seems to be very important to know how others perceive them. This way they could adapt to the situation and learn. This will be beneficial for work life as well. Factor 3 sees the value of EiT for a future job. They also express that they can develop in group relations even though it can be challenging.

- 6. By having others telling me how they perceive me in group, I can confirm how I am as a person. (+3)
- 18. Through various experiences in EiT I can learn and adapt to a future job, by having my thoughts made visible. (+3)

10. It is obvious to me that I can develop my knowledge and my skills in various group situations, yet it is very challenging. (+3)

There seems to be skepticism towards the system in factor 3. This is highlighted with statement 30 which is one of the distinguishing statements.

30. I trust the fact that the EiT-staff and village leaders, through active learning, facilitate what I should learn out of my ability. (-1)

This was also expressed by Betty who did not think that the village leaders had done a good job. She did not agree on the organization of the course, but admitted that she liked teamwork and experienced this to be useful.

5. I like the fact that EiT facilitates my development.(+2)

7. EiT is a very different topic at NTNU that stops me in my personal development.(-3)

The factor array gives the impression that the participants experience EiT to facilitate development and that this is a good thing. Even so, the statements that either are positive or negative to EiT directly, are not placed in the pattern where it has most value. This could mean that they like the intentions of EiT but is not particularly excited about the implementation.

4.4 Factor 4 – Theory-based learning is what I prefer. Group work is scary.

There is only one participant that define factor 4. Johnny (0.8247) has a high loading on the factor and represents a point of view that is quite different than the other factors. There is reason to believe that it is important to include this factor, even though there is only one person defining it. This factor could represent a notion that is not only characteristic for him, but also for other students.

The most prominent attitudes in this factor are the positive attitude towards the traditional university education. There seems to be a preference for lectures and that this is believed to be a good opportunity to succeed. It is also clear that to be in a group feels unsafe and generates insecurity. Maybe because of this, giving and receiving feedback is associated with discomfort. It does not seem like EiT is experienced as useful for factor 4. This is prominent in both -/+5 and -/+4.

19. Normal university teaching is what I prefer, because it enables me to consider my limitations and choose subjects I know I can handle.(+5)

26. When I am in a group I am often afraid that others will reveal what I cannot. It is one of the reasons why I like working for myself. (+4)

35. I prefer lectures and experience that I together with others can learn and grow in this way. (+4)

31. Others have to accept me, and I have to accept others. That is why it feels good to give each other feedback in group work. (-5)

18. Through various experiences in EiT I can learn and adapt to a future job, by having my thoughts made visible. (-4)

Especially statement 26 gives the impression of a participant that finds it challenging to be in a group because he is afraid that the others will expose his weaknesses. This is confirmed by Johnny who has some bad experiences of being in groups and this makes him very unsecure of how to act in a setting like this.

To give or to receive feedback does not feel good. Johnny states that he cannot think of anything worse than receiving or giving feedback. This makes him feel very uncomfortable. Statement 8 and 9 emphasize this point of view. For factor 4 it is also not obvious that he can change or develop and this seems to enhance the uncertainty in a group.

8. Getting feedback from members of the group can be very difficult because the feedback is often related to things I cannot do anything about. (+2)

9. Teamwork is very difficult and I feel unsafe and insecure. (+1)

24. It is unnecessary that NTNU arrange for me to get personal feedback. I'm not going to change anyway. (-4)

10. It is obvious to me that I can develop my knowledge and my skills in various group situations, yet it is very challenging. (-1)

Statement 8 expresses that it is hard to receive feedback because it is related to things that you cannot change. Johnny emphasizes this and says that if feedback is given on things that you either work on or that you actually have problems changing it is very painful. Even so he believes it is useful to receive feedback so he could see new sides of himself.

The statements that are in the area of 0 in factor 4 contains different aspects. Some refer to development. The reason why they are there could be the uncertainty around the ability to develop.

5. I like the fact that EiT facilitates my development. (0)

15. There is room for emotions in EiT, which means that I can learn and develop. (0)

34. I'm happy with how I am, and do not need to discover new sides of myself. That is why normal university teaching suits me best. (0)

4.5 Similarities and distinctions

In the data set there are two statements that are consensus statements (appendix E). These statements are placed in approximately the same place in all the factor arrays. This is statement 11 and 29. They are placed rather neutral or slightly positive, which can mean that the statement is unclear or did not give meaning to the P-set.

29. I would have liked to see that EiT gave me relevant theories. It would have helped me and my development. (0, 0, 0, -1)

11. Creating my own learning through listening and sharing experiences with others in a group helps me to learn about myself and become motivated to develop. (+3, +2, +2, +1)

My interpretation of these statements is that the participants' experience of relevant theories in EiT is very varied. I also believe that "creating my own learning" is not something that the students recognize themselves in.

I will summarize the differences in seven different themes that stand out in particular; the experience of EiT, group work, blueprints, traditional learning, feedback, personal development and capacity to develop. The first theme is the attitude towards EiT as a course. Factor 1 is positive to EiT, while factors 2 and 4 are negative. Their negativity is somewhat different because factor 2 does not see the point of having the course as a mandatory part of the study, but factor 4 seems to see some of the learning benefits, but does not like group work and therefore not the course. Factor 3 is neither positive nor negative. It seems like the participants both can see the positive and the negative sides so they end up being fairly neutral.

Factor 1's point of view of group work is that they like it and has the experience that they can learn a lot from it. This is the same experience that factor 3 has even though they don't have the same attitude towards EiT. Factor 2 experience group work to be ok, but nothing more or less. Factor 4 gives the impression that group work is scary and unsafe. This is closely related to the preference for traditional university education, which is mostly associated with lectures. Both factor 2 and 4 have a preference for this type of education and believes this benefits the learning. Factor 1 expresses that this type of learning is not enough and factor 3 seems to

dislike it. Here it also differs who wants a blueprint. Factor 2 strives for it and finds it hard to deal with if it is not there. Factor 4 seems to like blueprints too.

The engagement in development as a person has different value in the different factors. Factor 1 seems to be very engaged with it and search for it. Both factor 1 and 3 express that they are able to develop. It seems though that they have different motive for developing. Factor 3 is very concerned with adapting to situations and other persons. This does not come clearly through in factor 1. The interest in development is especially evident through the interest and search for feedback. Factor 2 expresses that NTNU should not have anything to do with the personal development and does not give an impression of being concerned with it. Factor 4 is interested in it in some ways, but the ability to change is somewhat uncertain. This factor also express discomfort related to giving and receiving feedback.

5 Discussion

The aim of this research has been to investigate how students experience Experts in Teamwork (EiT) facilitating the development of personal competence. Different aspects have been in focus and new aspects have been brought to light through the data analysis and interpretation. I have chosen to discuss the elements I found to be the most prominent and that contribute to give a holistic picture of the data set. The discussion is divided into sections according to themes, and not by factors. This was done since there are themes that are visible in all the factors, which seemed relevant to discuss in relation to each other.

The discussion is divided into four main parts; what the personal competence means for the students, the student and the system, the student and the group, and the student. I have chosen this order because it lets the reader move the focus from a broader perspective down to the individual. The three last parts also refer to the levels of self-understanding that were a part of the research design, and which appeared in the data analysis. Each section is divided into smaller parts that address relevant aspects. The base of the discussion is the data analysis, the interpretation and presented theory. In the discussion I will also bring in some new theory to illustrate or to validate the themes. The choice of presenting this directly here was based on the judgment that these were not explanatory theories, but that proved relevant as a result of the interpretation and abduction process.

As previously explained the factors do not represent an opinion of a specific person. They represent a point of view which the participants more or less correlate with. In the discussion I will nevertheless review the factor as a person to make it more orderly for the reader.

5.1 What does personal competence mean for the students?

NTNU wants to educate students so they get the competence they need to succeed in a future job (NTNU, 2011). With the fast changes and increasing demands in the society, we are challenged to both acquire new knowledge and skills (Joiner & Josephs, 2007; Kegan & Lahey, 2009; Skau, 2011). Skau (2011) argues that to become a competent and professional person, personal competence is required and personal development is a part of this. This puts a pressure on the educational system to both facilitate the learning of the competences students need, and personal development. Through EiT, NTNU is trying to facilitate the learning of collaboration skills, team based and individual reflection. This could be seen as an attempt to prepare the students for future work life through gained personal competence.

Even though the theorists claim that the demands have changed and the need for new knowledge, skills and development has grown bigger, this is not necessarily how the students perceive it. *What is a competent person in a work context?* Skau (2011) refers to this as a person that has the necessary qualifications to fill a position and maintain certain tasks or express an opinion on a question. She divides the professional competence into three areas; theoretical knowledge, work-specific skills and personal competence. The last competence seems to be something that men in the street have their own definition of, which is reflected in the factors. Factors 2 and 4 associate theoretical knowledge as the most relevant for work. This especially comes up in the follow-up interviews, but also through the factor arrays. The information from experts on a theme is highly valued and they search for a blueprint. Factors 1 and 3 on the other hand, seem to relate the concept of competence more towards personal competence. They see the value of being able to see themselves from a different point of view and be able to adapt to situations. Giving and receiving feedback is also highly valued. Theoretical knowledge does not exclude the personal competence, but it tells us that the perceived value of the personal aspect varies.

The students' expressed attitude towards EiT has varied over the years (EiT, 2011b). This is also prevalent in the factors. Factor 1 seems to be fairly positive to EiT. This is indicated through the high scores on statements that express the value of the course and the way of working. Factor 3 has a more neutral attitude. This is apparent through the conflicting opinions about the intention and the implementation of EiT. This results in a more neutral attitude towards the course. Factors 2 and 4 are more negative to the course and would like to see the course as voluntary. The ways of working in EiT goes against what they prefer and it seem to be of little value for them.

This attitude towards EiT can be seen in connection to the experienced value of the course. It is said to be important that the teacher emphasize the aim of teaching so the students can get a purposeful learning experience (Lyngsnes & Rismark, 2007; Moxnes, 2000). Even though the aim of EiT should be emphasized by all the village leaders and the EiT-staff, the students do not necessarily see the value of it. Factor 1 seems to experience that EiT has a value for them and see the importance for a future job. This correlates with their positive attitude. Factor 2 do not see the meaning for having a course like this at the university and has a negative attitude towards EiT. I see this in relation to the importance of meaning-making (Frankl, 1969; Grendstad & Sandven, 1986). The meaning-making of the knowledge has to be discovered by the student him- or herself for it to give meaning (Moxnes, 2000). If the students cannot see

the importance of learning the skills that EiT wants to teach, the course feels meaningless. There is a famous saying that goes like this; *you can lead the horse to the water but you can't make it drink* (Fikse & Reams, 2009). Fikse and Reams (2009) compare learning to drinking and explain that teaching something that is mostly invisible to people is not easily done. They suggest that sharing experiences could cultivate the need for water. Some of the EiT students are not necessarily thirsty, but some are. In the follow-up interview with factor 3, Betty points out that her previous experience with working in teams outside of school, made her realize the importance of learning these skills. Maybe the students that have these kinds of experiences with them are thirstier and more able to see the value of the course. This is an aspect that could be interesting to look at in another context.

5.2 The student and the system

In my study I have looked at the two types of learning, experiential learning and theory-based learning. I will further present how these can promote or inhibit a gained personal competence for the students. The first paragraph provides a broader context for the discussion in 5.2.1, 5.2.2 and 5.2.3.

The two kinds of learning create different types of knowledge. The knowledge created through theory-based learning is founded on existing facts, knowledge and procedures (Moxnes, 2000). In contrast, the knowledge gained through experiential learning is oriented towards the here and now and the future. The learning is said to feel meaningful, personal and creates more questions than answers (Moxnes, 2000). Personal competence is described as a personal, subjective, unique and experience-based type of knowledge. It arises through an experience and our reflection on the experience (Skau, 2011). Personal competence therefore coincides with the type of knowledge that you can acquire through experiential learning. But there seem to be at least one requirement. According to Kurt Lewin (in Johnson & Johnson, 2009) the level of participation in the group is crucial in order to learn new skills, develop new attitudes and obtain new knowledge about groups. So the experiential learning can promote personal competence, but what about the theory-based learning? Freire (1999) emphasized that this type of education leads to a lack of critical thinking and knowledge ownership in the students. This could be seen as a contrast to what experienced based learning wants to achieve. EiT uses experienced learning as a base to reach the learning goals in the course. The issues discussed above shows that EiT could be a good learning context for the acquisition of personal competence. Even so, there seem to be a lot of other factors that

contribute to this competency building. I will continue to discuss some of the other aspects that have appeared in this study.

5.2.1 The demands on the students

Different types of teaching activities demands different levels of involvement from the students, consequently giving various challenges. Theory-based learning or banking education can seem to be a passive form of knowledge acquisition. The students are an empty container and the teacher who is the expert, gives the answers and deposit the knowledge (Freire & Nordland, 1999). This indicates that the students do not have to make an effort for the knowledge to stick. In contrast to this it has been argued that traditional education also has demands to the students. The teachers deliver the knowledge of certain themes, and it is up to the students to make meaning out of it (Fikse & Reams, 2009). Factor 3 points to this. The information that is obtained through the lectures is not worth so much because it does not give meaning to the student. This meaning-making is strongly emphasized by Frankl (1969). The meaning-making is up to the students to do, by talking to each other or solving problems. This shows that the focus of the learning is on the cognitive dimension, which leads to a value basis on development and learning within the intellectual understanding (Kvalsund & Karlsdóttir, 2009). The meaning-making which the students are responsible for also highlights the notion that the students in general are responsible for their acquisition of learning. Engagement and a willingness to learn are important for the learning outcome in all kinds of learning activities.

In theory-based learning activities the students could also be seen as objects to the education. Who you are as a person is not interesting in the process of gaining knowledge. In experiential learning you as a person become the interesting part in the process. This means that you become a subject in the learning process, where you have to be active and creative (Moxnes, 2000). It seems to me that a change in the type of learning creates a demand for a shift from object to subject in the learning process. I believe that this could be a challenge for the students. The experiential learning demands more of you as a person than the theory-based learning. You are required to be more personal. According to Factor 2, this does not fit with what they see as necessary for the education. This factor does not want NTNU to facilitate this kind of learning. In contrast to this Skau (2011) argues that you cannot take the personal out of the professional. Factors 3 and 1 clearly see the value of this. They emphasizes that EiT with experiential learning brings something new and valuable to the education. Again, it is

prevalent that there are different perspectives amongst the students which affect their subjective experience learning in the course.

5.2.2 Trust the system

For the learning outcomes to be how they are intended to be in a course, it demands something from the system. In this study there is a clear distinction between those who favor theory-based learning contra those who prefer experiential learning. This correlates with, as previously shown, their attitudes towards EiT. What I called traditional teaching in the statements seems to be associated with lectures by all of the factors.

Factor 2 especially, seems to be in favor of the theory-based learning. The trust of the system is of particular interest in this context. Factor 2 trusts the university to facilitate their learning and development in an effective way. Because lectures are the most common way of teaching at NTNU, this is assumed by factor 2, to be the best way to learn. The wish and the need for concrete knowledge or a blueprint is prominent and this is fulfilled by the transmission model. Fikse and Reams (2009) argue that this could be an useful approach to learning in some areas in life, for example where technical knowledge is required. Even so, there are also areas where it falls short (Fikse & Reams, 2009). Factor 1 seems to notice this and believe that they are likely to succeed in the traditional education, but do not think that this is enough to learn and develop. Freire (1999) points out that the transmission model will lead to a lack of critical thinking and knowledge ownership in students. This ownership is also mentioned by Parker Palmer (1998). He believes that even in the area of learning the facts it seems that the students actually learn more and faster by developing some kind of relationship with the subject. Grendstad and Sandven (1986) further emphasize the difference between the theory-based learning process and the experience-based learning process in the statement “to learn is to discover”.

There seem to be an irony in how the traditional university education is practiced and what the theorists say about learning. This could be seen as a gap between espoused theory and the theory of action (Argyris, 1991). No one argues for the banking or transmission education yet there seem to be a trend in the traditional education to teach this way (Imsen, 2009). In this context, the theory of action is what you actually observe, the kind of education that is carried out. While the espoused theory would be what you read about learning in the literature. This gap could turn in to a defensive attitude which could help against embarrassment and threat. A lot of theorists advocate for more experiential and process-based learning to bring the focus

over to emotional development, action- or practice oriented knowledge and on competence- and ability development (Kolb, 1984; Kvalsund & Karlsdóttir, 2009; Moxnes, 2000).

In contrast to this it seems like EiT is an initiative that narrows this gap. EiT's espoused theory is experiential learning which is close to their expressed theory of action. Even though this seems nice one could argue that the intention is not attained because the implementation is not as good as it intends to be. This point of view has been brought to light by at least two of the factors. Factors 3 and 4 think the intention of EiT is good, but do not think that it lives up to this. In the follow-up interview it was brought to light that the organizing of the villages and the leading team in the village had an impact on this. The data set does not give enough information to discuss this further. In the following section I will look closer on how the system facilitates personal learning through support and challenge.

5.2.3 Support and Challenge

The search for new personal learning and the need for growth only wakes up when we feel sufficiently safe (Moxnes, 2000). Arguments for a safe environment have been pointed to by many. Kegan (1994) uses the terms challenge and support to describe the facilitation of the learning process.

These terms could be used on both a systemic level as well as for a group. If the challenge is too big, it develops resistance. If there is too much support, it gets boring and the students do not learn (Kegan, 1994; Moxnes, 2000). This leads to a conflict between the level of support and challenge related to what the students need. Even though this could be hard, EiT as a system has a responsibility to facilitate that the structure around the villages so the groups feel sufficiently safe. Levin and Rolfsen (2004) emphasize that the given external structure can influence the team work a lot. It is likely that not just EiT as a system has an effect, but also the village leader and the learning assistants in the different villages. According to the study there is only factor 4 that experienced EiT to be too challenging. This is connected to a strong feeling of uncertainty. This could imply that the challenges are experienced to be too high compared to the level of support. The other factors seem to agree to a certain level that group work can be challenging, but they appear to feel that the support is good enough. Because factor 4 is only defined by one person it tells us that this is probably a point of view that is present among the students, but not the opinion to most students.

5.3 The student and the group

The group work in EiT is the foundation for learning and development. This is where the students collect their experiences to reflect on. The students' attitudes, feelings and experience of this vary. Factors 1 and 3 seem to experience group work in EiT as a potentially great learning area. It is experienced to promote a bigger insight to who they are in a group and how others experience them to be. This is reinforced by the feedback that they need to give and receive in EiT. It appears to be an experience of a gained personal competence. Especially it seem like feedback often could be a scarce in traditional education. Through feedback from others we can get valuable information (Øiestad, 2004). Skau (2011) argues that feedback is necessary for us to develop and also sees the ability to give and receive feedback as a personal competence. The feedback could be a basis for personal learning and development because it can contribute to a change in a person's way of thinking or self-understanding. Factor 3 sees feedback as a way to adapt to different situations and people. The importance of being liked comes up in the follow-up interview, and therefore a wish of adjusting the behavior. These are two different aspects of the feedback; one, that is directed towards personal development and one which is directed towards a wish of adapting.

Feedback is not necessarily associated with a good thing. Factor 4 expressed strong negative feelings in relation to feedback. The positive outcome is not out of sight, but the discomfort of giving or receiving it overshadows the potential learning. This could also be related to the level of challenge and support in the group. If the support is not good enough, the feedback will be especially hard to receive. It could produce resistance and defense mechanisms as well as anxiety because the self-understanding is threatened (Moxnes, 2000; Rogers, 1965). Factor 4 seems to avoid these situations because of the discomfort, which can lead the person to hold on to old ways of understanding and miss out on personal learning (Moxnes, 2000).

The use of subject-object terms was introduced earlier in the discussion related to types of learning. I will continue to explore this some more in relation to the ability to receive feedback. The subject-object principle will therefore be used differently than in the relation to the types of learning. Receiving and giving feedback could be seen as a question of being able to take something that is a subject as an object for observation (Kegan & Lahey, 2009; Øiestad, 2004). Reflection in EiT could have this purpose. The students write both personal and group logs and try to reflect on common experiences. For this to happen the students have to be able to step away from the experience and look at it from a different perspective. Often,

someone is owned by a feeling. When you are a subject to a feeling, you do not have the ability to look at it from the outside. If you could take a feeling as an object, you are more distanced to it and therefore more able to reflect on it (Kegan, 1994). This transition is also debated by Jordan (2001). He argues that to enable ourselves to reflect on our experiences and to evaluate them we need to take the experiences out as objects. The greater ability you have to take something out as an object, the greater ability you have to receive feedback (Joiner & Josephs, 2007). Even if the feedback feels good or uncomfortable it could lead to a new self-understanding. According to Skau (2011) this is a part of a gained personal competence.

Feedback seems to be less important to Factor 2. This could be connected to the favoritism of theory-based learning where there is little room for feedback. The statements concerning feedback are placed near the center of the array, something that tells me that this is not that important to the participants that define factor 2. The negative attitude towards personal development could be an origin for this. Even so, it does not seem to be a discomfort connected to the feedback, but a low level of interest. This could be seen in the context of ability to reflect which I will debate in the next section.

5.4 The student

Some of the different demands that the society, the teaching style or the group have from an individual has been explored earlier. The demands are obvious and will probably not become less apparent over the years (Kegan, 1994). We need to change, adapt, acquire new skills and grow. But are we really able to meet the demands? Do students have what it takes to take something from subject to object? Do they have the ability to reflect on the process? Can they develop? These questions can be seen in a light of mindset, cognitive abilities and level of consciousness.

5.4.1 The mindset

As previously pointed out our mindset profoundly affects the way we learn and lead our lives (Dweck, 2008; Kegan, 1994; Kegan & Lahey, 2009). Our mindset is beliefs that we can be both aware of and unaware of. According to Dweck (2008) these beliefs can have an impact on how we respond to learning. In this study it is clear that the different factors relate differently to learning. Factor 1, which is engaged in learning and development could seem to have resemblance with what Dweck (2008) calls a growth mindset. Persons with a growth mindset seize the chance to learn because they believe that the success is about learning. This has its source in the belief that it is actually possible to grow your initial talents, aptitudes and

interest through application and experience. This results in a person who is eager to learn and to see new sides of him- or herself. This is expressed by factor 1 with the interest for feedback as well as wish to challenge themselves to learn new skills. It is also interesting that the statements which describe a person with a limited vision of him- or herself were placed in the middle of the factor array (appendix C). It seems like the participants that define factor 1 do not identify with limited abilities and the notion of an unchangeable person. In the follow-up interview David did not confirm this. Even so, this could be an expression of beliefs that the participants in factor 1 are unaware of. This could be one example of the notion that Q-method can bring the implicit to the explicit (Brown, 1980).

In contrast Factor 4 seems to have some similarities with a fixed mindset. The statements which represent the more narrow learning perspective and highlight limitations are placed in the most psychologically significant areas. The belief that your abilities are carved in stone seems to be present, in line with the belief of a fixed mindset. Because people with a fixed mindset believe that they have only a certain amount of intelligence and personality they tend to yield to the situations where they could fail (Dweck, 2008). This is also related to how a person receives feedback. Johnny explained in the follow-up interview that giving and receiving feedback feels very unpleasant. The reason for this, he explained, was that it was hard to get negative feedback on something you cannot do anything about. This reinforces the belief that the abilities are carved in stone, and therefore limiting.

Dweck (2008) points out that you do not have to have either a growth or a fixed mindset. People could have different mindset in different areas. As for factors 2 and 3 there are not clear characteristics for either one of them, that is why I have highlighted factor 1 and 4 in the previous section. It is also important to point out that the description of the mindset does not exist to put a label on people, but to give them an awareness of what their possibilities to change their mindset are. If you become aware of your beliefs, you can change them and as a result grow your mindset (Dweck, 2008). Often we are unaware of the beliefs that create problems for us.

5.4.2 The mental demands

Skau (2011) point out raising awareness as the first principle of personal competence development. She continues to ask questions for reflection. *How can we change something if we don't see it? Raised personal awareness starts with oneself. What am I doing, and why?*

How conscious we are will affect the way we enable learning (Dweck, 2008; Kegan, 1994; Skau, 2011).

The importance for moving facets of experience from subject to object has a central implication for how we should work with gaining personal competence. This shift in perspective was mentioned earlier in relation to the two types of learning. It was argued that a shift in perspectives from theory-based learning to experiential learning was needed. There is also a demand of a shift from subject to object in the process of experiential learning. When the students work in a group, they have to be able to step back and reflect on the process. Not only the process, but also to their own behavior in the group. For the student to be able to do this, they have to have a certain capacity to reflect. People often describe people as more or less reflected. Could this have something to do with their ability to step back and take a look at what is going on as object?

Kegan (1994) argues that this ability to shift is like a muscle. You can train to get a strong muscle to be able to do the shifts, and you also have to maintain it. During the student's time in the groups, the students practice these shifts. To help them, they have the learning assistants that observe and give objective feedback on what they see. This could help promote the shift in awareness. Either way, this is something each student has to practice on. And to reflect on the group process is not the same as reflecting over your own behaviors and thoughts. EiT tries to increase this awareness through the learning assistants among other things. Kolb's learning cycle (Figure 2) can also help promote this understanding for the students.

The factors seem to deal with this aspect differently. Factor 1 seems to appreciate reflections very much and this seems to promote learning and development for the participants. The other factors do not give that much of an impression of reflection being important for them. This could refer to their ability to reflect but, the data set does not give enough basis to discuss this further. Even so, it is noteworthy that Factor 1, 3 and 4 seem to experience that discussing various issues in group work promotes the ability to see themselves from the outside. The way I see this, their ability to take the group process as an object is increased through the sharing of experiences in the group. Factor 2 however does not seem to share this experience.

6 Conclusion

The purpose of this study has been to bring awareness to the students' experience of how EiT facilitates the acquisition of personal competence. The research question: *How do students experience Experts in Teamwork facilitating the development of personal competence?* has been the basis of the study. I have discussed the interpretation of data through the theoretical framework of understanding. These next paragraphs will summarize the main aspects found to be important for the students' experience.

The importance of gaining personal competence has been emphasized more than once in this thesis. I have found that there is a difference in the experienced value of personal competence amongst the factors. This is likely to affect the students' attitude and also their learning outcomes. The students' meaning-making will have consequences for their ability to gain personal competence. The factors (1 and 3) that see a value of EiT for a future job seem to be the ones that experience EiT facilitating the development of personal competence.

EiT has experiential learning as their theoretical foundation. This is in big contrast to the traditional university education which mainly has been focused on theory-based learning as their theory of action (Freire & Nordland, 1999; Imsen, 2009). In contrast to what the theorists might say about the best ways to learn, this is what the students are used to and also in some ways expect. I have found a discontent with the traditional way of learning amongst most of the participants. They call for a different kind of learning. Experiential learning seems to fill a gap for these students. Through EiT, they see new sides of themselves reinforced by the feedback from the group leading to increased personal competence. Yet, this is not valid for all of the participants. Some point to the intentions of EiT and like the idea of them, but do not think that EiT is able to meet these intentions.

According to the theory, the experiential learning is a better way to gain personal competence than theory-based learning. EiT facilitates this through an emphasis on the reflection of specific experiences. This turns the focus from the intellectual understanding to the emotional, action and practice oriented knowledge, which can lead to competence and ability development. Theory-based learning has its valuable aspects when it comes to fact knowledge, but in the area of personal competence it falls short. I have argued that the change from theory-based learning to experiential learning demands a shift of attention for the students which may be perceived as hard. From being a passive object which is being filled

with information, the student has to be active and creative in creating his or her own knowledge.

Further, the subject-object principle has been brought in to highlight different aspects of the dataset. This principle was used to describe some of what is being required from the students namely a greater amount of awareness. This is also related to the ability to give and receive feedback. To better be able to receive feedback, the student has to take a step back and create distance from the source of the feedback. This creates an opportunity to reflect on it and maybe act on it. Being able to give and receive feedback is seen as a part of personal competence. I have found that feedback is very valuable for some students, and some think it is intimidating. Feedback could be a way of widening your self-understanding, which could produce defensive mechanisms if it threatens the perceived idea of who you are. Through the follow-up interviews, and through my employment in EiT, it has come to light that feedback is something that the students rarely receive through traditional university education, however, it is very much appreciated in the EiT context.

The mindsets have also been argued to affect how the students relate to learning. A student with a fixed mindset would experience EiT as a unsafe area of learning because they evaluate everything in terms of success or failure. The feedback will also feel very hurtful because it concerns things that he or she cannot change. This is not a good starting point for the development of personal competence. A student with a growth mindset on the other hand, will see EiT as a new opportunity to learn new skills and knowledge (Dweck, 2008). This is not black and white, but it is brought to attention here to emphasize the affect that a different mindset could have on the development of personal competence.

Based on NTNU's strategy (2011) I interpret that the system has, in this context, a responsibility to facilitate the competence the students need, including personal competence. The system is trusted by many of the students to do this in best possible way. Yet, some students have lost their belief in the system. For a gained personal knowledge, the system has to provide the right amount of challenge and support for the students. Since this is individually experienced it will be an impossible task to satisfy all the students. Even so, according to my factors, most of the participants experience EiT as an appropriately challenging course. This leads to an experience of gained personal competence.

The systemic perspective has stood out more clearly than expected in this research. This could be due to a number of factors. An element could have been that there was a majority of the statements that highlighted this perspective. Another point could be that the students emphasized these because they were more concrete than the interpersonal and personal perspectives. Further, it might be an element that is very clear to the student because EiT it is experienced to be very different than the others courses they have taken in the past. The last element is my bias as a researcher, which could have made me emphasize this.

Throughout the thesis many aspects have been found to be important for the students' experience. Even so, an aspect that has not been emphasized enough is that, ultimately it is not only up to EiT as a system to facilitate the acquisition of competence, but the students themselves. Through the students' level of engagement and attitude, the learning will vary. The system has a response, but there is only so much it can do. Finally, it is up to the students to take their share of the responsibility.

6.1 Further research

This thesis has brought light to some aspects of the students' experiences obtained by the data. This type of research brings up new questions and curiosity for other aspects that could be relevant for further research.

It would be interesting to look at EiT's implementation compared to the set learning goals. Their espoused theory is clear, but is the theory in use or in action necessarily the same? I claim that their theory in use is an attempt to narrow the gap between the espoused learning theories and theories of action, but there might be a gap within EiT.

The interdisciplinary aspects in the groups are also an interesting and could have a big impact on the students' experience and learning outcomes. The ability to cooperate across disciplines will probably become more and more important in the years to come. In this study there were a strong majority of participants from Gløshaugen campus (27) compared to the participants from Dragvoll campus (9). This could be an indication of a low level of interdisciplinarity in the villages which the participants came from.

During this study it has also become apparent that the value of feedback is put high by many students. Because the university generally does not facilitate this, this is especially appreciated in EiT. This could be interesting to have another look at in further research.

In the end of the discussion, the capacity to reflect was briefly mentioned. Kegan (1994) relates this to the level of consciousness and believes that an increased level is necessary to meet the demands of the society today. This theme, related to the students, would make an interesting discussion.

I also mentioned briefly the students with work experience might be more able to see the values of EiT's learning goals. This value has been argued to have an effect on the learning outcome. It could be interesting to have a closer look at work experience related to the meaning-making of the course.

7 My role as a researcher – from a critical point of view

This final chapter has been an opportunity for me to take a step back to reflect on the process of writing this thesis. I see this as way of taking the thesis as an object instead of being a subject to it. Doing this gave me the chance to see how my subjectivity affected my research, what I could have done differently in the study and how I as a researcher experienced the process.

7.1 My role

In normative research there has been a tradition of having an outside-in perspective. Hunt (1987) argues for a perspective opposite of this where the researcher start with themselves when they are conducting research. This is an inside-out perspective, which includes the researcher (Hunt, 1987). He points out that if you begin with yourself, you could take advantage of a rich reservoir – your experienced knowledge on interpersonal relations, self-awareness, individual differences, teaching and learning and so on. Thorsen and Allgood (2010) also encourage the students to explain their role and subjectivity in the research to ensure the study's quality and to explain the choices along the way.

My interests and my reflection was the starting point of this research. The employment I had in EiT had given me experience and reflections on the theme that I wanted to have a closer look at. In the process of writing this thesis I have actively been aware of my close connection to the field of research. For me this meant that I had to try to situate myself with being aware in the choices I made. To be aware takes practice. I believe that I have practiced this skill during my time as a master student, but this does not make me capable to be aware at all times during this research. Some of time it felt like the thesis was too overwhelming, I became a subject to the thesis. A way to help me situate myself was to talk to my supervisor and fellow students about the process.

The employment in EiT, as a teaching assistant, did not involve the students directly, but gave me a lot of information about the organization, the attitudes and beliefs that were present. I also had different opinions and notions of EiT and about the students in the course. This was an advantage for me as well as a disadvantage when I was looking for the concourse for this thesis (Postholm, 2005). Naturally, this affected my design. The design was based on my personal theory, reflections and experience in addition to relevant theory. I see that the skewness of the statements could have been a result of my subjectivity. I found it hard to

construct negative statements towards EiT, as well as positive statements towards traditional education. Help from a fellow student and a pilot sort with a seemingly unbiased person was very useful in this situation.

I also experienced some challenges with the collection of data. I had reflected over the question if my role in EiT and my role as a researcher were in conflict with each other on beforehand. After a number of discussions I came to the conclusion that this was not a problem. But a new dimension arose. During the collection of data I started wondering how voluntary the participation actually felt when I, as a part of the EiT-system, came and asked if they wanted to be a part of my research. At the same time I had to trust that these were grown up students that had to choose for themselves, and take responsibility for their own choices. All I could do was to point out several times that it was voluntary. I think that the way that this could have affected the result was that the students could have done a more careless sort, or more negative, or dishonest sort.

7.1.1 Factor interpretation and follow-up interviews

Due to the interpretation of the factors that I did in advance to the follow-up interviews, I wonder how well I was able to listen instead of confirming my thoughts on the theme in the follow-up interviews. As a counseling student I have gained some communication and attention skills which could have helped me with this. Even so, there is no question about my bias when I already had an interpretation of the factor. The purpose for doing the post interviews was to either confirm or disprove the interpretation that I had done, but it could also have given me new perspectives on the theme that I had not put a light on. My fear is that my interpretation did not give room for these new things, or I was searching for a confirmation on what I already thought. It could also be mentioned in this context that it was easier for me to relate to factor 1 than the other factors. This could also have been affecting the interpretation. Another measure one could do to situate oneself is that the researcher also does the sort. I did not do this because I had not experienced to be a part of a group in EiT so this would have not been appropriate in this study.

7.2 What could have been done differently?

In this type of research, and especially when it is your first big research, there are always a lot of things that could have been done differently. I would like to point out some of the elements that I see, could have been done differently in my research.

During the development of the design I could have done a more thorough job reading theory. It is hard to say if this could have made the development of the Q-sample easier, but likely it would have. There are also other interesting aspects of the concourse that could have been considered as a part of the design, but were omitted in this study. There will always be a chance that the researcher has not covered the whole concourse. I mention this to highlight my awareness of different aspects of the concourse that might have been overlooked. Even so, many aspects in relation to the theme have been discussed.

As mentioned before, it was challenging creating the statements, which resulted in some statements that seemed ambiguous. This could have made the sorters insecure while doing the sort, as well as given problems for me in the analysis. I also could have done a better job with defining some of the words on beforehand. Words like “development” could be interpreted in many ways of the participants. That said, the participants give their own meaning to the statements and a lot is left in the data analysis and interpretation to the researcher. Different aspects also come out clearer than others in this type of study. In this study, the system perspective has been central in this study and the interpersonal relation has not been emphasized to the expected extent.

In aspect of the condition of instruction, which the intention is to get the participants awareness directed to the same situation, this could have been different in this research. The condition of instruction was; *what is your personal experience of team work in Experts in Team (EiT)?* Looking back at this, this condition could have been closer connected to the research question. This could have made it easier for me as a researcher to answer my question of research and also increased the validity even more.

There are many relevant aspects that have not been introduced or discussed in this thesis due to the limited space and time. What stood forward in this study as important in the students experience is not necessarily the whole picture of important elements. It's just an attempt to bring awareness to some of the existing perspectives.

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9 Appendices

9.1 Appendix A – Design and statements

Research design

Effects	Level 1	Level 2	Level 3
Mindset	Growth (a)	Fixed (b)	
Self-understanding	Individual (intra) (c)	Person (inter) (d)	System (impersonal) (e)
Type of learning	Theory-based (f)	Experiential (g)	

Statements according to cell combination

ACF

21. I think in general that NTNU takes measures to facilitate my learning and development. EiT are an exception to this.
22. Listening to a lecture gives me thoughts about how I want to be as a person.
32. The normal teaching at NTNU is not enough for me to grow and develop as a person.

ACG

17. By discussing various issues in group work, I find that I can observe myself from the outside and learn from it.
18. Through various experiences in EiT I can learn and adapt to a future job, by having my thoughts made visible.
14. Focus on reflections prevents my learning and development

BCG

34. I'm happy with how I am, and do not need to discover new sides of myself. That is why normal university teaching suits me best.
33. One-way communication is poorly suited to my learning because I do not get to show my abilities.
19. Normal university teaching is what I prefer, because it enables me to consider my limitations and choose subjects I know I can handle.

ADF

2. It motivates me to get feedback from others, so that I can see new sides of myself.
35. I prefer lectures and experience that I together with others can learn and grow in this way.

4. To receive information from an expert in one area stands in the way of good discussions with others and for me to learn about myself.

BCG

9. Teamwork is very difficult and I feel unsafe and insecure.

31. Others have to accept me, and I have to accept others. That is why it feels good to give each other feedback in group work.

36. Knowledge that is difficult to put into words is not very valuable to me and my development.

ADG

11. Creating my own learning through listening and sharing experiences with others in a group helps me to learn about myself and become motivated to develop.

12. It is especially meaningful and rewarding to reflect on shared experiences in the group.

10. It is obvious to me that I can develop my knowledge and my skills in various group situations, yet it is very challenging.

BDF

26. When I am in a group I am often afraid that others will reveal what I cannot. It is one of the reasons why I like working for myself.

23. The most important thing for me is to discuss theory with others so that we can acquire this knowledge together.

25. It is not possible for me to exploit my potential when I am cooperating in the ordinary teaching method.

BDG

8. Getting feedback from members of the group can be very difficult because the feedback is often related to things I cannot do anything about.

6. By having others telling me how they perceive me in group, I can confirm how I am as a person.

27. I do not see the point in others being the ones to decide if I succeed or not in a collaboration.

AEF

29. I would have liked to see that EiT gave me relevant theories. It would have helped me and my development.

16. To learn about group processes through the lectures that EiT have, gives me opportunities to grow and learn.

3. The fact that EiT does not give us a blueprint, I experience as that good for me and my development.

AEG

15. There is room for emotions in EiT, which means that I can learn and develop.

1. To reflect on how I am and how I can develop is central in EiT. I believe this is important for me to succeed in a future job.

7. EiT is a very different topic at NTNU that stop me in my personal development.

BEF

28. I wish fact that EiT had been more like other subjects we have. As it is today, it is too challenging.

13. Through traditional university teaching, I have a good chance to succeed.

20. I find that NTNU facilitates my learning in an efficient manner through traditional teaching based on my assumptions.

BEG

30. I trust the fact that the EiT-staff and village leaders, through active learning, facilitate what I should learn out of my ability.

24. It is unnecessary that NTNU arrange for me to get personal feedback. I'm not going to change anyway.

5. I like the fact that EiT facilitates my development.

9.2 Appendix B – Factor Loadings

The X in the table indicated that the participant define the given factor. The names⁶ written in *italics* are the mixed loaders which fell out of the analysis. The **bold** names and numbers mark the participants that best defines the factor and whom I conducted follow-up interviews with.

		Factor 1	Factor 2	Factor 3	Factor 4
1	Sharol	0.6529x	0.2365	0.5114	0.0619
2	Johnny	0.0252	0.0982	-0.0862	0.8247x
3	Doris	0.5363x	0.1817	0.1371	0.2776
4	<i>Charles</i>	<i>0.2990</i>	<i>0.4379</i>	<i>0.4584</i>	<i>0.3470</i>
5	Thomas	0.7465x	0.1570	0.4032	-0.1813
6	James	0.7371x	-0.0128	0.2449	-0.1277
7	Betty	0.2906	0.1225	0.8459x	-0.1114
8	<i>Nancy</i>	<i>0.5633</i>	<i>0.3637</i>	<i>0.4592</i>	<i>0.0202</i>
9	Paul	0.6370	0.2747	0.3595	-0.0444
10	Richard	0.7398	0.1663	0.4446	0.0014
11	Lisa	0.4473	0.2574	0.7351x	0.0462
12	Maria	0.2096	0.4453	0.6261x	0.1666
13	<i>Edward</i>	<i>0.1802</i>	<i>0.5445</i>	<i>0.5349</i>	<i>-0.3297</i>
14	Kenneth	0.5208	0.6096x	0.0310	0.1112
15	<i>Brian</i>	<i>-0.0738</i>	<i>0.4435</i>	<i>0.5202</i>	<i>0.4413</i>
16	<i>Helen</i>	<i>0.3880</i>	<i>0.3846</i>	<i>0.4337</i>	<i>0.0007</i>
17	<i>Steven</i>	<i>0.4012</i>	<i>0.6032</i>	<i>0.4675</i>	<i>-0.0226</i>
18	Daniel	0.2971	0.1030	0.5649x	0.0475
19	Peter	-0.4238	0.5991x	-0.3095	0.1387
20	Carol	0.4755	-0.1099	0.6061x	-0.0332
21	Andrew	-0.0325	0.8108x	-0.0444	0.1042
22	Sandra	0.6819x	-0.0366	0.3239	0.0651
23	George	0.6647x	0.4431	0.4080	-0.1093
24	David	0.8402x	0.2432	0.0706	0.1508
25	Donald	0.3977	-0.2790	0.6339x	0.1405
26	Barbra	0.4768	0.0064	0.7381x	0.0422
27	Mark	0.4956	0.6304x	0.1571	0.1639

⁶ Pseudonyms

28	Susan	0.6582x	-0.0763	0.5105	-0.0980
29	Robert	0.7049x	0.0731	0.4884	0.0441
30	<i>Margaret</i>	<i>0.4871</i>	<i>-0.0504</i>	<i>0.5007</i>	<i>0.1186</i>
31	William	0.8128x	0.2092	0.2020	0.0706
32	<i>Linda</i>	<i>0.4380</i>	<i>0.3085</i>	<i>0.4500</i>	<i>0.5387</i>
33	Jennifer	0.7121x	-0.1001	0.4277	0.3438
34	Mary	0.7746x	-0.0211	0.4110	0.0484
35	Michael	0.6760x	0.1872	0.3551	0.0588
36	John	0.5678x	0.1064	0.1758	0.1237
Number of participants defining the factor		16	4	7	1
Explanatory variance		30%	12%	21%	5%

9.3 Appendix C – Factor arrays

Factor 1

Most disagree						Most agree				
-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
14	7	34	9	4	19	3	31	6	5	1
	24	27	21	25	20	10	17	11	2	
		28	22	26	23	13	15	18		
			36	35	29	32	12			
				8	30	16				
					33					

Factor 2

Most disagree						Most agree				
-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
4	22	9	3	1	29	2	23	10	20	13
	26	25	8	14	24	6	21	19	35	
		33	12	16	17	31	11	30		
			28	27	18	34	5			
				32	15	36				
					7					

Factor 3

Most disagree						Most agree				
-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
22	24	7	13	4	3	12	11	18	1	2
	9	8	20	14	19	15	32	10	23	
		34	21	27	25	16	33	6		
			28	30	26	17	5			
				35	29	31				
					36					

Factor 4

Most disagree						Most agree				
-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
31	18	4	3	7	1	9	2	13	26	19
	24	22	12	10	5	11	6	17	35	
		36	21	14	15	20	8	27		
			32	29	16	25	30			
				33	23	28				
					34					

9.4 Appendix D – Factor Q-sort values for each statement

Nb	Statements	Place in Factor array			
		F1	F2	F3	F4
1	To reflect on how I am and how I can develop is central in EiT. I believe this is important for me to succeed in a future job.	5	-1	4	0
2	It motivates me to get feedback from others, so that I can see new sides of myself.	4	1	5	2
3	The fact that EiT does not give us a blueprint, I experience as that good for me and my development.	1	-2	0	-2
4	To receive information from an expert in one area stands in the way of good discussions with others and for me to learn about myself.	-1	-5	-1	-3
5	I like the fact that EiT facilitates my development.	4	2	2	0
6	By having others telling me how they perceive me in group, I can confirm how I am as a person.	3	1	3	2
7	EiT is a very different topic at NTNU that stop me in my personal development.	-4	0	-3	-1
8	Getting feedback from members of the group can be very difficult because the feedback is often related to things I cannot do anything about.	-1	-2	-3	2
9	Teamwork is very difficult and I feel unsafe and insecure.	-2	-3	-4	1
10	It is obvious to me that I can develop my knowledge and my skills in various group situations, yet it is very challenging.	1	3	3	-1
11	Creating my own learning through listening and sharing experiences with others in a group helps me to learn about myself and become motivated to develop.	3	2	2	1
12	It is especially meaningful and rewarding to reflect on shared experiences in the group.	2	-2	1	-2
13	Through traditional university teaching, I have a good chance to succeed.	1	5	-2	3
14	Focus on reflections prevents my learning and development	-5	-1	-1	-1
15	There is room for emotions in EiT, which means that I can learn and develop.	2	0	1	0
16	To learn about group processes through the lectures that EiT have, gives me opportunities to grow and learn.	1	-1	1	0
17	By discussing various issues in group work, I find that I can observe myself from the outside and learn from it.	2	0	1	3
18	Through various experiences in EiT I can learn and adapt to a future job, by having my thoughts made visible.	3	0	3	-4
19	Normal university teaching is what I prefer, because it enables me to consider my limitations and choose subjects I know I can handle.	0	3	0	5
20	I find that NTNU facilitates my learning in an efficient manner through traditional teaching based on my assumptions.	0	4	-2	1

21	I think in general that NTNU takes measures to facilitate my learning and development. EiT are an exception to this.	-2	2	-2	-2
22	Listening to a lecture gives me thoughts about how I want to be as a person.	-2	-4	-5	-3
23	The most important thing for me is to discuss theory with others so that we can acquire this knowledge together.	0	2	4	0
24	It is unnecessary that NTNU arrange for me to get personal feedback. I'm not going to change anyway.	-4	0	-4	-4
25	It is not possible for me to exploit my potential when I am cooperating in the ordinary teaching method.	-1	-3	0	1
26	When I am in a group I am often afraid that others will reveal what I cannot. It is one of the reasons why I like working for myself.	-1	-4	0	4
27	I do not see the point in others being the ones to decide if I succeed or not in a collaboration.	-3	-1	-1	3
28	I wish fact that EiT had been more like other subjects we have. As it is today, it is too challenging.	-3	-2	-2	1
29	I would have liked to see that EiT gave me relevant theories. It would have helped me and my development.	0	0	0	-1
30	I trust the fact that the EiT-staff and village leaders, through active learning, facilitate what I should learn out of my ability.	0	3	-1	2
31	Others have to accept me, and I have to accept others. That is why it feels good to give each other feedback in group work.	2	1	1	-5
32	The normal teaching at NTNU is not enough for me to grow and develop as a person.	1	-1	2	-2
33	One-way communication is poorly suited to my learning because I do not get to show my abilities.	0	-3	2	-1
34	I'm happy with how I am, and do not need to discover new sides of myself. That is why normal university teaching suits me best.	-3	1	-3	0
35	I prefer lectures and experience that I together with others can learn and grow in this way.	-1	4	-1	4
36	Knowledge that is difficult to put into words is not very valuable to me and my development.	-2	1	0	-3

9.5 Appendix E - Distinguishing and consensus statements

Distinguishing statements are statements that are sorted significantly different in the various factors, and therefore contribute to the differences between the factors. All of the statements are significantly different on the <0.05 level. Statements marked with an asterisk (*) are significant on the <0.01 level.

Distinguishing statements factor 1

		Factor 1	Factor 2	Factor 3	Factor 4
5	I like the fact that EiT facilitates my development.	4	2	2	0
12	It is especially meaningful and rewarding to reflect on shared experiences in the group.	2	-2	1	-2
32	The normal teaching at NTNU is not enough for me to grow and develop as a person.	1	-1	2	-2
27*	I do not see the point in others being the ones to decide if I succeed or not in a collaboration	-3	-1	-1	3
7*	EiT is a very different topic at NTNU that stop me in my personal development.	-4	0	-3	-1
14*	Focus on reflections prevents my learning and development	-5	-1	-1	-1

Distinguishing statements for factor 2

		Factor 1	Factor 2	Factor 3	Factor 4
20*	I find that NTNU facilitates my learning in an efficient manner through traditional teaching based on my assumptions.	0	4	-2	1
19	Normal university teaching is what I prefer, because it enables me to consider my limitations and choose subjects I know I can handle.	0	3	0	5
21*	I think in general that NTNU takes measures to facilitate my learning and development. EiT are an exception to this.	-2	2	-2	-2
18*	Through various experiences in EiT I can learn and adapt to a future job, by having my thoughts made visible.	3	0	3	-4
24*	It is unnecessary that NTNU arrange for me to get personal feedback. I'm not going to change anyway.	-4	0	-4	-4
25*	It is not possible for me to exploit my potential when I am cooperating in the ordinary teaching method.	-1	-3	0	1
26*	When I am in a group I am often afraid that others will reveal what I cannot. It is one of the reasons why I like working for myself.	-1	-4	0	4

Distinguishing statements for factor 3

		Factor 1	Factor 2	Factor 3	Factor 4
2	It motivates me to get feedback from others, so that I can see new sides of myself.	4	1	5	2
23	The most important thing for me is to discuss theory with others so that we can acquire this knowledge together.	0	2	4	0
32*	The normal teaching at NTNU is not enough for me to grow and develop as a person.	1	-1	2	-2

33*	One-way communication is poorly suited to my learning because I do not get to show my abilities.	0	-3	2	-1
12	It is especially meaningful and rewarding to reflect on shared experiences in the group.	2	-2	1	-2
30*	I trust the fact that the EiT-staff and village leaders, through active learning, facilitate what I should learn out of my ability.	0	3	-1	2
20	I find that NTNU facilitates my learning in an efficient manner through traditional teaching based on my assumptions.	0	4	-2	1
13*	Through traditional university teaching, I have a good chance to succeed.	1	5	-2	3
8	Getting feedback from members of the group can be very difficult because the feedback is often related to things I cannot do anything about.	-1	-2	-3	2

Distinguishing statements for factor 4

		Factor 1	Factor 2	Factor 3	Factor 4
19	Normal university teaching is what I prefer, because it enables me to consider my limitations and choose subjects I know I can handle.	0	3	0	5
26*	When I am in a group I am often afraid that others will reveal what I cannot. It is one of the reasons why I like working for myself.	-1	-4	0	4
27*	I do not see the point in others being the ones to decide if I succeed or not in collaboration.	-3	-1	-1	3
8*	Getting feedback from members of the group can be very difficult because the feedback is often related to things I cannot do anything about.	-1	-2	-3	2
9	Teamwork is very difficult and I feel unsafe and insecure.	-2	-3	-4	1
18*	Through various experiences in EiT I can learn and adapt to a future job, by having my thoughts made visible.	3	0	3	-4
10	It is obvious to me that I can develop my knowledge and my skills in various group situations, yet it is very challenging.	1	3	3	-1
31*	Others have to accept me, and I have to accept others. That is why it feels good to give each other feedback in group work.	2	1	1	-5
28	I wish fact that EiT had been more like other subjects we have. As it is today, it is too challenging.	-3	-2	-2	1

Consensus statements - those that do not distinguish between any pair of factors.

		Factor 1	Factor 2	Factor 3	Factor 4
11	Creating my own learning through listening and sharing experiences with others in a group helps me to learn about myself and become motivated to develop.	3	2	2	1
29	I would have liked to see that EiT gave me relevant theories. It would have helped me and my development.	0	0	0	-1

9.6 Appendix F - Statements in Norwegian

The statements that were given to the participants were in Norwegian. These have been translated to English after the sorts. To show the originally statements, I have chosen to leave these here in the appendix.

1	Det å reflektere over hvordan jeg er og hvordan jeg kan utvikle meg er sentralt i EiT. Det at NTNU tilbyr et slikt fag er viktig for at jeg skal lykkes i jobben min.
2	Det motiverer meg å få tilbakemelding fra andre slik at jeg kan se nye sider av meg selv. Dette er svært vanskelig å oppnå gjennom klassisk undervisning.
3	Det at EiT ikke gir oss noen fasit opplever jeg som positivt for meg og min utvikling.
4	Å motta informasjon fra en ekspert på et område fører ikke til at jeg kan komme i gode diskusjoner med andre og lære om meg selv.
5	Jeg misliker at EiT legger opp til at jeg skal utvikle meg.
6	Ved at andre forteller meg hvordan de oppfatter meg i gruppearbeid, kan jeg få bekreftet hvordan jeg er.
7	EiT er et veldig annerledes emne på NTNU som ikke legger tilrette for at jeg skal kunne se nye sider av meg selv og utvikle meg som person.
8	Det å få tilbakemeldinger fra gruppemedlemmene kan være veldig vanskelig fordi de ofte handler om ting jeg ikke kan gjøre noe med.
9	Gruppearbeid er veldig uoversiktlig. Jeg føler at jeg må legge bånd på meg selv slik at det ikke skal bli for belastende.
10	Det er en selvfølge for meg at jeg kan utvikle min kunnskap og mine evner. Jeg opplever likevel at dette kan være utfordrende i ulike gruppesituasjoner selv om medlemmene har omsorg for hverandre.
11	Det å skape sin egen læring gjennom å lytte og dele erfaringer med andre i en gruppe gjør at jeg lærer om meg selv og blir motivert til å utvikle meg.
12	Det er ikke spesielt meningsfullt og utviklende å reflektere over felles erfaringer i gruppa.
13	Sett opp mot den tradisjonelle universitetsundervisningen er EiT nytenkende og annerledes. Jeg tror dette er gunstig selv om sjansen er stor for at jeg ikke gjør det så bra.
14	Jeg opplever ikke at erfaringer og refleksjoner bidrar noe til min læring og utvikling.
15	Det er mange følelser knyttet opp mot det å lære i grupper, og det har EiT forstått, og dette fører til at jeg enklere kan lære og utvikle meg.
16	Det å lære om gruppeprosesser gjennom forelesningene som EiT har synes jeg gir meg gode muligheter til å vokse og lære.
17	Ved å diskutere ulike problemstillinger i gruppearbeid, opplever jeg at jeg kan observere meg selv fra et annet perspektiv og lære av det.
18	Gjennom ulike erfaringer kan jeg lære og tilpasse med en fremtidig jobb, ved at jeg får synliggjort tankene mine
19	Vanlig universitetspedagogikk er det jeg foretrekker, fordi dette gjør at jeg kan ta hensyn til begrensningene mine og velge fag jeg vet at jeg kan mestre.
20	Jeg opplever at NTNU gjennom tradisjonell undervisning legger til rette for at jeg kan lære det jeg trenger på en effektiv måte ut i fra mine begrensninger.
21	Jeg synes generelt at NTNU legger godt til rette for min læring og utvikling. EiT et unntak av dette.
22	Det å lytte til en forelesning gir meg refleksjoner om hvordan jeg vil være som person.

23	Det er viktig for meg å diskutere teori sammen med andre slik at vi kan tilegne oss denne kunnskapen sammen.
24	Jeg har ikke behov for at NTNU skal legge til rette for at jeg skal få personlige tilbakemeldinger. Jeg kommer ikke til å endre meg uansett.
25	Slik jeg ser det er det ikke mulig for meg å utnytte mitt potensiale når jeg skal samarbeide ved vanlig undervisningsform.
26	Når jeg er i en gruppe blir jeg ofte redd for at andre skal avsløre det jeg ikke kan. Det er en av årsakene til at jeg liker å jobbe for meg selv.
27	Jeg ser ikke poenget i at andre skal avgjøre om jeg lykkes eller ikke i et samarbeid.
28	Jeg skulle ønske at EIT hadde vært mer likt andre fag vi har, jeg tror jeg kunne lært mer om gruppeprosesser da. Slik det er i dag er det for utfordrende.
29	Jeg skulle gjerne sett at EiT ga meg relevante teorier. Det ville hjulpet meg og min utvikling.
30	Jeg stoler på at EiT-staben og landsbyledelsen gjennom aktiv læring legger til rette for at jeg lærer det jeg bør ut i fra mine forutsetninger.
31	Andre må akseptere meg, og jeg må akseptere andre. Det føles derfor meningsløst å gi hverandre tilbakemeldinger i gruppearbeid.
32	Å vokse og lære er viktig for meg. Jeg opplever at den vanlige undervisningen på NTNU ikke bidrar til at dette i særlig stor grad.
33	NTNU med sin enveiskommunikasjon er dårlig egnet for meg og min læring. Jeg opplever at jeg ikke får utnyttet det jeg faktisk har mulighet til.
34	Jeg er fornøyd med hvordan jeg er, og trenger ikke å oppdage nye sider av meg selv. Det er derfor vanlig universitetsundervisning passer meg best.
35	Jeg foretrekker forelesninger og føler at jeg sammen med andre kan lære og utvikle meg med bakgrunn i dette (på denne måten).
36	Kunnskap som det er vanskelig å sette ord på er lite verdifull for meg og min utvikling.

9.7 Appendix G – Information letter and consent form

INFORMASJONSSKRIV

Forespørsel om deltakelse i mastergradsundersøkelse.

Som masterstudent i rådgivning ved Institutt for voksnes læring og rådgivningsvitenskap, NTNU, skal jeg våren 2012 skrive en masteroppgave. I denne oppgaven ønsker jeg å se nærmere på studenter i Eksperter i teams opplevelse av utviklingen av personlig kompetanse.

For å gjennomføre dette ønsker jeg hjelp fra studenter som tar Eksperter i team våren 2012. Undersøkelsen skal gjennomføres ved hjelp av Q-metoden. Denne metoden brukes for å forske på subjektive opplevelser. Den søker ikke å finne fasitsvar, men forskningsdeltakernes subjektive opplevelse, holdning og erfaring knyttet til et tema. Du som forskningsdeltaker vil bli bedt om å sortere 36 utsagn som skal sorteres systematisk fra mest enig til mest uenig.

Utsagnene vil være knyttet til temaet for oppgaven. Sorteringen vil ta ca 45-60 min.

All deltakelse er frivillig og som forskningsdeltaker kan du når som helst trekke deg fra prosjektet uten noen spesiell årsak. Hvis du trekker deg underveis vil alle data bli slettet. Som forsker har jeg taushetsplikt og alle data vil bli behandlet konfidensielt. I den ferdige oppgaven vil all informasjon bli anonymisert, og ingen av opplysningene vil kunne spores tilbake til den enkelte. Studien er meldt inn til Norsk samfunnsvitenskapelig datatjeneste AS (NSD). Alle data vil bli slettet når studien avsluttes (15.08.12).

I tillegg til selve sorteringen ønsker jeg informasjon om kjønn og studieretning. Denne informasjonen kan komme til nytte i sammenheng med tolkningen av resultatene. Det kan også bli aktuelt å ta en uformell samtale med noen av deltakerne i etterkant av sorteringen, for en mer utdypende informasjon om det som er kommet frem av sorteringen. Dersom dette blir aktuelt for deg, vil jeg ta kontakt per e-post eller telefon.

Dersom du er villig til å delta i studien ønsker jeg tilbakemelding så raskt som mulig på e-post. Ved positivt svar vil jeg ta kontakt og gi nærmere informasjon rundt deltakelsen. Skulle det være noen spørsmål rundt prosjektet kan de rettes til meg via e-post eller telefon,

████████████████████ eller til veileder Jonathan Reams,

████████████████████

På forhånd tusen takk.

Vennlig hilsen

Lene Røsok Dahl



SAMTYKKEERKLÆRING

Jeg, _____, har mottatt skriftlig og muntlig informasjon og er villig til å delta i studien,

Signatur

Sted, Dato

9.8 Appendix H – Conditions of instruction and the instruction for the sort

Q-sortering: Struktur for gjennomføring

1. Les først igjennom alle utsagnene for å få en oversikt over hele innholdet. Utsagnene skal nå sorteres mer nøye. Fyll ut sorteringsmønsteret med tall til slutt.
2. Del utsagnene i 3 noenlunde like grupperinger i samsvar med betingelsen:

Hva er din personlige opplevelse av gruppearbeid i Ekspertes i Team (EiT)?

Bunke 1) de utsagnene som beskriver deg eller som du er enig med (til høyre)
Bunke 2) de utsagnene som ikke beskriver deg eller du er uenig med (til venstre)
Bunke 3) de utsagnene som er mer nøytrale, som ikke gir deg så mye mening, virker tvetydige, tvilsomme, uklare eller motsigende (i midten)

3. Du skal nå gjøre en mer detaljert fordeling, der du skal gi/sette tallverdier på hvert utsagn på en skala fra +5 til -5.
4. Først; legg ut alle utsagnene i Bunke 1 (de som du er enig med) . Les så gjennom dem igjen og velg ut det utsagnet som du er mest enig i. Plasser utsagnet lengst til høyre, (+5) i tråd med skjemaets mønster (på bordet).
5. Deretter gjør det samme med Bunke 2 (de utsagnene som du er mest uenig med), og plasser deretter det utsagnet som du er mest uenig i lengst til venstre, (-5) i henhold til skjemaets mønster.
6. Gå så tilbake til de utsagnene som du er mest enig i (Bunke 1) og velg 2 utsagn som forsatt du er svært enig i og plasser dem på (+4) ved siden av utsagnet som du plasserte lengst til høyre.
7. Gjør nå tilsvarende for Bunke 2 og velg 2 utsagn og plasser dem under (-4) ved siden av utsagnet som du plasserte lengst til venstre.
8. Når du kommer til 3. kolonnen plasser 3 utsagn først under (+3), så 3 under (-3). Tilsvarende for +2, +1 og 0 rubrikkene. Her er det de små nyansene som avgjør i hvilken kolonne du plasserer utsagnene. Vær nøye og bruk god tid. Fordel utsagnene i Bunke 3 til slutt.

Vær så nyansert som mulig og pass på at du plasserer riktig antall utsagn i hver kolonne. Plasserer 4 utsagn under (+/-2), 5 utsagn under (+/-1) og 6 utsagn under 0 (se skjemaets mønster).

9. Når du nå har fullført fordelingen og plasseringen, se over den på nytt og avgjør om du er enig med deg selv i de valgene du har gjort. Hvis du er misfornøyd med noe, juster plasseringene til du blir fornøyd. Noter utsagnenes nummer på skjemaet og lever dette.

Lykke til!

9.9 Appendix I – Approval from the Norwegian Social Science Data Services (NSD)

Norsk samfunnsvitenskapelig datatjeneste AS
NORWEGIAN SOCIAL SCIENCE DATA SERVICES



Jonathan Reams
Institutt for voksnes læring og rådgivningsvitenskap
NTNU
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www.nsd.uib.no
Org.nr. 985 321 884

Vår dato: 31.01.2012 Vår ref: 29188 / 3 / KH Deres dato: Deres ref:

KVITTERING PÅ MELDING OM BEHANDLING AV PERSONOPPLYSNINGER

Vi viser til melding om behandling av personopplysninger, mottatt 24.12.2011. Meldingen gjelder prosjektet:

29188	<i>A q-methodological study of students in EIT's subjective experience of developing personal competence, seen in light of mindset and relations.</i>
Behandlingsansvarlig	NTNU, ved institusjonens øverste leder
Daglig ansvarlig	Jonathan Reams
Student	Lene Røsok Dahl

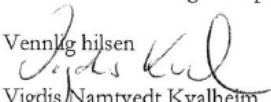
Personvernombudet har vurdert prosjektet og finner at behandlingen av personopplysninger er meldepliktig i henhold til personopplysningsloven § 31. Behandlingen tilfredsstiller kravene i personopplysningsloven.

Personvernombudets vurdering forutsetter at prosjektet gjennomføres i tråd med opplysningene gitt i meldeskjemaet, korrespondanse med ombudet, eventuelle kommentarer samt personopplysningsloven/-helseregisterloven med forskrifter. Behandlingen av personopplysninger kan settes i gang.

Det gjøres oppmerksom på at det skal gis ny melding dersom behandlingen endres i forhold til de opplysninger som ligger til grunn for personvernombudets vurdering. Endringsmeldinger gis via et eget skjema, http://www.nsd.uib.no/personvern/forsk_stud/skjema.html. Det skal også gis melding etter tre år dersom prosjektet fortsatt pågår. Meldinger skal skje skriftlig til ombudet.

Personvernombudet har lagt ut opplysninger om prosjektet i en offentlig database, <http://www.nsd.uib.no/personvern/prosjektoversikt.jsp>.

Personvernombudet vil ved prosjektets avslutning, 15.08.2012, rette en henvendelse angående status for behandlingen av personopplysninger.

Vennlig hilsen

Vigdis Namtvedt Kvalheim


Kjersti Håvardstun

Kontaktperson: Kjersti Håvardstun tlf: 55 58 29 53
Vedlegg: Prosjektvurdering
Kopi: Lene Røsok Dahl, Kannikestrete 4, 7013 TRONDHEIM

Avdelingskontorer / District Offices:

OSLO: NSD, Universitetet i Oslo, Postboks 1055 Blindern, 0316 Oslo. Tel: +47-22 85 52 11. nsd@uio.no
TRONDHEIM: NSD, Norges teknisk-naturvitenskapelige universitet, 7491 Trondheim. Tel: +47-73 59 19 07. kyrre.svarva@svt.ntnu.no
TROMSØ: NSD, HSL, Universitetet i Tromsø, 9037 Tromsø. Tel: +47-77 64 43 36. martin-arne.andersen@uit.no



Personvernombudet finner prosjektopplegget tilfredsstillende.

- Informasjonsskrivet til utvalget tilføyes dato for prosjektslutt.

Prosjektslutt er 15.08.12. Datamaterialet anonymiseres ved at verken direkte eller indirekte personidentifiserbare opplysninger fremgår. Koblingsnøkkel slettes.