

ENRI Research Memo xx/2018

# **A multinational study of mini-company experiences**

## **Summaries of three master student projects**

by

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Julie Aae  
Ingunn Elder  
Ruth Ida Valle

The Eastern Norway Research Institute (ENRI) was established in 1984. Since 2011 the institute has been **organised as a limited company co-owned by the** Hedmark and Oppland county authorities, Lillehammer University College, Sparebanken Hedmark and the Eastern Norway Research Foundation. ENRI is located in Lillehammer, but also has an office in Hamar.

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Report: This research report presents empirical findings from three master student projects in the Innovation Cluster for Entrepreneurship Education. The field studies were done in January and February 2017, and they focused on students' and teachers' and their experiences with the JA Company Programme (CP). The three areas investigated were teachers' reflections on their role as mini-company teachers, whether mini-company participation can increase students' self-efficacy, and whether mini-companies are a suitable working method for students with special needs.

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# PREFACE

The project Innovation Cluster for Entrepreneurship Education (ICEE) is assigned by the European Commission through the Erasmus+ programme. The main partner in the consortium, with responsibility for practical implementation, is Junior Achievement (JA) Europe. The Eastern Norway Research Institute (ENRI) is leading the research part of the project.

ICEE is an education policy experiment. 20 upper secondary schools in Belgium, Estonia, Finland, Italy and Latvia have participated in a 27-month field trial using mini-companies. The research in ICEE is based on a combination of qualitative and quantitative methods. Survey data has been gathered over two school years with more than 12000 respondents (students, teachers, parents, and business people). In the qualitative study about 150 informants were interviewed in all five countries.

Five master students did their master thesis project in the ICEE project, and four of them were from the Department of Education and Lifelong Learning, NTNU. This memo summarises the findings from the studies done by the NTNU-students Julie Aae, Ingunn Elder and Ruth Ida Valle. Daniel Schofield, Astrid Margrethe Sølvsberg and Vegard Johansen were supervisors. Vegard Johansen is also responsible for the research conducted in the ICEE project.

We wish to thank the informants who so generously lined up for interviews and shared their experiences with us. Without their participation this research would not have been implemented. Finally, we would like to thank JA and the rest of the partners in the project for an interesting and exciting project!

Lillehammer, March 2017

Vegard Johansen  
Project Manager

Tonje Lauritzen  
Research Manager

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# 1 INTRODUCTION

Junior Achievement (JA) Europe is Europe's largest provider of education programmes for entrepreneurship, work readiness and financial literacy. In February 2015, a three-year research project led by JA Europe started. The project was called the Innovation Cluster for Entrepreneurship Education (ICEE), and it was funded by the European Commission under the Erasmus+ programme. 14 partner organisation took part in the project, including five national ministries (Flanders/Belgium, Finland, Estonia, Italy, Latvia), five national JA organisations in the same countries, and three research institutes (the Eastern Norway Research Institute (ENRI); the Foundation for Entrepreneurship - Young Enterprise Denmark; and the Faculty of Economics at J.J. Strossmayer University of Osijek). JA Europe led the practical part of the project and ENRI led the research part.

The ICEE project analyses the impact of entrepreneurship education (EE) and the drivers and hindrances of EE. It aims to understand what is needed to reach the European goal that every young person has a practical entrepreneurial experience before leaving compulsory education. The project has a particular on the mini-company method. A mini-company is a practical entrepreneurial experience based on a learner-driven method, in which students work in teams and start, run and close down a mini-company. The most widespread mini-company is the JA Company Programme (CP), and it has reached millions of students in countries all over Europe and beyond. About 300,000 European students across 39 countries enrol in the programme annually, and the programme is available for students in both general and vocational schools. In CP, students, from age 15 to 19, have the opportunity to set up and manage a mini-company during a school year under the guidance of teachers and business volunteers. They can participate in competitions and trade fairs where they demonstrate what they have learned and achieved.

The ICEE study uses a combination of qualitative and quantitative methods. The fieldwork in the qualitative study in 2017 was done in January/February (Estonia, Finland, Italy, and Latvia), May (Belgium), and November (Finland and Italy). About 80 informants were interviewed individually or in groups in 2017. Findings related to impact, drivers and hindrances of EE have been presented in the final report from the project. This memo will only summarise findings from three master thesis projects, and they focused on:

- Which reflections do teachers` have on their role as mini-company teachers?  
(Ingunn Elder)
- How can mini-company participation increase students` self-efficacy? (Julie Aae)
- Are mini-companies a suitable working method for students with special needs?  
(Ruth Ida Valle)

Chapter 2 introduces the national strategies on entrepreneurial education in the countries examined: Estonia, Finland, Italy and Latvia. This presentation is based on previous presentation of these countries in the ICEE-project (Eide & Olsvik, 2017; Johansen, 2018).

Chapter 3 is a brief presentation of the research methods used in the three studies.

Chapters 4 to 6 present the findings from the master theses projects.

## **2 THE NATIONAL STRATEGIES ON ENTREPRENEURSHIP EDUCATION**

### **2.1 Estonia**

Since 1994, when Junior Achievement Estonia was established, EE activities have been carried out in Estonia. For the most part EE was provided only at general, vocational and higher education institutions, but as a continuation of the “Lifelong Learning Strategy 2020”, the Ministry of Education and Research decided to develop EE at all levels of education from 2016. The Programme for Entrepreneurship Education is based on three key principles: EE should be taught at all education levels; EE should be developed in collaboration with the universities; and that EE is to be understood as something for all people, not just future entrepreneurs.

In addition to the Ministry of Education and Research and other ministries, the actors involved in EE are educational institutions, employer unions and organisations such as JA Estonia. They work together with the enterprise centres in establishing EE in the country. According to the Ministry of Education and Research, the main drivers for EE implementation are the collaboration among different stakeholders (ministries, business organisations and schools) and the financing and strategy. The main hindrances are lack of competent EE-experts to develop methodology and evaluate the impact of EE.

### **2.2 Finland**

The Ministry of Education and Culture and the Ministry of Economic Affairs and Employment are the two main actors in EE at the ministerial level. To have unified approach, a steering group with people representing organisations, unions, educational institutions and local and regional authorities have worked on the implementation of EE since 2009, and they are currently replaced with a new Entrepreneurship Management Group. Many of the actors in the steering group are united in YES-centres, which work at the practical level and are involved in projects and events (teachers’ seminars, teaching materials, arranging activities for students).

Finland has established a progression model for implementing EE at different levels of its educational system. The national curriculum was updated in 2014-2015 with a strong EE-emphasis, focusing on work skills and entrepreneurship as a multi-disciplinary approach. An important aim is to convince universities to make EE part of teacher education. Continuous evaluation and research is also an important part of the Finnish strategy, especially by providing measurement tools for teachers to evaluate their own initiatives. The Ministry of Education and Culture sees that the strong emphasis on EE is an important driver, as well as the high unemployment among young people. Important hindrances are rigid attitudinal structures, a rigid educational system, insular companies, teacher education and parents.

## 2.3 Italy

The Ministry of Education, Universities and Research is the main actor introducing EE in a systematic way in the education system. An important effort is a new law making the former 'school-work exchange' into a mandatory programme, comprising EE at the upper secondary level and in vocational schools. If students are not able to set up real school-work exchanges, business simulations are offered. The important actors within EE also include schools, business associations, and organisations such as JA Italy. A limit is that EE is not provided in initial teacher training.

According to the Ministry of Education, the most important drivers for EE were the compulsory school-work exchange and other EE-projects promoted by the ministry. The most important hindrances were business cooperation, lack of specific teacher preparation, lack of involvement by parents, and lack of integration of EE in the official curriculum.

## 2.4 Latvia

There is no specific EE-strategy in Latvia, but the broad Education Development Guidelines 2014–2020 have some objectives related to EE. Learning of topics that foster the development of entrepreneurial skills has been adopted, collaboration between vocational schools and apprenticeship enterprises also promotes the development of entrepreneurial skills, and the standards for initial teacher training underline that entrepreneurship should be included in all study programmes. There are different short-term EE-initiatives across the country, partly initiated at the ministry level and partly by educational institutions, NGOs and private businesses. The largest EE-provider is JA Latvia.

The National Centre for Education regards that they, the Ministry of Education and Science, JA Latvia, and some schools are the most important drivers for EE. The most important hindrance is time available for EE in schools.

## 3 RESEARCH METHODS

### 3.1 Data collection

The ICEE project includes 25 schools; five are control schools and twenty are test schools where CP is tried over two school years. Some of the schools have previous experience with EE and CP and some are without previous experience. The selection of participating schools was based on having a diverse distribution of the following criteria: education programs (vocational and academic schools), size (small and large schools), and geography (schools in cities and non-urban areas). The qualitative studies in 2016 and 2017 covered half of the test schools; five schools in 2016 and five schools in 2017. In each country one general/academic school and one vocational/technical was visited throughout the study.

This memo covers some of the data collected at four school visits in January/February 2017. As illustrated in Table 1, the main source of data used in the memo is from interviews with students (studies in Finland, Italy and Latvia) and teachers (studies in Estonia and Italy). Data from interviews with parents (Italy) and teachers (Finland and Latvia) and students (Estonia) were used to contextualise findings. In addition, the researchers were allowed visiting students and observe mini-companies in action to get an impression of the location for mini-company work and how the students worked together. The first day of the visit at the school would also include a walk around the school premises and informal talks with the school contact person (and at times also the headmaster and the JA coordinator).

Table 1. Overview of the data collection.

	Estonia	Finland	Italy	Latvia
Observation CPs in action				
Interviews students				
Interviews teachers				
Interviews parents				

Each school had a contact person that arranged for the interviews. All interviews were done in a separate room (meeting room) within the school premises. The contact person at the school was asked to select informants based on these guidelines:

- *Students: Group interviews should include 4-7 students from different CP*
- *Teachers: Group interviews should include 4-7 teachers involved with CP*

- *Parents: Group interviews should include 4-7 parents with students involved in CP*
- *Mentors: Group interviews should include 4-7 mentors involved with CP at the school*
- *Special needs students: In the individual interviews with students with special needs we suggested to have a mix of students with various categories of needs, including students with disabilities (e.g. ADHD, motor disabilities), specific learning disorders (e.g. dyslexia), and other special educational needs (e.g. linguistic disadvantage). It was desirable if there was an IEP (individualized education plan) and/or the student had a support teacher.*

Most of the group interviews included five-six students from different mini-companies. There were also five participants in most of the group interviews with teachers, and we met teachers from various education programmes (vocational, technical, academic) and subjects (economy/business and non-economy/business). The mentor and parent group interviews were done with three-four participants, and we had the opportunity to talk to parents whose sons/daughters were in different companies. Finally, we had hoped for interviews with four students with special needs, but we could only do two interviews with students with special needs.

In all interviews, a semi-structured interview guide was used, with some questions written in advance. Group interviews and the individual interviews lasted for approximately one hour each, and all the interviews were recorded. There were two researchers in most of the group interviews, and then one researcher led the conversation and the other researcher took detailed notes. There was only one researcher in the individual interviews and for some of the group interviews, and then the researcher focused on leading the conversation.

The working language in the interviews was English, a second language for both the researchers and the informants. In some of the interviews we used an interpreter, whilst in other interviews interpretation was unnecessary since the informants spoke English fluent. The interpreters that we worked with were bilingual and they did an intermediary role in the interviews; translating questions in English to the mother tongue and translating responses from non-English speaking participants to English.

Using an interpreter to conduct interviews there is a potential threat to data-validity in various points in the interview process. From the first year of qualitative research we learned that it was an advantage if the interpreter not only had linguistic abilities, but also in-depth knowledge of EE (Eide & Olsvik, 2017). Thus, all interpreters had very good knowledge of EE. One threat is that the researcher has no possibility to ensure that the interpreter has translated the questions in the right way. Thus, before the interviews we spent time with the interpreters and discussed pre-written questions to clear up potential misunderstandings. We also explained words and concepts that were used in the project, and ensured that the interpreter understood the informants' need for confidentiality and anonymity. A second threat is that the researcher has no possibility to ensure that the

interpreter translates the interviewee's responses in the right way. Sometimes the informants helped the interpreter to present their responses in the correct way.

It must be noted that informants who participated in this study were selected by the schools (and their contact person). The possibility of biased, unrepresentative selections must be considered. In qualitative research, we talk about getting an informative sample of informants (and not a representative sample). In that respect, it is important to have informants who can describe and reflect upon their experiences in a way that gives us extensive information about a phenomenon or a case.

### **3.2 Interviews**

The focus group method combines elements of interviewing and participant observation, and it provides an opportunity to probe the participants' cognitive and emotional responses while also observing underlying group dynamics (Vaughn et al., 1996). The interview is carried out as a discussion of some questions between the participants, and the moderator is there to help to encourage a good discussion (Massey, 2011). A group interview will naturally develop through the group dynamic that arises along the way, and this dynamic contributes to providing the interview with meaning.

One benefit is that focus groups can uncover the complexity of various situations. Participants are invited to converse around a topic, so that underlying norms, rules, individual attitudes and values come to the surface. It is a prerequisite that the participants share a mutual understanding of the topic being discussed and therefore have something in common. In some occasions, focus groups may assist participants to come to mutual understanding of issues under discussion (Wibeck et al., 2007). By selecting topics that the participants find personally relevant, focus group interviews can contribute to increased consciousness and the development of critical reflection around participants' own practices.

Another benefit of the focus group method when doing cross-cultural studies is the cultural sensitivity it facilitates. It is usually called an 'empowering method' in which the informants have the power to define and explain phenomena, incidents or specific experiences. Unequal amounts of information will be gained from each informant in focus groups. Still, this type of interview enables participants to reflect over and build upon each other's statements, which in turn enables good and comprehensive data. The facilitator's job is to drive the dialogue forward, while attempting not to play a prominent role.

In terms of students that have mastered mini-companies and their teachers, we have reached a saturation point over the two years of study. Students in various countries have expressed fairly similar experiences and opinions. On a critical note, we could have obtained even more comprehensive data if we had spoken with more students who did not

master mini-companies very well. The quantitative data tells us that some students (a minority) do not master and like this working-method well enough.

In-depth interviews were done with three informants in the special needs education study in Italy. The informants were encouraged and prompted to talk about the topic (mini-companies as a working method for students with special needs), and the researcher had a list of topics and some questions and follow-up points, and she retained some control over the direction and content to be discussed.

In-depth interview is one of the most common methods of data collection in qualitative research. One limit is that the quality of the in-depth interview is limited by the recall of the participant, the ability of the participant to articulate his or her experiences within the timeframe of the interview, and the ability of the researcher to ask the “right” questions to prompt more detailed discussion. Thus, in the Italian study the interviews with the students were supplemented with an interview with a teacher and also observations at the school.

The findings from individual interviews and group interviews will depend, amongst other things, on how the interview is constructed and the questions are designed. A semi-structured interview guide was used for all the interviews. The researchers emphasised open questions and questions that lead to reflection. They also stressed the researchers’ external role in the ICEE project, and assured the informants that all data would be treated anonymously. It is important that informants feel they can speak freely without the risk of having to defend their views in retrospect.

The team of students and supervisors arranged two research seminars to have an opportunity to share experiences. We met initially to work on the development of research questions and to prepare for the data collection. Then we met again in the concluding phase, where we had the opportunity to discuss findings. These seminars were valuable, since we managed to confirm similar experiences in various countries. As such, these seminars might be said to have strengthened the findings drawn from studies conducted in different countries.



## 4 STUDENTS WITH SPECIAL NEEDS (ITALY)

This chapter presents findings from the study done by Ruth Ida Valle (2017). Her research project investigated whether the principle of inclusion was upheld for special needs students in EE. The question addressed was: “How does it feel to take part in a mini-company for special-needs students?” The project was carried out in Italy, and her Master’s thesis supervisors were Daniel Schofield and Vegard Johansen.

### 4.1 Research focus

My desire in taking part in the ICEE project has been to shed some light on student experiences with mini-companies, including a focus on those who face extra challenges during their school life. I have chosen this focus based on my pedagogy specialism, which is special needs. For this reason, I wish to look at special-needs students who are taking part in EE. I have almost no previous experience – practical or theoretical – of EE. I therefore regarded this project as an opportunity to learn more about what this entails, and I approached it with a very open mind. To limit the study further, the goal has been to examine how the principle of inclusion is maintained in the teaching and in the work of the mini-company as seen from a student perspective. Inclusion of students within the school has been a major issue in special education. This is a complex but highly relevant issue in today’s schools and is also dealt with in plans and regulations. I hope that my research project can provide a relevant contribution to questions of how best to organise entrepreneurship teaching for special-needs students.

### 4.2 The selection of participants

Italian law no. 107 from 2015 makes the formerly optional “school work exchange” programme compulsory for students in Italian general and vocational education (Palumbo & Brancaccio, 2016). This entails 200 hours in the general sixth form and 400 hours for vocational schools during the last three years. The change to obligatory participation increases awareness of the importance of entrepreneurial skills and EE in general. To show the advantages and possibilities of EE, guidelines have been laid down in respect of the responsibility of schools in terms of entrepreneurship teaching in Italy. Although precisely what is done and how it is carried out is up to the individual schools.

I had the opportunity to visit a school that had a vocational programme area, to gain greater insights into how this school uses EE and to collect data for this study. The school had a strong focus on entrepreneurial qualities, by such means as practice placements and company visits. Academic coordinators and several of the teachers were very familiar with

entrepreneurship, on the basis of their own experience as entrepreneurs and by means of much work with entrepreneurship in the school. At this large school, students in the fourth year worked with mini-companies as a subject in its own right. For reasons of anonymity the name of the school or its location are not given here.

For the purposes of this study, the selection of participants has been based on strategic selection. This means that the participants were chosen by certain characteristics or qualifications they possessed, which are strategic in relation to the issues and theories addressed in this study (Thagaard, 2013). To find and recruit participants I had help from a contact person at the school. The school and age range (15-19 years) was pre-selected. An advantage of the age range was that the students were old enough to reflect over their own experiences. I had decided in advance which characteristics and qualifications should form the criteria. The contact persons at the school found individuals who fulfilled the criteria, which were to be participating/have participated in a mini-company, and have some type of special needs (see also subchapter 3.1).

There was not a large group to choose from and we ended up with two students, both of whom were boys. Focusing on two students gave an opportunity to go more deeply into the students' experiences of taking part in a mini-company. The selected informants are providing the actual information on the topic, the data used to analyse and provide answers for the issues addressed by the project. As such, the selection will be significant for the degree of transferability that will reside in the results (Thagaard, 2013).

One student was in the middle of the process of completing the mini-company, while the other had completed the mini-company project the previous year. This represented two interesting differences. In addition, I also asked for a teacher to participate in the study. The criterion for the teacher was that he/she should have had a special-needs student involved in a mini-company. The teacher who was chosen had been responsible the previous year for one of the students I interviewed, which made it more interesting for me to see how the student's experiences were perceived from the teacher's perspective.

The first student (student 1) was a 17-year-old boy studying economics. He was taking part in the mini-company at the same time as the interview was carried out. At this point he was three months into the process. This student had dyslexia, which had been identified early. At the time he started at secondary school he was also attending a centre at which he received help with his difficulties. At the time of the study, he stated that he did not notice his problems very much, but he had an individual tuition plan in his foreign language and thus fulfilled the criteria for participation in this survey.

The other student (student 2) was a year older and studying marketing. He had taken part in the mini-company the previous year and had completed the whole process. His special needs were due to nerve damage sustained at birth due to lack of oxygen. This was not one

specific physical problem. He was in a wheelchair and trained daily to maintain his muscles and physique. In addition, he had dyslexia, for which he had a support teacher during lessons to help him with writing.

The teacher I interviewed was the teacher for the mini-company in which student 2 had participated the previous year. He was trained as an economics teacher and had been a teacher since the 1980s, working the last 19 years at this school. He was not trained as a special-needs teacher.

### 4.3 Findings

I will distinguish between three types of presentations: empirical data, opinion-based interpretation and theoretical interpretation. Empirical data will consist of descriptions and narratives from the interviews and observations. Opinion-based interpretation is my interpretation of these data. Theoretical interpretation is where I look at findings in connection with theories about inclusion. My overall structure divides the material into main categories that have been derived from the empirical data and theory. I have chosen to call these: Process focus; Collaborative learning; Student in the centre; Involvement and engagement; and Significance of mini-companies.

### 4.4 Process focus

Under *process focus*, I show that the programme's focus on practical issues and on the process has provided the students with insights into the future and their working lives, as well as that this has influenced the students' independence. Group work is a characteristic working method of the mini-company, while collaborative learning is one of the categories, which, due to the "forced" collaboration in the mini-company, has both provided more unity in the class and led to conflicts. In addition, I will comment on the significance of the programme having the students in the centre and of the students' influence, organising and decision-making within the mini-company. One of the students was very engaged and experienced something important in working with the mini-company – an illustration of the potential that can lie in this working method for special-needs students – while the other gave the opposite impression. The latter reminds us that there are nuances and that there remains more to look at and investigate if we are to gain a better understanding of how inclusion is maintained in a mini-company. I will deal with this in more depth in the section involvement and engagement, in which attention is paid to obligations and individual involvement. In addition, I will give an account of an analytical discovery in which I observe the possibility of a "spiral effect" from the inclusion criteria. I deal with the benefits gained by the one student after the completion of the project and programme in the section about the significance of the mini-company, which also describes interaction and self-confidence.

I would like to begin by presenting one of the most essential elements of the mini-company; the practical work. The mini-company has a strong focus directed towards practical learning situations. This is something previous studies suggest can be one of the strengths of EE for special-needs students (Johansen & Somby, 2016). What is particularly distinctive about mini-companies? As the teacher said, the students here are working with something “real” as opposed to reading about it in a book – they are learning to create. A mini-company is a relatively long process – more than an academic year for these students – and the process contains several elements and stages that are distinct from ordinary teaching.

#### **4.4.1 The future and working life**

The practical process-based work was something that student 2 spoke about. He spoke of the previous year’s class project, in which working in such a practical manner was something he had not hitherto experienced. A mini-company is bound up with a work process that provides the students with the opportunity to direct their focus towards the future and their working life. As student 1 observed, this prepares an individual for work or for starting his own company after the completion of education. However, the focus on practical processes is not merely concerned with the future, but – as student 2 noted – it is important that those students who have chosen a vocational education are enabled to work with their trades as opposed to merely being taught about them and reading about them. Student 2 suggests, as I understand it, that this is concerned with becoming good at the things with which one is going to work, in addition to the expectations that students have when beginning school about what they will learn.

In the group interview with parents in Italy, parents spoke about the programme’s focus and emphasised that the work in a mini-company in many respects mirrors working life. They stated that familiarity with this type of work, even when still in school, could help a student to realise at an early stage whether they like this type of work and whether they are suited to it. It was frequently argued that the process focus and the practical work was significant for a number of students and, this can have affected several other things than purely the work itself. This is something that emerged in all the interviews: everyone seemed very positive to this way of working, even in the group interviews that I conducted.

I would draw attention to one of the inclusion dimensions identified by Olsen et al. (2016): the academic dimension, in which students should be enabled to draw maximum benefit from the tuition. Under this category, I place one of the inclusion criteria of the study: value and active participation. Value is based on the student learning what he is supposed to and has the potential to learn. As I see it, the programme’s practical focus enables several possibilities in this respect. Another of the criteria listed here – active participation – is also relevant in that this criterion is concerned with the student being involved in meaningful

activity. As we see here, students, teachers and parents have spoken about how meaningful practical work is when it involves working with something relevant for a future career; gaining skills in this way can yield future advantages by preparing for working life and by helping to decide whether such work is of interest. This is perhaps especially true of students in a vocational education. Student 2 had also found out something more of what he wanted to do after he finished at school. His mini-company had made him aware of marketing design.

#### 4.4.2 Independence

In addition to his physical challenges, student 2 had dyslexia, which meant that he needed a good deal of help writing. He had a support teacher who helped him with note-taking, homework and so on, and who accompanied him in all lessons. When I asked in the interview what academic support and help he needed in the programme, he replied:

*I didn't need much help, because the project is really practical. When we do activities where I don't need to write, I am able to interact with the students and take part in the project at the same level as the other students.*

I interpret student 2's comments as suggesting that the heavy focus on practical work provides an opportunity for greater independence. When student 2 did not need to work as much with reading and writing as he did during normal lessons, he was able to work more on an equal level with his fellow students. One example is the practical work with the website. In not needing the support teacher, he was able to work independently. This is something that was very significant to student 2, and it was something he returned to several times during the interview. Thus, independence is one of the main findings in the study, and it shows some of the contribution this working method can make to special-needs students.

As I understand it, student 2 was academically and culturally included (Olsen et al., 2016). Cultural inclusion includes preserving the diversity of the learning environment, an environment with which the student can identify (Olsen et al., 2016) and I regard this as an important dimension when considering special-needs students. The interests of special-needs students are to feel that they fit in as a part of the learning environment. To me it seemed that student 2 had experienced this within the programme when he spoke about participating at the same level as the other students. To make this possible it was important for him that the support teacher was not present and that he could work independently; which could happen because he was not only writing but also doing practical work. Inclusion is not merely a matter of academic elements including student learning and working methods; it includes a focus on community and on the group of students involved in the collaboration. This brings me to the next category: collaborative learning.

## 4.5 Collaborative learning

Perhaps the most apparent element of mini-companies and the data collection was group work and collaboration. Group work is also a key aspect in terms of inclusion. In a mini-company, all the students must collaborate in the process of the project, which creates an opportunity to use the student collaboration systematically to meet the students' social needs and to train their social skills (Skaalvik & Skaalvik, 2014). This form of collaboration appears to constitute a good form of learning for many individuals.

### 4.5.1 Togetherness in the class

The students in this school worked as a class on a single project, so the group size was around 25 students. The whole class took part in decisions about the product and what to do. The class was divided into smaller groups, each with its own areas of responsibility (one group for instance, was responsible for finance and another for marketing), while the whole class worked together on larger issues. How these sub-groups were allocated and how responsibility was shared out varied from class to class, but common for all projects was the general principle of one product per class. When the data collection was done, the students had worked on the programme for about three months. Student 1, who was working with a mini-company at this point, had many positive things to say about the group work:

*I like it. It is easier to work in a group. It's more beautiful to see when different people work together than doing the same things just on your own.*

He found it both easier and more "beautiful" to work in groups. He explained that this "beauty" lay in what several people could achieve together as opposed to working in isolation. In addition to the product of collaborative working, student 1 spoke of his good relationship with his class. Everyone knew each other and were good friends, so he had not experienced conflicts within the class, but he said that he could envisage that the most difficult aspect with group work was taking joint decisions. He supported the idea of group work and said that "the more we are, the better we work". He did not perceive a problem with being many because he felt that being all the same age and knowing each other well made it easier to take decisions and to collaborate. The interview with student 2 contained many of the same elements in this respect; he too had a good relationship with his classmates and had not experienced conflicts. Student 2 said of his class that they were very open and caring:

*The students and teachers are very welcoming and caring. It's a great class with great students.*

He added that his class had been very helpful, offering assistance both with his wheelchair, with getting into his place in the classroom, and getting him out at break times. They also

helped him with academic work, though this help was sometimes reciprocal. I got a positive impression of this student's relationship with his teacher and classmates, in which acceptance and recognition appear to have played a role in the classroom.

I also wish to add something that struck me during the interview; when speaking about student 2's class and fellow students he referred to them only as "friends" or "his friends". I had not previously raised the issue of friends or friendship during the interview. The teacher spoke of good friends within the class and said that this meant a great deal for student 2. In addition, when I asked the teacher in concrete terms what was the most important thing in the school for student 2, he mentioned working in a group. Both student 1 and student 2 said that they had good friends in their class.

In an inclusion perspective, I would highlight the social dimension in everything described up to this point, enabling the students to find belonging and security (Olsen et al., 2016). An inclusion criterion that is natural to draw in in this connection is community. The reason for highlighting community is the factors of recognition and acceptance. The impression was that both students felt themselves to be a part of the group, not in any way excluded from the community. Student 2 expressed the significance that this had for him. We have already mentioned that being able to take part in the work on an equal footing with the others in the group was important to him, in addition to his observations that they were caring and helpful. His teacher spoke of them as friends and said of student 2:

*He likes very much to work in the group. He was involved with his friends, and so he was very relaxed and he worked with joy.*

This is the teacher's perception of the student's position in the group; that he was very involved and relaxed. Student 2 was also an active participant who worked with joy, according to the teacher. For student 1 it appears that things were more meaningful when he was working together with others rather than doing the same tasks alone. One of the reasons for this interpretation is the overall impression given by the interview with student 1, in which the only aspect of the programme that was particularly positive for him was that of working together with his classmates.

This kind of interpretation should not overshadow the fact that the activity will not necessarily be meaningful for the student simply because of it being rooted in-group work; it is the group work itself that is the meaningful element. In addition to community and active participation, student 2 gained a benefit, as I see it, not merely in terms of academic development but also of social development. It was clear from the interviews with student 1 and student 2 that they had good relationships with their fellow students and teacher and that the class environment in general was good. Student 2 spoke of his teacher being "really great", while student 1 also liked his teacher and regarded him as a kind person. Relational theory, which is important when discussing learning environments, shows the

significance of good relationships with classmates and teacher for a student's enjoyment, learning outcomes and development (Drugli, 2012; Olsen et al., 2016). This is nevertheless something that requires an increased focus to gain a better insight into the significance of relationships for special-needs students in mini-companies.

#### 4.5.2 “Forced” collaboration

We live in a world that contains other people, and in many jobs, we depend on collaboration even though the majority of us hold differing views. The same applies in schools, which contain a wide diversity of students. Collaboration in the school is nothing new, so what is so special about collaboration in mini-companies? There are different ways of organising collaboration, reflecting not least what the subject of the collaboration is to be. One parent observed that since the class must work in a particular way in mini-companies, the students are “forced” to collaborate, which gives the class greater unity. Student 1 also noted that the class had become more unified from working together on one project. In connection, I wish to highlight a point made earlier: the long working process inherent in the mini-companies, which shows the time dimension within which the group needs to work through several stages. Student 2 said that “teamwork skills” was the thing he had learned most through working in the mini-company:

*I think the main thing I learned of working in-group is the teamwork abilities. Because you work a lot in the team, so that is something you really strengthen when you do the programme.*

I regard learning to collaborate as both social skills and academic learning. Student 2 learnt a great deal from working in groups, both in terms of having respect for others and listening to others, as well as having to contribute to the group. One student in the group interview observed that this kind of collaboration could also reinforce friendships, which takes us back to the category community feeling in the class. The teacher of student 2 also noted experiencing the same with his group – that student 2 came closer to his fellow students by working together with them in this way. I would not exclude the possible influence of other factors in his saying this, but the teacher had a “collaborative approach” in his practice, both between himself and his students and between the students. Collaboration was thus an important principle for him.

From the study's inclusion perspective, I am examining community and benefit. Through need to collaborate, several students experienced that the community became more cohesive. As student 1 noted, we work together better when we know each other, an observation I interpret as being about good relationships. In addition, I regard it as significant that one should feel a part of the community; knowing one another and collaborating well with each other.



Benefit is concerned with space for academic and social development. We have seen that student 2 has learned this from working in a group and collaborating. Student 1 gave a different answer. Even though he preferred working in a group, he had not learned anything new from the group work in the mini-company, so this did not make a great difference for him. I interpret this as suggesting that although he enjoyed working with friends, this has not affected his learning outcomes from the mini-company. We see here that the benefits for the two students have been different in terms of group work and collaboration. There were considerable differences between the two students in general, in terms of both their special needs, and that one was working with the mini-company and the other had completed the process. These differences, however, have given me some insights into how differently mini-companies can be experienced, even at different stages in the process. I am referring here to how student 1 and student 2 experienced collaborative work and what they learned from it. For that reason, I regard it as important to identify which factors were dissimilar, to find out why and perhaps to identify issues that need to be accounted for.

Conflicts are also something that can occur, and I mention this to show the nuances of collaboration. Several teachers noted that some students had conflicts in mini-companies. During observation of an entirely different class, I spoke with the teacher responsible. She told me that a small group of relatively strong personalities within the class exercised a good deal of control and often ended up in conflict with each other and with other students. This could be a challenge, she stated. There may be several reasons why student 1 and student 2 did not mention experiencing any conflicts, but here I will emphasise possible causes of conflict and their significance for inclusiveness in the class.

## 4.6 The students in the centre

This main category also represents many of the study's principal findings. Considering the students in the centre is about how the students reach decisions, influence actions and participate. I have formulated some under-categories in this part.

### 4.6.1 Joint decision-making

The impression I received is that the students feel that they are at the heart of the project when they can take part in shaping the greater part of the programme. When I asked the students: Who took decisions? Both said that the students decided almost everything. Student 2 commented that the teacher expressed his opinion about what would be favourable, but it was the students who decided:

*All the decisions were in the hands of the students. The teacher could give some advice and maybe his opinion about what was better or less good, but then in the end it was the students who made all the decisions.*

Student 2 gave an illustrative description on how the teacher had performed during the programme, and that was: he had been like a “chameleon”. He had not been there, but was nevertheless available when they needed advice and guidance. This was not a negative quality; quite the reverse, he observed. The other student in my interviews, as well as the group interview with students without special needs, had the same perception of the teacher’s role, and who took the decisions in the programme. In mini-companies the teacher worked more together with the students and was one of them, and still motivating and supportive.

Joint decision-making is concerned with all students being heard and getting an opportunity to influence their education (Haug, 2014). My finding is that the mini-company method may be very well suited to precisely this criterion: the students can determine and influence the programme to a high degree. When I began the analysis, I found that this demands an awareness of how this is to be achieved. Is it as simple as just saying that the students can decide? Does each individual have this opportunity? Joint decision-making is also concerned with the balance between individual interests and community interests (Haug, 2014). This means that we must look more closely at whether all views are considered equally. It became apparent that this was organised differently from one class to another.

#### **4.6.2 Organisation and decisions**

To look more closely at how joint decision-making can be ensured in a mini-company, I will examine the organisation of CP and the management of student joint decision-making. When I spoke to student 1 and student 2, I got the impression that their respective classes had differing practices in terms of how decision-making was organised. Two things in particular emerged; the distribution of groups/tasks and how decisions were taken.

When I asked student 1 who took decisions, we approached the question by talking about his role in the mini-company. He stated that he was a part of the finance group and that he particularly enjoyed this task because it was his favourite subject. It was, he said, purely coincidental that he had been given this task or allocated to this group. Student names had been written up and a draw was held to determine who should do what. When I asked who had decided that things should be organised in this way, he said that the students had decided this. Therefore, we ended up saying that for him the division of tasks had been “luck”. I did not hear him say anything about the teacher.

Things were done a little differently in student 2’s class: Concerning the distribution of tasks and organisation of groups within student 2’s class the previous year, the student said that this was the only thing that the teacher had gone in and decided. Student 2 was very happy with the task he had been given, but did not have much more to say about the organisation.

It was then interesting for me to hear the response from the teacher afterwards: When I asked the teacher about how he had organised the tasks in student 2's class, he said that he allowed the students to try out some tasks and then have a conversation about it. They then decided together whether the student was well suited for the task or whether they wished to swap. This is also a part of his previously mentioned "collaborative approach" in the programme. He tries to find out what the students enjoy doing. The teacher had discovered that student 2 liked designing and colouring (on the PC), so he had given student 2 the task of working with the marketing group to design the website for the company. This does not directly address the question of how joint decision-making as an inclusion criterion is embedded in the programme, but the point I wish to make here is that different grades of joint decision-making exist in different situations, often due to the teacher and the way in which the programme is organised.

Another difference in practice between the classes of the two special-needs students was how decisions were to be taken. Student 2 reported:

*Every single step was discussed and agreed on with the whole class and we took decisions together. If there was something someone didn't like, we didn't do it. We removed it from the project.*

In student 2's class there was a culture for taking decisions after mutual discussion and unanimity. If anyone had good grounds to disagree, the suggestion was defeated and had to be replaced (or changed until everyone could agree). Student 2 had also made a proposal with which the rest of the class had agreed.

A majority took part in student 1's class decisions, and votes were held to determine the outcome. Student 1 told me that his class took decisions on an equal footing: "we all make decisions together". He had been in disagreement with some decisions, but he accepted and went along with the majority decision. This may suggest that student 1 was not a part of making decisions in his class but was conscious of always going along with the others. Does this represent decision-making on an equal footing? If we consider the two different decision-making practices observed in the two respective classes in the light of the joint decision-making criterion, another significant aspect became apparent during data collection: group size. In a group of 25 students, it is natural that many opinions will need to be considered and that some students will inevitably disagree. If not all are able to have their opinions heard on an equal footing with the others, then their influence over the project can be brought into question. It is possible that more attention would be paid in student 2's class to individual opinions and opportunities to influence decisions, in that unanimous agreement was required before decisions were taken. It appears to me that by organising a discussion in which everyone had to be convinced, this group found a balance between the interests of the individual and of the community. Such an opportunity was not necessarily equally evident in student 1's class, in that the opinion of an individual who

was not on the side of the majority or had the majority on his side was not decisive. Naturally, this needs to be looked at in more depth before reaching firm conclusions, but I am reminded of the group that I observed in which the teacher spoke of a small group of strong personalities that decided most things and that was involved in conflicts with each other and with the other students. How were decisions in this class organised? How much account was taken of the views of the other 20 students?

It was a conscious decision to call this section the students (in the plural), rather than just the student, in the centre. While it is good to focus on student participation in decisions, there are arguments that suggest that some of the practices I have seen do not take account of the voices of each individual student, or allow each individual voice to be heard on an equal footing with the others. Many would regard this as an impossible goal. My findings suggest possibilities that can alleviate this, as in student 2's class. In this respect, I question the concept of active participation. Active participation is defined as an opportunity for everyone to contribute to and receive benefits fairly from the community by taking an active part in meaningful activities. How meaningful will the entire project be for a student who has not played a role in deciding any of it? How fair is the student's opportunity to take part in the fellowship around this project if the student needs to give way to the others? Some possible answers to these questions are offered in the next section, which presents findings relating to involvement and engagement.

## **4.7 Involvement and engagement**

This main category deals with individual differences, showing the great diversity of students included in the school's teaching and in the mini-company. I call the category involvement and engagement because involvement is an issue many people spoke about, while engagement was another factor particularly apparent in my findings and which represented a large difference between student 1 and student 2. I will first describe student 2's involvement and engagement in the project before dealing with one of my main findings: the "spiral effect" of inclusion. This became apparent to me while analysing the data and looking more closely at the individual factors that were significant for the inclusion of the individuals. The next finding in this category is concerned more with the individual's obligations to the actual project in the class's mini-company.

### **4.7.1 The "spiral effect" of inclusion**

To begin with student 2's experiences in the mini-company in terms of involvement and engagement, he seemed very engaged in the interview. Based on his own comments and those of his teacher, he seemed very involved in the class project. He was responsible for the design of the website and had much to tell about his experiences at various stages in the process. The teacher told me that student 2 was very able and had many questions. His

hand was raised every five minutes, according to the teacher. When I asked the teacher why he thought student 2 had so many questions, he replied:

*It was because he was interested in learning more (...) working in this way made him more interested.*

Student 2 was also interested in learning more. According to the teacher, the working method was largely responsible for this. I have previously attempted to show how meaningful group work and the focus on practical work was for student 2. I naturally attribute this to active participation; in that it was evident, that student 2 was an active participant and contributor to the project. This is also supported by his comments regarding his relationship with his fellow students, in which he was not only helped by them, but helped them in some respects. This shows that he was able to both contribute and receive fairly from the community (Haug, 2014).

I extend this perspective slightly to look not only at the direct link between his engagement and his active participation but also at the reverse or from a greater distance. Might some inclusion criteria have been responsible for his engagement and involvement (active participation) in the project? My findings and interpretation suggest a positive answer to this question. It has already been seen that this method of working has been beneficial for student 2. Through the mini-company experience, he has had the opportunity to take part in the project on an equal footing with the others in his group. He has been accepted and recognised for whom he is and has been able to contribute his opinions and been included in decision-making. Through the CP, he learned a great deal about collaboration and he gained an increased desire to learn more. This is a combination of information I was given and my interpretation of it, but my point here is to demonstrate a form of spiral effect that I perceive the inclusion criteria having on each other. Individual criteria are not necessarily better or more important than others are, but I see student 2's experiences in the mini-company as helping show that they influence each other at various stages and levels in the student's education. If one criterion is enabled, this can have a ripple effect on another. A feeling of being an equal participant in the group can increase the interest for learning, thus also increasing the benefit from the teaching. Helping take decisions about something in the project promotes a feeling of active participation, making the process more meaningful for the student. The student may receive a significant benefit during the process which makes the programme's activities seem more meaningful, creating a positive feeling towards the community. It was student 2's narrative of his experiences that made me notice the reciprocal effect of the various inclusion criteria on each other.

#### **4.7.2 Obligations**

It was clear that in terms of involvement and engagement, student 1's experiences of participating in the mini-company were somewhat different. This can be illustrated by

several quotations from student 1 from various stages in the interview, together with what I asked. It should be mentioned that he was about three months into the process and had not completed it. When I asked whether there were any aspects of the project with which he disliked, he replied:

*For now, no. There is nothing I don't like, but I don't know about the future.*

He was not dissatisfied with anything, but further questions gave the impression that there was not so much that he was satisfied with either. He said that he did not feel motivated. When I asked whether anything could have been done to change this, either by the teacher or in terms of programme organisation, he replied that there was not, giving the reason:

*I don't commit so much to the project because it's sort of how my personality is. That when I don't get a return I don't really commit to working with something.*

He was not very committed to the class project, explaining that he regarded it merely as a school project that did not offer returns. When I asked what kind of a return he wanted he said money. It is understandable that a 17-year-old boy wants to be paid for creating a saleable project. He believed that the same applied to the other students:

*I think that all the other students feel the project is something connected to the school and not something they really care about personally.*

He followed this up by saying that even though the product was the students' idea they did not receive any money for it, which limited the motivation. As mentioned earlier, student 1 was not a part of much decision making, so I floated the suggestion of working individually or in smaller groups in which he could have had more influence. To this he only said that he was not especially interested in this type of project so it would not have made a difference. What is interesting in student 1's interview is what was said earlier on. After he spoke of not taking any decisions, but of giving way to the majority, I asked the student whether his interest in the project would have been any different if he had been able to decide more.

*Not really, I feel like I'm not committed so much to this project. Cause it's not my idea or something I really care about.*

He states explicitly that he does not feel committed to the project because it was not his idea or something that he cares about. If I had been sufficiently aware at that point I would have asked how he would have felt if it had been his idea. This approach might have yielded other answers than those given when I asked only about increased influence in the project in general. I cannot be certain of this – it could also have been a form of accidental contradiction or that the student gained an increasing feeling through the interview that nothing could have made things any different. Nevertheless, the statement is worth taking

into consideration in that it was actually made, which means that the student was thinking it there and then. At that point they had not got far in the process so he did not have much to report on what had already been done. He was in the finance group and amongst other things had been responsible for collecting money. By the time I met him he had helped sell some bookmarks and had discussed the project with family and friends. He said that these were things that anyone could have done and that he had neither used his strengths or learned anything new. At various points in the future I asked what he was envisaging further on in the process and received varying answers. He believed that there might be opportunities to use his strengths when selling the product, which was a positive thought, but nevertheless he did not expect his interest or motivation to change.

Although we are here discussing active participation and outcomes, joint decision-making may have an influence on this. At this stage in the project, student 1 has stated that anyone at all could have done what he was asked to do and that he had not learned anything from it. This appears to me not to be especially meaningful activity for student 1. Of course, not everything that is done in school or in a mini-company must be equally meaningful, but when student 1 has nothing else to say about the things he has done during the first three months of the project it seems to me as though some changes could and should have been made. In addition, the outcomes on his part have not been great in that he has not learned anything new. Student 1 enjoyed working together with his class and liked group work in particular, but the content the group was working with was another matter.

#### **4.7.3 Individual involvement**

Since this is concerned with involvement, I will also bring in points made by teachers, other students and parents. Since student 1 and student 2 had such differing experiences in this respect it was interesting to see how things worked for others. The same thing was said in group interviews with teachers and students: some students are more involved than others. The teacher also mentioned this as one of the weaknesses of the programme. In a large class, it is difficult to involve everyone. During the group interview with the students I got the impression that those who were sitting there were all engaged and competent students. These students spoke about the others in their group who were less involved and said that they cared less and exploited the fact that others cared more and dealt with everything. A student who said this also added that she liked to take control. This student was in the class that I observed and was one of the most active in the lesson. The teachers also mentioned that many students tended to hold back and allow those who were most engaged to deal with everything.

Some suggestions were made, for instance that a reduction in group sizes would make it more difficult to hide behind more active members of the group. Here we see again the significance of group size in the project. As part of the parental interview, a mother said that her son did not particularly like school work in general. The point she was making

may be important to remember in many school situations: that although her son was probably not the most heavily involved in the class project, this was nevertheless the programme with which he was most engaged in terms of his school work. Although it may appear to others that someone is not particularly involved, it may be that from that individual's perspective they are more engaged than usual in the work. In recounting this I am highlighting the extent of individual differences that must be accounted for, as well as the differing degrees and significance of the inclusion criteria for individuals. In an inclusion perspective, we can see the difficulties here in making generalisations. The degree of active participation for this student may seem high from his perspective while seeming very low to other students and the teacher. This also illustrates something of the complexity of the inclusiveness concept when discussing individuals. As my data shows, there are many challenges in making provision for everyone in a mini-company, but such a programme has a great potential in several respects for ensuring the inclusion of participating students.

## **4.8 The significance of a mini-company**

This final section in the presentation of findings is concerned largely with outcomes. I draw here on many of the benefits to student 2 after participation in the mini-company. Student 2 is in focus here because student 1 had not completed the entire programme, so final outcomes were not apparent from his interview. As we have seen, I believe that inclusion criteria can have a spiral effect; identifying which criterion which may have exercised the first or greatest influence on another can be a "chicken-or-egg" question. Other criteria will therefore also be relevant in this section, because we will also see that these findings appear for student 2 to have emerged gradually during the programme. This category is concerned with the significance of the mini-company for student 2 and it involves some of the study's most important main findings: interaction and self-confidence. These two elements emerged clearly in the interview with student 2 and he expressed how significant they were for him in his participation in the programme the previous year.

### **4.8.1 Interaction**

Interaction is a word that student 2 repeated and that was of constant significance for several aspects of his school work in the mini-company. In this category I would like to highlight some of what I regard as the more personal elements that emerged from the interview. Even though they may seem personal, student 2 did not have any problem sharing them in the interview situation; quite the opposite, as I saw it. He had a great deal to say and shared his experiences and thoughts without showing any sign that this was uncomfortable for him. In some cases he was more serious while actually telling me about things that were difficult, but while the interpreter was translating them he smiled at me. I have already mentioned student 2's experience in terms of independent work in the mini-company and that it was important for him to be able to work on an equal footing with the



other students. When I asked him what he regarded as the most challenging aspect of school, he said:

*The most difficult for me would be interaction with other people.*

This is an important aspect in that the student says himself that it was one of his greatest challenges, making it one of the school's tasks to ensure student 2's opportunities for interaction. He went into more depth about this, speaking of his experience of having special needs when interacting with others and saying that one of his greatest fears is that most people do not understand all the nuances of having functional issues, often attributing such issues to a lack of understanding – believing for someone to have functional issues means that they have reduced understanding. I highlight this to show how important it was for student 2, in the context of the interview. The class involved in the mini-company was the same class that had been together the previous years, so they knew each other well, but student 2 stated that the attitudes of others towards him for his special needs was a matter of constant significance and he had a constant awareness of how he felt that he appeared to the others. This strengthens the significance of two things that were said. The first was when I asked him how it felt to take part in the mini-company without the need to have a support teacher and he said:

*I feel it's very important because being able to work in the mini-company programme without the support teacher made me feel more normal.*

The second was when I asked how it would have been if the class had not been as supportive and helpful as he said that they were. He said that it would have been very different, and not as good:

*...because real interaction happens when a disabled person doesn't feel like a disabled person any more.*

It was important for him to feel an equal member of the group, which involved not feeling functionally challenged in terms of interaction – he wanted to feel “normal”. What is shown here is fundamental to student 2's positive experiences, making interaction one of my main findings. This is apparent from how important it was for him that the special needs should not be in focus or prevent him from taking part on an equal footing with his classmates – something that had not been possible in the ordinary classroom situation because a support teacher had been with him. This is important because it is to a great extent concerned with academic, cultural and social inclusion dimensions – the student is enabled to draw positive learning outcomes where diversity is accepted and he has an experience of belonging and security (Olsen et al., 2016). I have said that this is largely concerned with outcomes, but it is also relevant in terms of interaction, fellowship and active participation. I interpreted both his role as a member of the group and how

meaningful the activities were for him as aspects that were influenced by his opportunity for interaction and for not feeling like a student with special needs.

#### 4.8.2 Self-confidence

Another challenge that student 2 formerly had was shyness, but the programme had taught him to overcome this. He had to stand on a public platform and present and promote the product to strangers. When I asked how this had been he said that he had been anxious now and then but had just breathed deeply and tried to forget the impression he was giving people. When you feel a bit strange or something, he said, you ignore it and carry on. The teacher mentioned in the interview that the programme was excellent for student 2 in that the latter needed more self-confidence and received it through the programme, both by working in groups in this way and by speaking about the product to groups of people, including strangers. Interaction and self-confidence are two of many elements that I regard as essential if a student is to feel included. As such, interaction needs to feature a fellowship of equals, recognition and acceptance, with everyone being heard and participating. Self-confidence is also something that all students need to move their focus on to learning; the school has a responsibility to achieve this. That student 2 felt greater self-confidence after the programme is an indication of how successful it was for him; since there clearly had been room for a positive development. The teacher also regarded this method of working as very useful and good for student 2:

*In other type of work he was often stressed. In the work of this programme in action, he was more relaxed ... and happy. Happy to work.*

His ability to relax and show pleasure in the work seemed to me to result from his independence in a group of equals, particularly without the need for a support teacher. He was also enabled to show his strengths in the practical tasks with which he was working. This leads me to an aspect mentioned by a parent in their group interview. She spoke of what the practical aspect of this work can reveal to a teacher about a student. I would also highlight what it can reveal also to others, including to the student himself. She said that in the context of practical work the teacher was able to see the student “in action”, because not all students are, top students or have good theoretical skills. The programme was thus a good opportunity to demonstrate other abilities. This point could also have been made in the earlier section about practical work, but I have chosen to include it here to emphasise the significance of practical work within the broader picture, especially for student 2, and the experiences he was able to draw from the programme as a result. The programme formed an opportunity for him to demonstrate that he was able – very able – without the support teacher. Self-confidence is an important outcome student 2 gained from the programme. By his active participation in a secure fellowship, he was in my view enabled to experience increased self-confidence and a positive personal development.

I asked student 2 whether he had any suggestions for changes, or what should be considered to make the mini-company appropriate for special-needs students. In his reply, the student used the word “include”. He said that the programme needs to be made even more inclusive for special-needs students by ensuring that activities are organised in which all students take part. He also cited a film that makes this point. The film is actually concerned with going out with a person who has functional impairments, but the message, he believed, is transferable to a school situation:

*When you go out with a person with disabilities, you have to forget the disabilities – but at the same time know that he or she has a disability*

I regard what student 2 said here as going to the heart of special-needs education in the school. Students do not wish to be regarded as special-needs candidates but as the entirely normal individuals that they are. Nevertheless, we cannot forget that they have particular needs and that provision is required for these. As the teacher pointed out, there needs to be even more focus on special-needs students and their individual needs in the organisation of the programme.

### **4.8.3 Final reflections**

The complexity and subjective nature of inclusion represents a challenge to research in this phenomenon and makes general conclusions difficult. It is nevertheless of the utmost importance to examine these questions. A key dimension of inclusion concerns organisational aspects; it is in the relationship between individual needs and those of the school as an organisation that inclusion needs to be designed if the principle is to be upheld in the best possible way: it is a joint responsibility (Olsen, 2013). The teacher plays an important role in the relationship between the individual and the organisation – he or she is in a sense the facilitator.

There are different ways of organising a mini-company. This study has investigated aspects such as group sizes, relationships, degrees of student self-determination and teacher control. The teacher has a unique opportunity to contribute something different in a mini-company from in classroom teaching, given that some capacity is freed up when the students themselves occupy a central role in a project to which everyone is contributing. The teacher can thus become a “chameleon” who is not constantly visible but who maintains full background control of what is going on in the classroom – and ensures the inclusion of all students.

In the analysis, I discovered a “spiral effect” that the criteria of fellowship, active participation, joint decision-making and outcomes can exercise on each other: if one of these is enabled it will reinforce another, or if one of these is not maintained and enabled, it will have a negative effect on another. This study has shed light on challenges such as too

little involvement, conflicts and different individual needs, but has also shown that the potential is so great and the opportunities so many that it is important not to take them for granted. For special-needs students, the focus on practical work can be very significant in both academic and personal terms. Different academic expectations and the opportunity to demonstrate other abilities are a strength of the programme and create a potentially good alternative for special-needs students.

I nevertheless conclude, and wish to emphasise, that findings in this study suggest that mini-companies do not necessarily represent a “quick fix” for all students. It will not necessarily be the case that anyone who needs an alternative to normal classroom teaching will find a mini-company in itself to be the sole simple solution. This is the case as EE is not obligatory in all countries in Europe. Since the European Commission wishes to achieve this, we must look into ways of organising it to ensure that all students will be included in the best possible way when this is put into practice. What we need to ask as researchers when looking at students and at what will work is what works for whom, and in what context (Tangen, 2012) – to see the individual in relation to organisational issues.

Finally, I would like to highlight a few issues that have cropped up and which it is worth mentioning as a reflection. For me this project has been a complex process, very demanding and not least informative. Taking part in the ICEE project has given me a feeling of being part of something larger and thereby more meaningful for me. In addition, it has been a strength for all the master’s projects to have a group of students and supervisors who have met and shared experiences. There will always be things that could have been done differently. Research is a complex activity; the most important for me has been to carry it out as credibly and relevantly as possible. What I would like to emphasise here in my concluding reflection relates to the complexity of the chosen topic. Special needs, inclusion and EE are three areas each of which are very complex to define and research. In this work, I have portrayed some of the complexity in inclusion, individual differences in terms of special needs and different ways of organising a mini-company.

It was very interesting to listen to two students with varied special needs, and about their different experiences. This provided an even greater understanding of how varied mini-companies experiences can be and an even clearer picture of which aspects of organising mini-companies have a direct effect on special-needs students. This is essential to gain a better understanding. In respect of the organisation of mini-companies, I only had the opportunity to carry out data collection in one school, which meant that much of the basic organisation was similar. It could be a further strength for purposes of comparison to look at practices in another school and how students perceive these.

Naturally, the subject of this study is one that can never be fully investigated and not many things can be claimed to be universally applicable. My contribution is intended merely to point in the right direction and identify factors that should be borne in mind when

organising a mini-company to ensure inclusion. My conclusions and the data gathered in the study suggest that there are several elements and situations in mini-companies that could and should be the subject of further research to gain a better and deeper understanding of what this involves. In general, it would be an advantage to take this entire further, look more deeply into it and examine it in different situations.

## 5 STUDENTS' SELF-EFFICACY (FINLAND AND LATVIA)

This chapter was written by Julie Aae. The issue addressed by her study was how working with a mini-company can enable an inclusive learning environment in which students receive an increased expectation of mastery. She did her Master's thesis project in Finland and Latvia. Her supervisors were Daniel Schofield and Vegard Johansen.

### 5.1 Research focus

Through my teacher training and studies in special education I have learnt about many principles regarding adaptive teaching methods and creating an inclusive classroom. Through working and teacher practice, I have asked myself whether the teaching being carried out enables an inclusive learning experience. It is claimed that adaptive teaching is the main factor needed to create an inclusive learning society. This sounds logical, in that a perfectly adapted teaching will be appropriate to all students, and will thus lead to an inclusive learning environment. The problem is that such perfectly adapted teaching also is very difficult to achieve. As a teacher and special-needs teacher, I want to find a way of teaching that will ensure that all the students can participate and receive a feeling of accomplishment. Even if this appears ambitious, I believe it is necessary to look at new forms of education in order to approach this goal.

In my experience, teachers generally tend towards a teaching method with which they are familiar. Working with a mini-company can be viewed as a contrast to what we are accustomed to seeing with traditional classroom-based teaching methods. I therefore wish to examine mini-companies as a teaching method and consider whether it meets student expectations. I want to see if the students gain a sense of achievement and whether this teaching method can enable an inclusive learning experience.

### 5.2 Selection of participants

Qualitative studies mainly use strategic selections. My informants include students and teachers taking part in the "Mini-Company" programme in the school year 2016/17. At the school I visited in Latvia, entrepreneurship was an important part of economics. The students had chosen this specialism themselves, but mini-companies were a mandatory part of the course. The school I visited in Finland ran a vocational study directed towards business and trade, and mini-companies was a voluntary elective available to the students at this school. The students involved are between 17 and 18 years of age and are in the second year of upper secondary school. The teachers teach at the same schools. The contact persons in JA Finland and JA Latvia, as well as a teacher at the one school and the head

teacher at the other, influenced the selection of participants. I had minimal control over and little influence on the composition of the selection.

In total, the selection used in the study consists of twelve students and nine teachers divided into two student groups and two teacher groups; four focus groups in all. The students were divided up with five students from the school in Finland and seven from the school in Latvia. All the students took part in a student business and in JA's "Mini-Company" programme. At the Finnish upper secondary school, the teacher interview was carried out with two teachers who had both worked with the programme over many years. In Latvia, the teacher interview was carried out with six teachers and the head teacher, of whom one of the teachers generally functioned as interpreter. The teachers I interviewed in Latvia came from the same school.

### **5.3 About the learning environment**

The issue addressed in this study is how a mini-company can create an inclusive learning environment in which the students gain an increased anticipation of achievement and mastery. An inclusive learning environment is a rather broad term. Skaalvik and Skaalvik (2014) suggest that the concept encompasses the environment, atmosphere, social interaction and decisions the students encounter or are called upon to make at school. They also observe that it would be expedient to differentiate between: a) the learning environment as it is organised and constructed, including the attitudes and view of learning which form the basis for it; and (b) the learning environment as experienced by the students. The aim of this study is to examine more closely the student's experience of working with a mini-company, thus making it natural to observe the learning environment as perceived by the students.

Skaalvik and Skaalvik (2014) observe that there has been an increased focus on inclusive education during recent years, even while individual special-needs teaching has also increased in extent. This can suggest a heightened focus on social inclusiveness in education, and thus a reduced individual perspective, and this can lead to individual students becoming victims of ideology. For this reason, I want my study to highlight student perceptions of their learning environment, thus focusing on an individual perspective of the concept. An individual perspective of inclusive learning is concerned with what Skaalvik and Skaalvik (2014) term experience criteria. This is concerned with how students perceive the school in social, cognitive and emotional terms.

If we are to determine whether a learning environment is inclusive or not according to this definition, it becomes necessary to observe the student's experiences of and expectations of achievement and mastery. A strict definition requires that for a learning environment to be inclusive, all the students must participate and experience mastery. It is thus, my desire to discover whether a mini-company can create a learning environment where this is the case.

Skaalvik and Skaalvik (2014) also claim that it is meaningless to take account only of experiences. If the elements creating the students experience are to be changed, the environment within which the student operates must also change. In this study, the elements inspected will be those of working with a mini-company. I regard this method as different from the ones usually applied in school, and I find it interesting to see how using this method will influence a student's experience of the learning environment. It is very important to observe the student's experience of their learning environment because this is what will have consequences for their learning, motivation, self-image and attitude.

The key prerequisite for a person to be in control of their own life is that the individual can believe in their own abilities to complete the tasks necessary to achieve their goals. Bandura (2006) terms this self-efficacy. Frank Pajares (2006) puts this term into a learning context, claiming that expectancy of mastery creates a basis for motivation, well-being and personal completion skills through all areas of life. In his opinion, phenomena such as motivation, learning, self-regulation and accomplishments are unexplainable without bringing up expectation of mastery. Mastery and the expectation of mastery will thus not only be a deciding element in whether a learning environment is inclusive, but will also, be a prerequisite for motivation and learning.

On this basis, knowledge of what shapes expectations of mastery is decisive in enabling both learning and inclusion. Bandura (2006) points out that if people do not believe that they can accomplish their aims through action, they will have little initiative for taking action and will struggle to persevere when they encounter difficulties. This belief is fundamental to how students will approach schoolwork and other situations in life. Despite other elements functioning as sources of direction and motivation, all these are firmly rooted in the belief that we ourselves have the power to create changes through our actions. The belief that we can take direct action in our own lives is key to personal development, successful adaptation and change (Bandura, 2006).

In addition to affecting a student's cognitive abilities, expectation of mastery will also play a significant role in their emotional lives. An expectation of mastery will also affect and be affected by how the students perceive themselves and the thoughts they have about themselves. Bandura (2006) claims that expectation of mastery is the decisive element in whether a student thinks optimistically or pessimistically, elements that can strengthen or weaken their self-image. This can also affect our vulnerability to stress and depression. This makes it important to be aware that a student's belief in themselves and their expectation of mastery plays a role for their self-image and psychological health.

Our belief in mastery is also a decisive element in our expectations towards results. It dictates whether we expect a fortunate or unfortunate result, and will thus affect our goals, ambitions, motivation and how much we can endure when encountering challenges. People with a low expectation of mastery will often view it as useless to apply effort to



something once they encounter difficulties. They give up quickly. In contrast, people with a high expectation of mastery will see ways to overcome difficulties by developing themselves and not giving up (Bandura, 2006). As we can see, creating an environment in which mastery and expectation of mastery can thrive is important if the students are to believe in themselves and their own abilities. This is not only important when engaging in schoolwork, but also for mastering other activities in life.

Bandura (1986) pinpoints that students with too high expectations can encounter difficulties due to engaging with excessively difficult tasks. However, students with a lower level of expectation than what they can achieve, find that they miss out many tasks that they would actually manage. These experiences are important for, as Pajares (2006) points out, completing a challenging task is both rewarding and energising. The reward is thus greater if the student regards the task as difficult, but still experiences mastering it by making enough effort. In this way, we see that the student's expectation of mastery needs to be proportionate to the opportunity that the student has of achieving it. If this is the case, it will be easier for the student to select tasks and have a realistic perception of the likely outcome. As Bandura (1986) points out, this is important for motivation and the development of personal abilities.

Even though we note the importance of the student experiencing mastery in order to gain an increased expectation of mastery, it is not the case that an expectation of mastery is affected only by experiences of mastery. Pajares (2006) points out that it is necessary to help students to understand that mistakes are inevitable but that they can be overcome. As such, one aspect of increasing a student's expectation of mastery is equipping them to tackle setbacks. It is therefore important to be observant when a student fails at something, in order so far as possible to prevent this experience from causing damage but rather to use it in such a way that the student will be enabled to overcome setbacks.

Bandura (1986) warns against students failing right at the start of a learning process. If the student experiences failure at the beginning of the process, there is a greater danger that he or she will explain this in terms of uncontrollable issues such as a lack of ability (Bandura, 1986). It is therefore very important to give the student the support they need in order to experience mastery at the start of work. If the student experiences failures later in the work, this will not be as damaging because the student will already have gained some experiences of mastery and there is thus a greater likelihood of the student explaining this in terms of controllable issues such as too little effort (Skaalvik & Skaalvik, 2014). It can therefore be useful for teachers to be extra observant when students are at the start of a learning process such that the students are enabled to gain some experiences of mastery. If they then have some good experiences to look back on, this will help ensure that they can learn to overcome setbacks without damage to their self-image.

An aspect of working with mini-company is that most work is in groups. I have therefore chosen to highlight theory about how group collaboration can affect a student's expectation of mastery and belief in controlling aspects of their own life. Social cognitive theory expands the concept of controlling aspects of one's own life to that of being several agents working together towards a goal (Bandura, 2000). This collaboration pools the knowledge, skills and resources of several individuals, while also providing reciprocal support to all group participants. This leads to the group developing or attaining something that each individual could not have achieved alone. People's shared faith in their joint capacity to bring about changes in their lives is the fundamental principle behind joint agency. This communal expectation of mastery leads them to set higher goals, reinforces motivation to overcome hurdles, makes them more resistant to setbacks and improves group performance (Bandura, 2006).

## **5.4 Findings**

Risk, realism and self-regulation appear to have a motivational effect and contribute to positive experiences of mastery for one group of students. It appears, however, that the same factors contribute to other students not being motivated or not getting on with the work, thus not gaining experiences of mastery.

### **5.4.1 Effort matters**

I have made several findings in this study. The most important finding is that one group of students work hard and determined in the mini-company while another group makes little effort or gives up at an early stage of the process. It appears that the hard-working students gain good experiences and an increased expectation of mastery, while those who make little effort or who give up, do not. The latter group, in my view, is more in danger of a weakened expectation of mastery. In order to analyse further what role these play for the tendency described above, I have chosen to look more closely at the factors that the study participants highlight as important and as typical for mini-company work. I find that working with a mini-company requires a certain level of willingness to take risks. At the same time, the work appears to make connections between schoolwork and real working life, which can give students a feeling that the work is realistic. The final factor is that the students manage the project on their own, meaning that a mini-company appears to enable self-regulation.

One reason that students do not get started, or finish early, may be that the start-up phase is associated with both risk and self-management. It appears that working with a mini-company is enabling for one group of students, but excluding for another group. Another observation that applies through these findings is that those students who succeed with mini-company work appear to be different students than those that normally succeed in academic subjects. This may mean that students who normally experience little mastery

find that they do master working with a mini-company. In this way, a mini-company function inclusively.

All the students I spoke to, find work with the mini-company to be rewarding, motivating and to give a sense of achievement. They report that through the work they have achieved greater belief in themselves and better self-confidence. They point out that the work was not simple, but could be challenging and at times a little scary. They describe this as contributing to making the feeling of mastering the work even better. In interviews with the teachers, I also heard about another group of students. The teachers describe this latter group as less motivated and working little on the project; some of the students chose to give up or leave the project. My assumption is that if I had been able to speak with these students, they would have told a different story. The teachers in Finland told me that some students are motivated and remain so throughout the entire process, while others seem unmotivated right from the beginning:

*'Cause that's been the general feeling, 'cause when ... when we come to an end, we usually have those groups that are like mmm ... they are excited about it and they're happy about it and they've been that all the time ... and there is those groups who, who have dropped out, who you can see them early on, that they are not really interested in coming to this fair or something like this. And, and, and ... So basically, for one reason or another they are not coping with it. We don't always know why ...*

As this teacher points out, they do not always know why certain students do not master working with a mini-company. I would therefore like to look more closely at why some students appear to be motivated report good experiences, while others are seemingly unmotivated and will probably not be able to report equally good experiences. The main categories used in the analysis are willingness to take risks, realism and self-regulation.

#### **5.4.2 Willingness to take risks**

The impression I gained from the interviews is that working with a mini-company requires a certain willingness to take risks. This is distinctive from what we might term traditional classroom teaching. The mini-company method requires the students to take risks and invest in their idea. The teachers report that in the context of mini-companies they regard themselves as advisers to a greater degree than in traditional classroom teaching. As I see it, this can lead to the students feeling to a greater degree that they need to take important decisions themselves, which can enhance the feeling of risk. It would appear that the start-up phase is perceived as particularly risk-filled, which means that the method requires the students to be risk willing right from the beginning. A student in Latvia reported that it was very stressful to take the decision to go with the idea that they decided on:

*... it was really stressful for us 'cause it was a actually a very ambitious idea, because we didn't know how to do it, how to make it or how much would be the material costs or how much would be the self-costs, for how much we could sell it, what's the market we are targeting.*

Much of the stress experienced by this student relates to the student not knowing how to do the task. Most of the students have probably never encountered anything of this sort and their uncertainty will give a feeling that they are embarking on something scary. In addition, the students are investing their own money in the project. This too enhances the pressure to succeed, as well as the sense of how great the risk is. Another student in Latvia reported that the task felt impossible.

*... at first it seemed, it would, it would be impossible to do something like that, because how to sell it, how to, I don't know, record it and stuff like that.*

These students report on a process surrounded by insecurity. They describe not knowing how to solve a task of this sort and that it felt impossible. What, then, makes the students dare to accept the risk and get on with the work? This can be understood on the basis of the theory of expectation of mastery. As Skaalvik & Skaalvik (2014) point out, a student with a high expectation of mastery will have previous experience of mastering tasks and will therefore have a more positive outlook on whether he or she will also be able to tackle this task, even if it does seem impossible. Students with good experiences of mastery will have a sense that their input plays a role in the result. As Skaalvik & Skaalvik (2014) claim, they will thereby have faith in their ability to solve the problem as long as they put in enough effort. As well as providing the motivation to get going with the task, this will also contribute to a positive attribution pattern if the student were to fail.

Another aspect of mini-companies is that the students as a rule work in groups. As Bandura (2006) points out, expectation to a group of which an individual is a part can be higher than the individual's expectations of success alone. This can mean that some students have faith in achieving because they are working in a group in which they believe, even though they do not believe that they could have accomplished something of this sort on their own. On the other hand, if a student is part of a group, that the student anticipates will achieve less than he or she could have done alone, this will presumably lead to little faith in the group's chances of success with the task.

A student in Latvia reports that when he embarks on a task that seems risky, and finds that he masters the task; this experience makes him proud of himself and gives him self-confidence. He says that he will use this self-confidence in subsequent situations where a task seems risky. This is in line with the principle that experiences of mastery provide increased expectations of mastery that in turn will affect the initiative to embark on new tasks.

*Yes, the confidence is what you get out of that because if you think of something risky and eventually it works out, it's like you are proud for yourself and eh ... it motivates and it gets you more confidence to do new things and to take risks which you think more hard than they are actually.*

Another student in Finland describes the work as hard, but also points out the value of it:

*... it's kind of hard because it takes a lot to make the bars and we do it ourselves, so it's hard, but it's worth it.*

The fact that working with a mini-company seems impossible, difficult or stressful seems as though it may be a motivational factor for these students. These students appear to be referring to a reward that makes the hard work worth it for them. That the students manage to envisage this reward suggests, in my view, that they have an expectation of mastering the task. As Pajares (2006) points out, completing a difficult task can be a reward in itself and thus become a source of energy. My assumption is that students who have experienced this previously know what it feels like and are thus able to see the value of the result while they are still working, even when the work is difficult.

My impression is that students perceive the start-up of the mini-company as risky. For some students this is motivational, as we can see from the above quotations. According to the teachers in Finland, however, some students do not appear to be particularly motivated for the task. I was told that some students give up and chose another course instead. As I see it, the sense of risk may hinder a student from embarking on the work. A teacher in Finland reports that if the students cannot handle the pressure and the uncertainty generated by this type of work, they are not meant to cope with it.

*'Cause, 'cause maybe, maybe we see it on another stage than that if you can't cope with the pressure, if you can't cope with the uncertainty, if you can't cope with the work, well maybe you are not cut out for it.*

He tells how students who are unable to handle these aspects often give up early in the course. Can we just accept that some students simply are not intended for this type of work? Based on Bandura's (2006) theory of expectation of mastery, a student with few or poor experiences of mastery will not have the same faith in himself when encountering a challenging task. We can therefore assume that students with little experience of mastering schoolwork or similar tasks will have little expectation of mastering this work either. Bandura (1986) also claims that risk calculations depend on the student's belief that they can master potentially threatening aspects of a situation. The perception of risk in starting a mini-company will thus vary from student to student. Students who have too little faith in their own competence will probably have a greater expectation that the situation can get out of their control. It appears that the uncertainty and volume of work may be the reason

that the students expect to be unable to tackle the work. This can lead to the risk being considered too great to justify starting the work.

It seems to me that avoiding making a start on the work is a way of protecting self-respect because the student has an expectation of failure. If the student starts the work and then experiences failure, this can damage their self-worth. Choosing not to expose oneself to this risk becomes a mechanism for self-protection. Skaalvik & Skaalvik (2014) describe this strategy as a self-imposed handicap. The student can choose to give up or to make a minimum of effort in order that he or she can attribute the expected failure to these causes.

The reason that these students have little expectation of success, and regards the risk as too great, may be that they have previously experienced failure even after putting in a lot of effort. If this has gone so far that the student no longer sees any connection between own actions and the outcome of the situation, then what Skaalvik & Skaalvik (2014) define as learned helplessness will become applicable. Students with learned helplessness will display passive behaviour. If this is the case, it is very likely that the student will not get going with work in a mini-company.

On this basis, it can appear that students who have little experience of mastering similar tasks have less willingness to take risks precisely because they expect to fail and therefore reckon the risk to be too great. When a student expects to fail, the student will have little motivation to start on the task and may well display behaviour consistent with an attempt to avoid the task. The reason for this may be to avoid exposing an already damaged self-image to further risk. The risk that is associated with the start-up phase in a mini-company can thus motivate one group of students while creating a barrier for another. This can also lead to some students not getting going with the work or carrying it out with an expectation of failure.

### 5.4.3 Realism

The students I spoke to say that they see a connection between working with the mini-company and what is awaiting them in the real-life workplace. I believe that this is a feature that distinguishes working with a mini-company from traditional classroom teaching. The students I interviewed speak of excursions to companies and of having mentors out in real-life workplaces. This helps the students to perceive the work they are doing as something important and valuable because they can see the meaning that it has. A student in Latvia comments:

*... yeah, the feeling that you, you have to do the real work. That gives the, erm ... I don't know, a preview how it will work in a real company or something like that.*

She says that working with a mini-company is a kind of foretaste of how things will be in real companies during working life. It sounds from this as though she sees the value of what she is learning through working with a mini-company. This may be because she finds that it provides knowledge and skills that she may find useful later in life. If so, it is reasonable to believe that this is motivational because it is perceived as useful. Another student in Finland reported that she was proud of the product they produced and that the company was not just “pretend”:

*I think it's good that we have some product that we are proud of, because the people ehm that we sell it to, or trying to impress, yeah it's kind of nice that the product is good, we are not kidding or joking or anything.*

This student emphasises that the product is not just nonsense. She says it is important that the product is good because they need to sell it for real. To me, this seems to be an indicator that she is motivated and finds the work meaningful because it is perceived as genuine and important.

Bandura (2006) emphasises that in order to be motivated, young people need to commit to a meaningful goal. Based on the comments by these students I believe it appears that working with a mini-company gives meaningful goals to these students and is therefore motivational. As mentioned earlier, I was also given an account of a group that did not seem especially motivated. The teachers in Finland relate that:

*... most of those that quit, they quit early when they found out how much work this is really. So they have like chosen the course because “we don't do anything there, and there are no books” and then after few weeks they realize what is going to happen and then there was no show*

Another teacher confirmed this by telling that they have some students who search for the easiest way of completing their schooling:

*They think like “maybe this is the easy way” and after two weeks maybe they see “no, this is not going to be the easy way” and then they quit.*

As Bandura (2005) suggests, students need to commit to something that they perceive as meaningful and worth mastering; otherwise, they will be unmotivated, bored and cynical. The students described here seem to me to be unmotivated and bored. If we follow this line of thought, there needs to be a turn-around if these students are to go from being unmotivated to being motivated. Working with a mini-company is unlike normal school work. As such, it can motivate many people and contribute to just such a turn-around. However, the fact that this method requires so much work and is risky during the start-up

phase can lead to many students giving up before they get the chance to experience the work as meaningful.

There many of course be individual students who do not find the mini-company working method to be meaningful even when they do give it a chance. The work is done differently from one school to another, but will always entail a focus on entrepreneurship and on running a business. If a student is not interested in this and cannot envisage a future in which he or she may have a need for such skills, it can be difficult to regard the work as meaningful. That will make it difficult to be motivated for the work and a solution may be to give up or to put in a minimum of effort.

#### 5.4.4 Self-regulation

A feature of work with a mini-company is that it demands a great deal of independent work on the part of the students. The work requires the students to manage large parts of their learning activity themselves. Both students and teachers relate that this method of working functions in such a way that the teacher adopts a mentoring role and that students themselves need to ask for help and advice when they need it. The teacher who was functioning as interpreter in Latvia summarises a comment made by one of the other teachers:

*... so she believes she is a coach*

The teachers in Latvia report that their role is somewhat different from in normal classroom teaching. They regard themselves as advisors and counsellors who give the students help when they request it. A teacher in Finland reports that she does not do things on behalf of the students but instead, asks the right questions to enable them to arrive at a solution themselves:

*... I think I see my role that I'm not doing anything for them but I can help them to ask the right questions*

The other teacher in Finland relates that this is different from other courses they teach:

*... yeah ... and, and, and this is basically the fundament or difference between a normal academic course and this one.*

My impression after speaking to several students is that managing themselves feels good and is motivating. A student in Finland says that:



*... for the first time we had something like our own, and like we were the ones who could do the decisions and all that. We had the power.*

The degree of personal management given to this student, gives a feeling of power that she likes. The way she describes the feeling of having this power seems self-confident. This suggests that the degree of self-management provided this student both with motivation and with increased self-confidence. She says that this is the first time she has had this feeling, which agrees with what was said by the teacher in a previous quote, that this is different from how teaching is normally carried out in the school.

This suggests to me that working with a mini-company can potentially enable the development of self-regulated learning. The students have to manage much of the process themselves, while the teachers function more as advisors. This appears to differ from other forms of teaching in which the teacher's role is more that of leader for the learning process. Bandura (2006) points out that the opportunity for self-management is important if the student is to learn good self-regulation and thus be equipped to tackle a society in constant change. Zimmerman, Bandura and Martinez-pons (1992) claim that if the student develops a strong belief in his ability to direct his own learning, this will lead to higher ambitions and performance. This suggests that it is important to enable the student to develop his self-regulation skills, both in order to become a good self-regulator and because this has an effect on ambitions and performance. Skaalvik & Skaalvik (2014) point out, however, that it is important to be aware that self-regulated learning contains many elements that need to be learnt gradually, and that the degree of self-regulated learning needs to be proportionate to the maturity of the student.

If the students have done little prior work involving self-regulation this challenge, in my opinion, can easily be too great. It is emphasised that students need to have adequate experience of self-regulation and that such experiences should be positive ones, if they are to believe in themselves as potentially good self-regulators (Zimmerman et al., 1992). If the student does not have experience of mastering self-regulated learning, he or she will probably not have an expectation of mastering it on this occasion either. It is also possible that the students have a minimal level of experience and that managing the learning process to such a large degree independently may be perceived as risky and difficult. This seems likely based on what this teacher from Finland relates:

*... some students ... it's a great thing to have that much trust put in you, now you're manage yourself and now your doing this all by yourself, we are just here to help if you need. Of course some students ehhh ... go the other way, they kind of get frozen. "I can't do anything, I'm not given instructions".*

For this reason, more support may be necessary for individual students simply because it is difficult for them to direct such a large part of their own learning. The students will almost certainly be at differing levels of maturity and thus have differing prerequisites for self-regulated learning. This is confirmed by a teacher from Finland:

*... they are at different levels all the time*

On this basis it may appear that students who are well equipped to operate with self-regulated learning will draw benefits from working with a mini-company. Students who are less well equipped for self-regulated learning are in danger of finding that they do not master this work.

### 5.4.5 Conclusion

The main conclusion is that working with mini-companies can enable an increased sense of mastery but can also hinder it. I will be identifying three elements that this study suggests may promote a group's expectation of mastery but which may also act as barriers to mastery for other groups. These elements are as follows: the risk associated with starting a mini-company, the requirements towards self-regulated and self-controlled learning and whether or not the experience feels realistic and meaningful. For the work with mini-companies to be successful in creating an inclusive learning environment, it becomes necessary to adapt teaching in such a way that all students can participate and receive a sense of achievement. This also makes it necessary to apply certain adjustments so that the students receive tasks suited to their situation.

Mini-companies have the potential to create environments in which all the students can participate and gain a sense of accomplishment, thus creating an inclusive learning experience. From what I have seen, the initial starting period appears the most risky and thus may be critical in terms of all students having an expectation of successfully mastering the work of the mini-company. It is necessary to regulate the experience such that no students regard the risk as too great and thus fail to start the work. In my opinion, individual goals can be set for each student so that the associated risk never becomes unmanageable.

Firstly, during the start-up phase of the mini-company, it is important for the teachers to be aware of which students need additional support and the nature of their needs. This is important because the student should attain receive a sense of success during the initial part of the process. As Bandura (1986) warns, failing during the start of a learning process can be very dangerous because it becomes likely that the student attributes this failure to uncontrollable causes. However, if the student experiences episodes of success early in the process it will help a perception that any future failures are caused by elements within their control, thus limiting the chance of this injuring their self-esteem.

Secondly, it appears that the effort put in by the students is affected by how meaningful they perceive working with a mini-company to be. In my opinion, the motivation shown by the students will be affected by how the project is presented and how it is adjusted to the individual's needs. The work performed during a mini-company should be presented so that it enhances skills that are important for the student's future life after school. With this method of working, it also becomes possible for the student to implement their personal interests and skills into their schoolwork. This can be done by developing a business idea that coincides with the student's interests. In my opinion, it should be possible to present the work in a way that all the students perceive as meaningful and thus motivating. Following this train of thought, the teacher's job would be to make sure that the work is presented as such, allowing the student to see the possibilities.

The third element that seems to affect the amount of effort applied by the students, as well as the benefits gained from working in a mini-company, is the amount of self-management required for the type of work. Both the students and the teachers point out that this work requires the students to regulate their learning process on their own, while the teachers function more as advisors. As Skaalvik and Skaalvik (2014) point out, self-regulated learning contains many elements that need to be learned, and this learning must be in proportion to the student's maturity and development levels. In my opinion, it is necessary to survey all qualities the students may have that will enable self-regulated learning, and then adjust the demands of the mini-company to these qualities. The teacher should be actively noting and adapting so that all the students have activities they can expect to master.

I found a group of students who have had a positive experience with a mini-company. They tell of increased self-esteem, a greater willingness to take risks, a sense of pride over having achieved something on their own and a certainty that the knowledge they have acquired will be beneficial later in life. These are attitudes and skills that are in line with the school's agenda within the larger community. Thus, I believe that more time and resources should be applied to researching how this work can be adjusted so that all the students can receive the same experience.

## 6 REFLECTIONS OF TEACHERS` (ESTONIA AND ITALY)

Ingunn Elder wrote this chapter. She studied teachers' experiences of leading creative and innovative processes in close relation to students in mini-companies. The research question addressed was: How do teachers experience working with mini-companies? More specifically, she discusses what teachers regard as positive in their work with mini-companies and what challenges they encounter in their interaction with mini-company students. The Master's thesis project was carried out in Estonia and Italy. Her supervisors were Astrid Margrethe Sølvsberg (supervisor) and Vegard Johansen (co-supervisor).

### 6.1 Selection of participants

In this study, the data are from teachers who work with mini-companies in vocational courses in Italy and Estonia. In Estonia I visited a medium-sized vocational school. The second and third-year students (from age 16 and above) have EE based on JA Europe's teaching model for mini-companies. Selected groups run their own mini-companies throughout an entire school year. During the 2016/17 school year, some 90 students were participating in mini-company work. In Italy, I visited a large economics-based vocational school. The students at the school were mostly within the range of 14-19 years old. All the 4th-year students (17-18 years old) participate in mini-companies at their school.

The individual focus groups that I interviewed in both countries consisted of teachers working at the same secondary school. All the teachers were experienced in vocational studies and with mini-companies. In Estonia, I performed a focus group interview with seven teachers, all of whom had worked with mini-companies that year or the previous academic year at the vocational school. In Italy, I performed a focus group interview with five teachers. The five teachers who participated in my focus group interview each have responsibility for one class and one mini-company for the current year.

### 6.2 Research focus

My hope in this study can shed light on aspects that teachers regard as stimulating and challenging in working with mini-companies. The issue addressed by this study is thus: How do teachers experience their work with mini-companies? The goal has been to look for patterns in how teachers describe success in mini-company work and what aspects of their encounter with the students they regard as challenging. I regard the study as having findings that suggest solutions for how the school and the teachers can meet and handle the challenges that they describe encountering.

### 6.3 The ability to detect blind spots and lead through Theory U

Establishing a mini-company is a creative and innovative process that takes place throughout one school year (Johansen, 2018). The students' work demands that teachers are open to new ways of thinking, often on subjects with which they are not very familiar, or where there are no established methods or recipes. Teachers are challenged to be supportive and curious about the project that develops along the way. Darsø (2010) claims that an ability to think differently and outside assumed expectations requires training, because we are used to suggesting solutions related to the instructions we receive. According to Scharmer (2011), a person can change his thinking patterns, and therefore systems, if he is conscious of his own attentiveness. In order to change personal practice, Scharmer (2011) states that it is necessary to develop self-awareness and expand our own blind spot. The blind spot is a place within or around an individual – that place where consciousness and intentions are created. The blind zone is the area of which we are unaware in our own inner social field, in experiences and in social interactions with other people. It is not what a leader does or how it is done that makes a difference in how challenges are met and dealt with; it is the inner place from where actions originate.

Scharmer (2011) claims that there are two sources of learning; learning from past experiences and learning that is drawn from the future as it develops. The first is the most common type and forms the basis of the majority of learning methods. Learning from the emerging future is an unfamiliar learning method. If we are to learn to cope with the challenges that a complicated future provides, we cannot act based exclusively based on experiences.

Working with mini-companies demands that teachers be both a driving force and passive; a dilemma, according to Ask (2014), with which teachers must learn to cope. In a process such as a mini-company, many teachers may fear a loss of control over their teaching if they cannot see the outcome. According to Ask (2014), the experience of not having an overview may explain why some teachers are hesitant to introduce more EE in school. Working with mini-companies is about showing one another trust; teachers must learn to relinquish responsibility in order for their students to learn to take responsibility. The key to leading through what Scharmer (2011) calls Theory U is changing the inner space from which actions originate, both individually and collectively. The leader must be able to see things from the perspectives of others and trust all the students as participants in the work. Scharmer (2011) refers to leadership as formal leaders, but also as individuals encountering challenges – how one creates change and contributes to shaping the future.

Theory U has four levels: action, thought, feeling and will. Scharmer (2011) emphasises the individual's personal skills of letting go and accepting what is new. Opportunities exist in opening for and acting on what the future offers, as opposed to acting from previous experiences. In this way, change within a social field can occur and it is possible to discover one's own creative inner force. It is necessary to identify the source from which one acts to

lead oneself or others through a creative and innovative process. Scharmer illustrates this in terms of the ability to see the process as a blank canvas to be filled, rather than focusing on the finished painting/result, or on the process alone. Through opening up, being inquisitive, listening to others, examining, supporting, being curious again and by being patient and allowing people to find things out on their own, we can contribute to the development of others and ourselves.

According to Scharmer (2011), it is necessary for a leader (in this case a teacher) to be able to discover himself. Darsø (2010) suggests that a group does not need to go through all the levels in the U-model, but the leader should be attentive to the group with which he is working and be able to make assessments from group to group. Theory U can be useful for seeing where one is, as well as being an aid for leading others. According to Scharmer (2011), once a group has accomplished change in its social environment and acts based on future possibilities rather than experiences that group is brought closer together and the individual can experience significant occupational and personal triumphs.

The highest level in the U-model is what Scharmer (2011) calls downloading. He explains this process in terms of how an individual normally perceives himself or the world around him. Normally an individual confirms his own usual opinions and does what he has always done, without considering what he is doing or why. At the highest level of U, individuals are not particularly open to new perspectives, nor to discussion or reflection.

In the level below, previously experienced knowledge is suspended and we open up to seeing with new eyes through new, additional knowledge. This ability to see with new eyes can be occluded by one's inner voice of judgement (VOJ).

At the third level, the individual reflects over his own blind zones and previous concept of abilities, allowing a view of former knowledge in association with new knowledge. Personal understandings are transformed in their encounter with the inner voice of cynicism (VOC) which can try to trick the individual into a distancing that prevents further examination of personal blind zones.

The bottom level of the U model describes creative presence, where new possibilities appear in a larger holistic context than at earlier levels. The voice of fear (VOF) can create resistance in an individual, making them unable to let go of the familiar and enter the new and unfamiliar. Leading through different levels will demand that an individual is conscious of personal inner resistance and fear and that they manage to convince those they are to lead that they are open in mind, heart and will.

According to Scharmer (2011), as many as 90% of teaching resources are allocated to downloading and reproducing old knowledge without self-reflection. The remaining 10% are mostly used on practice and training based on the 90% portion. Scharmer (2011)

challenges schools to alter their practices in the direction of teaching methods that are in touch with the world at large, so that children to a greater degree can discover their own authentic sources of creativity and awareness.

Scharmer (2011) states that in order to guide children into the future, teachers must move through four different fields of attention: 1) At the downloading level, the field of attention is created from what one is accustomed to, and one listens as I-in-me. 2) At level two, the mind is open and one listens as I-in-it. 3) At the third level, the heart is connected, and one listens with engagement as I-in-you. 4) At the fourth level, a field of attention is created in which one understands from one's innermost place, and listens as I-in-now. Listening with an open heart will enable the replacement of private agendas with a worldview as it appears to the perspectives of others (Scharmer 2011). Leading an innovative and creative process like a mini-company requires the teacher to make contact with his own sense of wonder and to integrate his own head, heart and hand in the development process together with the students.

Building a real and deep relationship with other people enables the sharing of social fields by means of what Scharmer calls presencing. Presencing does not only connect us; it also connects us to ourselves (Scharmer 2011). The lowest level of the U model is the level at which one lets go and creates the connection required to receive the future. Scharmer uses the term "I-in-now, about creating a sense of belonging with a future that needs us, and can only be brought about by us" (Scharmer 2011).

I suggest that teachers might be able to change their teaching from 90% instruction and reproduction (Scharmer 2011) towards providing the students with support to enable them to solve dilemmas through active exploration, personal reflection and through discovering new knowledge themselves. Ask (2014) also describes how this can occur through EE, in which mini-company is the most common method. She claims that through EE, students are moved from passive action to active action and that they develop the entrepreneurial skills that individuals need in their lives.

## 6.4 Findings

Based on the research question of how teachers experience their work with mini-companies and an analysis of the data material, I have devised the following categories: Personal growth; interaction relationships; and organisation.

The category of *personal growth* describes how teachers believe that working with mini-companies contributes to personal growth for themselves and for their students. This category describes two aspects of personal growth. One aspect is concerned with how teachers experience their work with mini-company as contributing to their own personal growth. Several teachers state that they find working closely with their students to be

motivating and that they learn a lot from their students through this form of teaching. Another aspect concerns the way teachers describe how their work with mini-companies is significant to the students' personal growth.

The category of *interactional relationships* describes interaction relationships between teacher and student in mini-companies. This category describes two factors regarding interaction relationships in mini-company. One factor describes how the teacher strengthens students by awakening the individual's interest. The teachers describe how they build relationships with the students and how they guide groups in the collaborative development of the group mini-companies. Another factor concerns how the teacher's role changes when working with a mini-company, and how the teacher can take a mentoring role in interaction with the students in the mini-company.

The *organisation* category describes what teachers identify as challenging in relation to the organisation of teaching, as well as in relation to cooperation with other mini-company teachers. The category describes two factors regarding organisation and cooperation. One factor is concerned with statements relating to challenges described by teachers in relation to how mini-company is organised for the students. Another factor concerns how teachers reflect around the need for cooperation and knowledge sharing between teachers.

#### **6.4.1 Teachers' personal growth**

The teachers found that working with mini-company contributed to their own personal growth, irrespective of whether their experience of working with mini-company was short or long. Several spoke of a feeling of mastery and motivation when they worked closely with their students through the innovative processes of mini-companies. My interpretation is that the significance of motivation for working with mini-companies is an important finding in the data material. What is particularly interesting is that motivation was varied at the start of the work. Some describe initially feeling inner motivation and engagement for this type of teaching, while others explain that they were externally directed to work with mini-company. Several teachers describe how working with mini-companies during the year affected their motivation for mini-company, as Ryan and Deci (2000) show in their self-determination theory. Two teachers describe their starting point for teaching mini-companies in this way:

*For me personally, it was a choice I made (to teach mini-company). Because I think this is a real way to learn about what life is like outside of school.*

*I was not personally interested. I was selected as group leader and to support the students. I did not know anything about mini-companies, and I felt like I was going into this with a bag over my head.*



*I did not know anything when I started, and now I feel like it is absolutely fabulous, it is so exciting, I really want to do this.*

The teacher in the first statement describes how he was interested in teaching entrepreneurship and mini-companies. He describes how mini-company seems to be a genuine way to learn about the real life outside school. During the interview, I noticed that this teacher was concerned with teaching in a way that stimulated a great deal of student activity, which Frøyland (2016) highlights as a qualitatively good way to teach. Another teacher describes how she initially felt external motivation, imposed on her by others without her being interested or engaged in working with mini-company. The teacher describes being externally controlled and nominated to lead groups of students in mini-company, relating that when she began she felt as though she did not know anything about the subject she was supposed to teach. In the last of the above statements, the same teacher describes how her motivation for working with mini-company changed from externally controlled to internally controlled motivation. This type of change is described by Ryan and Deci (2000) as a valuable motivation process: through self-reflection, she changed her attitude and her own understanding of her teaching work.

A third teacher told me after the interview that she most enjoyed teaching the adult students, because she felt that they were the most motivated and interested in her classes. She also taught younger students, who she tended to describe as harder to teach because they were unmotivated. I interpret her motivation as related to her preference for teaching individuals who are already internally motivated, rather than changing her perspective to see the opportunity to influence motivation amongst the unmotivated. I conclude that by means of relational-ethical reflection (Løgstrup 2010), this teacher could have chosen to regard the younger students as an exciting group to teach, offering an opportunity for her to change the students' inner motivation (Ryan and Deci 2000). Lindseth (2014) emphasises the importance of a helper – in this case the teacher – being aware of what others are expressing, especially when these concepts are difficult to understand. A teacher's most important task is to help all of his students to learn. According to Ryan and Deci (2000), a teacher's ability to enable students to experience teaching autonomously affects a student's capacity to alter his own motivation and attitude toward the teacher.

In one of the focus groups, some of the teachers had experience as entrepreneurs outside of their teaching jobs. All but one teacher had made a personal choice to teach mini-company. In the other group, most of the teachers told me that they had been nominated to teach the subject. That group had a minority of teachers with previous experience as entrepreneurs themselves. Here, two teachers explain how their work with mini-companies changed them, irrespective of whether they were internally or externally motivated at the commencement of the work with mini-company – or of whether they had previous entrepreneurship experience:

*I feel like I get in touch with my students in a very special way when we work on the mini-company, and that gives me so much on a personal level that I will gladly spend my free time on it as well [...] we have fun together.*

*It's easier for me, because I'm not the head of the business or the advisor for the businesses. I'm just a mentor and supporter of the businesses. And I especially help the students I know well from before. Perhaps the fact that I don't hold all the responsibility alone makes me feel that this is great fun for me on a personal level.*

The first statement came from an experienced mini-company teacher, while the second statement came from one of the teachers who was selected to work with mini-companies the previous year. To me, both statements are about the importance of feelings of belonging and competence for the teacher's motivation to teach a mini-company, and how the teacher experiences mini-company autonomously. Assignments are customised so that teachers experience mastery (Bandura 1989, Johnson et al. 2000) and joy in a close relationship with the student group. Both Ryan and Deci (2000) and Scharmer (2011) identify the ability to create joy in a work situation as an important source of motivation for the administration of creative and innovative processes.

In their work with mini-company, teachers explain how they are challenged to go through innovative processes together with their students and describe how the teacher can support each student through various phases, as Scharmer describes it in Theory U (2011). Teachers in both countries explain that they find it meaningful to be able to learn from and with their students through the processes of a mini-company. Mini-companies originate from student ideas and interests, which means that students can often have more knowledge about the theme of an idea than the teacher does. Below, I present statements regarding how teachers describe the experience of being the one who learns from their students:

*Because I can learn something new, and the students love to teach something to their teacher. I think it is something students like: to teach the teacher." Continuing: "Ahh, it is the best part of being a professional teacher!*

*"Sometimes I know more about what they are going to teach me, but I try to pretend that I don't know that much. The students learn better by teaching both me and others. And often, I feel like I really do learn something, because the students know more about their interests than I did to begin with.*

*My role becomes different than that of a normal teacher, because I'm more equal, I'm one of them. I've never communicated as much with my students as I do in the mini-company.*

In the first statement, the teacher describes her experience of the students' enjoyment of teaching and how she herself enjoys learning from them. I interpret her statement about the

best part of being a teacher as conveying something of her inner motivation (Ryan and Deci 2000) to interact with her students in a reversed role. Several teachers in both countries say that they experience their role as teacher to be different when working with mini-company. They find it valuable to learn from their students and they feel like equals in a team with their students. I draw a connection between these statements and the teachers' ability to open their minds, hearts and will to lead others, as Scharmer (2011) describes in Theory U.

Another teacher describes how he was challenged to work with an idea for which he and the students did not have a theoretical background in advance. The group discussed which possibilities were inherent in one student's idea and the teacher describes how he and his students, as a team, explored and learned together:

*It's been very interesting, because normally I'm used to working with concrete and bricks. But working with make-up is a little strange, and totally new to me. Not just to me, but to the students too. They are also used to working with concrete and bricks. I thought it was a very interesting idea, and it was concocted because we have beehives right outside the classroom. One of the girls wondered how we could use the beeswax. Together, we started searching online, looking for ways to make make-up with beeswax and olive oil. Eventually, we got in touch with two factories close to here that produce make-up with natural ingredients. We understood how hard it was to produce, but managed nonetheless to cooperate with these companies. Both companies thought it was an important way for the students to have an experience of real working life, and they really wanted us to achieve our goal.*

This teacher describes the possibilities that exist in being open, and how he as a teacher enjoys developing something totally new together with the group of students under his tuition. The same teacher described in other statements that he found it difficult to get everyone interested, but that he wanted to be a friendly leader for his students; a leader who could help all the students reach their goal together as a group. The process the teacher describes in the above statement is, in my view, a good example of a U process (Scharmer 2011). The group was in the middle of that year's mini-company process when the interview was conducted, and the teacher describes how they are on the way through the U's various levels (Scharmer 2011) and how he as a teacher helps his students by being open to their new discoveries and by learning together.

One teacher said that seeing a student's strengths (Løgstrup 2010) gave him a chance to succeed and show what he knew. She went on to discuss how that experience became important for the teacher's feeling of mastery and enjoyment in her work with mini-company. Below, she explains how her own experiences with mini-company have stimulated change in her teaching style as a mathematics teacher.

*It's interesting, because the most normal method in mathematics is that the students have to find the answers, but now I'm not as interested in knowing the answers as in knowing how the students have reached them. In their own way.*

Through reflection-on and in-action, I take this to mean that this teacher has changed the way she reflects-on-action in the subject she has taught for 20 years (Schön 2000). She challenged a student to play a role in which she knew he could experience mastery. This teacher was herself nominate to work with mini-company, where she experienced a major personal development that changed her role as a teacher. The teachers describe how they experience personal development in work with mini-company, and I found that all 12 teachers expressed enjoyment with teaching mini-companies. Mini-company is a method in which teachers are given the opportunity to make close connections with their students and in which they can contribute to the development of individual students' strengths (Waaktaar and Christie 2000).

#### **6.4.2 Students' personal growth**

Several teachers describe how their work with mini-company contributes to personal growth on the part of their students. The teachers express the view that working with a mini-company provides unique possibilities to awaken student interest on the basis of the students' strengths and interests in working with mini-company, and that this contributes to personal growth for the students. Two of the teachers express it in this way:

*I am completely certain that everyone has something special about them, their strength – independent of whether they are a teacher or a student. These strengths can be expressed (through mini-company), not all students are good at mathematics, but his eyes lit up when he received recognition for all his work (in mini-company). What can make them feel better? It is this which is very important – that I as a teacher see and support them.*

*I feel that mini-company gives students the possibility to be themselves and choose to work with something they enjoy. So, if a student enjoys drawing, they can choose to work on the design of the project. Or if a student is more of a leader, they can choose to be the leader.*

These two statements describe the positive opportunities the individual student is provided through working with a mini-company. To me, their statements suggests basing teaching on the strengths of the students (Waaktaar and Christie 2000) and that this is related to individual students' experience of authenticity and skills in the mini-company. This is something that Deci and Ryan (2000) highlight as important for motivation to learn. In these statements, the teachers are describing their own key roles in seeing their students in a way that allows them to experience mastery. This is similar to how Løgstrup (2010) and Lindseth (2014) describe a helper's positive influence on a meeting. The teachers also seem to be describing a form of jigsaw method of collaborative learning, of the kind

described by Johnson et.al. (2002) as a pedagogic method that the teacher has an opportunity to organise in such a way that each student can experience themselves as skilled and significant in their interaction with others (Ryan & Deci, 2000).

One of the teachers described how he works with individual students, taking them out of their comfort zones so that they can rise to challenges and dare to do more. He described how he was made aware of the students who had ended up as outsiders and how, through building relationships with them, he helped to expand each individual's leeway for action:

*I realised that usually, only a portion of the class is really involved. And the others are somewhat sidelined. So eventually, I became more concerned with getting those who fell off, back on – how to get them involved, too.*

*...that I sometimes have to force and push a little, within limits, so that they can overcome their difficulties. I really have to know the students and be able to assess whether they are receptive for that kind of pressure. For some students, it might have the opposite effect if the teacher insists too much.*

This teacher describes how he has reflected-on-action (Schön 2000) in relation to how he engages each student by means of the way he sees the individual. In my interpretation of his statement, he is the key to helping each student become involved in the mini-company – which, as Lindseth (2014) explains, is important in order to help. According to Lindseth (2014), the student's comments should make an impression on the teacher in the moments that are important for the student, which demands that the teacher is open and attentive to the student's comments here and now.

Several teachers described the task of getting all the students to participate equally in mini-company work as challenging. When I asked teachers to describe their experiences with changing students' participation and attitudes towards working with mini-company, they described their experiences in various ways, as shown in the statements below:

*He started out doing little, but during the spring, when the mini-company ended, he was the best at his speciality. He was brave enough to give advice to others, he expressed his opinions and he began to communicate.*

*These boys, who started out as very shy, got so much self-confidence through the project (resource for a business affiliated with another study).*

*She is very shy, but when we were going to select a representative for the class, the others wanted her to have the opportunity because she had worked so hard on this project. But she is a little shy and afraid. There will be an opportunity for her to overcome her shyness.*

In these statements, teachers discuss how experiences with a mini-company can contribute to feelings of mastery for the students. They describe how they have challenged their students to stretch themselves and to dare to accept invitations when the teacher and/or their classmates have shown trust that a student can master a situation. The teacher who described the changes in the students in the earlier statements explained how her own change of attitude towards mini-companies was closely related to her contribution towards increasing those same students' self-confidence (Waaktaar and Christie 2000). Her statement tells how she noticed her very shy and cautious student experience growth through the experience of mastery, a sense of belonging and her feeling of competence (Ryan and Deci 2000). I interpret the third statement as a description of how the support of the other students can help an individual overcome her shyness and dare to step forward, which Johnsen et al. (2000) emphasises as important in cooperative learning.

### 6.4.3 The teachers strengthens students

Several teachers in both countries talked about the challenges they experienced when working with mini-company. All of them were familiar with the challenges of passive students, or those who let others do the work for the whole group. In the statements below, the teachers speak about challenges, but also about possible solutions that they feel are important pedagogical measures for teachers to take:

*They aren't so well integrated, and many of them don't do much. And many of them that do something become angry and irritated at those that don't."*

*This is the hard part of organising and administering. Getting everyone on the same level of engagement. It's easier in small groups, and the teachers have to know how to teach in that manner.*

Here, teachers describe experiencing difficulties in getting everyone interested. At the beginning of the interviews, I felt that they were describing students who chose to step back and let others do the work for them. After a while, the groups brought up examples of times when they had experienced how individuals became involved through relationships and a sense of belonging, recognition and authenticity. To me, these statements describe how the teacher is the one who can ensure that the students participate, through developing a closer relationship with each of them in the early phases of the mini-company process. When the teacher occupies a position where students feel seen and recognised, it can contribute to major changes for individual students who previously have challenged the teacher. Through various forms of dialogue at an early stage in the process, teachers explain how they can follow up each individual student:

*When I delegate assignments and mentor them, I see what the student has done – then I try to look for what they like, and speak to the student, and ask them if they like this or that, or if they would rather have another assignment.”*

*If the assignments are split into smaller assignments and delegated to individuals, it makes the students feel that their work is more important. I had two students who did not participate very much, so I tried to involve them by giving them the assignment of creating the business’s logo. They did a really good job, and began to contribute.*

*One of the boys called me and asked if I was doing it right, saying he thought it could be done differently. That was because I knew nothing about making websites. In terms of communication, it was super.*

*Because they became personally involved, and because it was only those two, they weren’t able to hide behind others’ work. They felt that if they did not do the job, it would fail. Before this, they were very much outsiders, isolated from the rest of the group.*

In these statements, teachers describe how, through close monitoring and dialogue, they organise the mini-company in smaller groups and customise autonomous tasks so that the students can experience mastery, which Ryan and Deci (2000) emphasise as important for feeling inner motivation. By delegating the assignments in a more personal way, the teachers describe how their students experience participation as more engaging. I take this as a positive example of the jigsaw method in cooperative learning (Johnsen et al. 2000). The teacher who relates that one of her students contacted her outside of school also states that she finds it wonderful that the student took the initiative to show his competence in a dialogue with her. I interpret her statement as showing that she is open, available and that she recognises the student’s expertise. Waaktaar and Christie (2000) state that these are important factors in order to feel valued. In the final statement above, the teacher explains what was required to motivate two students to participate in the business. When he delegated an assignment to them that he felt they could master, he relates that the passive students became personally involved, and that they experienced that their contribution was important to the rest of the group. I interpret this as comparable to what Ryan and Deci (2000) regard as a universal human need to experience autonomy, belonging and to feel competent, in order to be motivated. The teacher seem to become personally involved in getting the students on board. And through his relational-ethical judgement at the time, the teacher helped the students by inviting them in a way that made it possible for them to accept the invitation. This is in line with Lindseth (2014), describing how we can demonstrate that we see and recognise another person through waryness. I felt that this teacher was a good example of how cooperative learning through the jigsaw method can be practised, as Johnson et al. (2002) describes.

Scharmer (2011) claims that in order to lead a U process, rather than focusing on the finished painting or result we should be able to see the possibilities that present themselves in a blank canvas, because the future is created as it occurs. Whatever the finished product, the teachers identify the opportunities inherent in the mini-company processes and the act of cooperation as being ultimately the most important thing. Below are some statements that describe the significance of what the group does together.

*Success in each individual mini-company project occurs when the participants trust one another and begin to cooperate and work together. And it is also very important to listen to one another. These factors are decisive to success, in my opinion.*

*I felt that each member of the business felt an attachment to their tasks; that was the key to success. They understood it themselves and it made them happy. A successful business is not just 2-3 people, but a well-functioning team that works together.*

In the above statements, teachers describe how important it is for a group's success that members of the group feel an attachment to their tasks and understand the work that is to be done. I interpret these statements as examples of cooperative learning (Johnson et al. 2002).

In the story below, a teacher describes how hard he fought to work against another colleague's style of leadership:

*I had chosen that class as a mini-company class, and it was the first time I had them. In the class was a teacher, and he decided what everyone did. From 1st to 4th year (upper-secondary school) they had had that teacher. So, each time the students were to do something, they went to their teacher and asked: can I do it so and so, or can I have permission ... Or the teacher would say: no, you can't do that task, she/he is better at it, etc. And that was very difficult, working against another colleague, because it was important that they changed the way they were used to thinking and acting. The greatest success wasn't that we went to the national finals, that was a bonus. The great success was that towards the end of the year, the class became a real group, where each individual could think for themselves.*

The teacher says that he values being able to strengthen the individual student's self-belief and group cooperation. I interpret the quote as a description of the differing styles of leadership of two teachers, as Scharmer (2011) describes the levels in Theory U. As I see it, he regards the other teacher's lack of trust and openness towards his students as contributing to the development of non-independent, near-adult students. I consider the teacher who decides everything for the students to be one who acts on the downloading-level and who listens as I-in-me. The teacher explains in the quote how he managed to change the student group's belief in themselves. By opening up and trusting his students,



he acted as a “midwife” for the individual students and for the group as a whole, as Scharmer (2011) claims can occur when one leads with an open will. The teacher also seems to be describing what Scharmer (2011) shows can occur to a group when it changes its social field and begins to act based on future possibilities rather than past experiences. The group can then be brought closer together and each member can experience personal and work-related triumph (Scharmer 2011).

#### **6.4.4 The teacher role changes in mini-company**

Several teachers describe how they experience their role as teacher as different in a mini-company compared to the other subjects that they teach. In three statements, the teachers describe how they occupy a mentoring role with students in mini-company:

*The difference is that I let the students work in groups, I mentor more (in mini-company).*

*I try to be a friendly leader in my mini-company classes – the teacher is not a leader, but a friend who leads the students towards the completion of their goals.*

*I try to maintain a personal relationship with each of the students.*

In these quotes, teachers describe how they mentor and one describes the experience of leading the students in a friendlier way in mini-company. To me, these statements mean that the teachers value the interplay that exists in group work, and that they recognise each student by building relationships with them, which Lindseth (2014) identifies as decisive in order to help.

According to Ryan and Deci (2000), motivation can affect our feelings and engagement. Several teachers describe how it can be frustrating to feel trapped between two interests. Increasing the acceptance of entrepreneurship as a subject to other teacher, was described as difficult:

*Some teachers are rigid. Individual teachers not want to cut any of their syllabus.*

*We are going to have to work with the frameworks that are in teachers' heads.*

*When you teach normal subjects, you can use group work. But the main difference is that in other subjects you have to teach in such a way that all the students acquire basic skills in each subject by the end of the year. In mini-company, students can do different things; some groups learn lots about marketing, others about sales, financing and economics. In other subjects, everyone has to go through the same syllabus.*

The two first quotes describe challenges that teachers experienced when trying to get their colleagues to see the value in students working in ways more similar to mini-company. The first two statements describe other teachers who were less open to discuss new ways for planning curricula and teaching. In the context of Theory U (Scharmer 2011), these teachers could be considered as working on the downloading-level.

In the final quote, the teacher describes how she herself felt that time spent in group work conflicted with external demands for a common syllabus and teaching basic skills. She describes how external demands challenge her when it comes to making appropriate provision for individual students, which she finds easier to do in a subject like mini-company. Teachers in both countries described how the students in mini-company work hard towards various deadlines throughout the year and that they often had as a goal to participate in regional/national mini-company finals. The students often met outside school hours to work with mini-company. What the teacher seems to be describing concerns her impression that students are put under pressure to achieve results in other subjects than mini-company. I found this teacher to be interested and motivated for the mini-company method; similar to what Ryan and Deci (2000) refer to as internally motivated. The teacher relates that she experienced a dilemma between mini-company and the demands the students were encountering in other subjects, and that in other subjects she focused more on results than student opportunities for reflection and trying things out together with others. I find the teacher's description interesting in the light of Frøyland et al. (2016) and Ryan and Deci (2000) and self-determination theory, in which the quality of education is equated to the individual student's opportunity for active exploration together with others. In Estonia, the school had begun to develop different curriculums that emphasised the combination of theory and practical knowledge across subjects and by introducing entrepreneurial skills in other curriculums.

#### **6.4.5 Organisation of mini-company groups for students**

Mini-company is organised somewhat differently in the two participating countries. Group sizes in mini-companies varied in Estonia, while in Italy it was common practice to have one business per class. All the teachers expressed the view that larger groups were challenging with regard to the level of involvement of all students.

*The main goal is to experience how it is to work as a team, and to understand what they like to do on their own, what engages them, understand how they are to use scarce resources and use their time. In my opinion, it is not just that they learn something about marketing or how a business is organised, or through roles in mini-company. But they learn a lot about cooperating as a team, that they need to work together to achieve their goal. All students should have the opportunity to participate in these kinds of projects.*

The teacher explains his view that each individual student's sense of value in the community is the most important criterion of success both for the individual and for the mini-company. Mini-companies are organized according to a template, and the students have various deadlines throughout the year that must be met in order to succeed. The teacher's role is to support and help the students' feelings of mastery during the mini-company processes. I interpret the statement as a good description of how the teacher needs to teach students to work together (Johnsen et al. 2000) in order to succeed in leading students through a U-process (Scharmer 2011).

Several teachers explain that the organisation of the groups is significant for everyone's participation. In the following statements, some of the organisational challenges become apparent:

*The others are pushed somewhat into the background. And it's really difficult to organise all of the groups in such a way that they are balanced.*

*In my opinion, the group is too large. At the start of the school year, the JA-resource suggested that the group could be split into 2-3 mini-companies, but I wasn't so sure about that, because I thought it would mean a lot of work. But when I consider it now, we should definitely have split the group into several mini-companies.*

In the above statements, teachers describe first how challenging it can be to find a balance between the correct tasks for an individual and their own ability to trust that the students will take responsibility if they are split into smaller mini-company groups. In the second statement, the teacher describes her own reflections, which I interpret to mean that she in hindsight reflected-on-action (Schön 2000) and sees that she could have split the group without creating more work, as she had first feared.

#### **6.4.6 Cooperation and knowledge sharing between teachers**

There are variations between the two countries in terms of how schools organise their teachers' work with mini-company, and to what degree the teachers have time set aside to work together. In one of the countries, there was a tradition of team cooperation throughout the year, although during the previous year they had moved away from prioritising their own team meetings in favour of mini-company cooperation. The other country did not have the same level of obligatory team cooperation. Several people, however, expressed a desire to speak together more about their experiences from practice. Teacher cooperation was one of the themes over which participants reflected in the focus interview.

*We don't have any time set aside for us to speak about our experiences with mini-company. Last year, we had time for this, but not this year.*

*"mini-company, that's something we discuss mostly during our coffee breaks. That's when we can discuss challenges and find solutions.*

*There should be a coordinator who could coordinate so that we could share our experiences. Especially for those of us with little experience. Those of us in our first year probably need more support.*

Such meetings require both formal and informal organisation. Teachers in both countries are describing here how group reflection can be an important step towards developing the individual's practice (Schön 2000). The teachers stated that they wanted time to narrate and listen to each other's experiences of practice in order to expand their own reflection. One teacher describes the significance of being able to talk about her experiences with others in this way:

*I don't know if it is only because of that (she told others about two of her students' success story), but this year my experiences is that many of the teachers are participating in more businesses across subjects, in order to help the businesses with their websites. I find that telling these stories is a really good teaching method; one that can teach and inspire others.*

This teacher describes her belief that telling the story of students' success can affect others' inspiration to dare to take on new challenges. The teacher describes how, by talking about the success stories of others, she experienced that she both affected the students' view of themselves and ensured that others (both students and teachers) were able to see possibilities of which they were previously unaware. According to Rismark and Sølvsberg (2011), cooperation that enables joint reflection is the key to building cultures of learning amongst employees. They emphasise that teachers need time to reflect together and systems that enable knowledge sharing; and that development work based on staff input is an important factor in school development. Schön (2000) suggests that through reflecting-on-action it is possible to recognise repeated situations and contribute to changing the way one reflects-in-action. I interpret the above statement as an example of how reflecting with others and sharing practical experiences can contribute to changing a teacher's reflection-on-action and reflection-in-action.

The findings from this study can be compared with the ICEE project's quantitative findings for the 2015/2016 school year. In the latter, the teachers state that they would find it useful to have more time to talk and learn together, that they find that most students like to cooperate with other students, and that the students enjoy working with mini-companies even though it is challenging and time-consuming work.

### 6.4.7 Conclusion

Several teachers express the view that they find it meaningful to be on an equal footing with their students in the cooperative nature of a mini-company. They enjoy learning together with and from their students. Teachers find it unproblematic for them not to be the expert. In addition, teachers describe that the students can show their individual strengths through mini-companies when the teacher acknowledges and sees the individual. In order to get each student involved, the teacher needs to create autonomous learning environments that build on student skills and sense of belonging. Several teachers find mini-companies a well-suited arena for leading students in creative processes, as Scharmer describes in Theory U (2011). It is my view that the teachers are the key to each individual student perceiving the value of the subject, which is something that the teachers in this study say all students should have the opportunity to do. The method that Johnson et al. (2002) terms cooperative learning can be a pedagogic method that satisfies the interests of students and teachers in their mini-company work.

In order to improve work with mini-company, the teachers describe how they must support their students by building relationships with and customising assignments for each individual student from the beginning of the school year. The way that mini-companies are organised will have an effect on whether or not they can get each student actively involved.

The participants describe how, by organising knowledge sharing between mini-company teachers, the school can support teacher reflection-on and in-action (Schön 2000). The teachers recount that they find it useful to hear one another's stories. I found that teachers in both countries received recognition from colleagues when they shared positive and challenging practical experiences with one another in the focus group interviews.

The students' ability to value and support one another, as Johnson et al. (2002) emphasises, is a cooperation skill that must be learned, and which requires the guidance of a teacher. My view is that for a teacher to be able to help students to open their minds, hearts and will, the teachers themselves must first go through a process of self-reflection to identify their blind spots, as Scharmer describes in Theory U (2011). The way a mini-company is organised is key for the opportunity that teachers have to enable mastery, which again contributes to students' personal growth in the work with mini-company.

According to Waaktaar and Christie (2000), the best help an individual can have to like themselves is to be seen and heard by others. Johnson et al. (2002) describes how, through cooperative learning, students in mini-companies can be helped to feel seen and recognised for who they really are. The students can practise their own awareness in the context of meetings with others, something that Løgstrup (2010) and Lindseth (2014) identify as important in order to help others. Scharmer (2011) claims that groups or individuals that have moved through a U-process are more likely to repeat the practice many times. When

teachers practise seeing themselves and their own blind spots, they simultaneously act as good role models for their students. The teachers have a large amount of freedom and unique possibilities to acknowledge the strengths of individuals through mini-company work and can affect and raise the individual student's awareness in relation to his or her mini-company group.

All twelve participants in this study expressed the view that entrepreneurial skills are concerned with skills for life and that all students need to acquire such skills. At the beginning of the interviews, when I asked if they could share a positive experience, several chose to discuss a concrete result from working with a mini-company, such as a business that had managed to reach the regional or national finals. But when asked to reflect how they experienced seeing their students' strengths in mini-company work, and what they themselves had learnt, the focus changed from being about pride over results. Instead, it became about how the most important success factor for mini-company is the opportunity it provides the individual students who participate. Participants describe how mini-companies provide opportunities for personal growth through practical knowledge; opportunities that the school otherwise does not provide. Scharmer (2011) challenges schools to develop more practical education in order to prepare students for the future and life after school.

It is my view that teacher training in mini-company teaching could contain more knowledge of relationship-building. Increased knowledge in this area could enable teachers to reflect upon their own roles and obtain a greater understanding of what impact they can have on students' opportunities to take part. Teachers need knowledge about pedagogic methods that can strengthen cooperation and increase participation opportunities for all students.

It is important that teachers experience the school administration as supportive, because teachers have differing backgrounds and motivations for working with mini-company. Several teachers describe how they experience increased motivation and mastery by having appropriate areas of responsibility when working with mini-company. I consider that cooperative learning is also transferable to development work in a staff group.

Motivation and knowledge sharing are core findings in this study. In my opinion, a structured organisation of time for reflection between teachers would be able to have a positive effect on the individual's feelings of mastery and engagement in subjects like mini-company. Inspired by Lea Lund Larsen (2015), I would regard it as appropriate to examine in more depth how teachers talk to each other about mini-company. Research by Larsen (2015) indicates that teachers do not use didactic language when describing their own practice, and the study shows that the school could achieve pedagogical gains by a greater degree of general didactic reflection between teachers in their everyday school lives.







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**A multinational study of mini-company experiences:  
Summaries of three master student projects**

This research report presents empirical findings from three master student projects in the Innovation Cluster for Entrepreneurship Education. The field studies were done in January and February 2017, and they focused on students' and teachers' and their experiences with the JA Company Programme (CP). The three areas investigated were teachers' reflections on their role as mini-company teachers, whether mini-company participation can increase students' self-efficacy, and whether mini-companies are a suitable working method for students with special needs.

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