

Internships in start-up companies as  
part of an entrepreneurship  
education

*A phenomenological study of the Norwegian  
entrepreneurship program Gründerskolen*

**MSc in Innovation and Entrepreneurship**

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# Abstract

The present thesis aims to investigate how an entrepreneurship education program that incorporates internships in start-up companies can enhance the learning experience for students. The author examines internship and entrepreneurship theories, as well as learning literature including Kolb's experiential learning theory (1984), Heron's scheme of 'multi-model learning' (1991), Banduras self-efficacy theory (1977), and Baron et al.'s (2010) theory of how vicarious learning can result in some of the same benefits as deliberate practice. The theoretical framework is further explored through a phenomenological study of the Norwegian entrepreneurship program 'Gründerskolen'. Gründerskolen is a Norwegian post-graduate program organised by several educational institutions in Norway, where students travel abroad to work as interns in start-up companies and attend lectures at a host university. The focus of the present thesis is on the program held at the Houston destination in Texas, USA, where all participants are enrolled in a master of innovation and entrepreneurship at a university in Norway.

Using a phenomenological method, sixteen semi-structured interviews were performed to get depth and richness of data. The author simultaneously considers the innovation and entrepreneurship master students, start-up companies and the internship program facilitator to identify 'disconnects' between the groups, and thus recognise how to facilitate greater satisfaction for all parties. Eight students, seven companies and one facilitator were interviewed.

The thesis suggests that there were significant differences to how students perceived the quality of their respective internships, consequently resulting in a notable span between those who gained a higher increased proficiency level in entrepreneurship, and those with a minimal increased proficiency level. It further reveals that a number of internships were of poor quality, due to several start-up companies having bad management skills, lack of structure, in addition to little experience in hosting interns. Students who had prepared clear learning goals prior to commencing the internships, were more likely to communicate better with the hosting company, raise issues when necessary, and take more initiative, consequently resulting in improved quality of the internships.

Furthermore, the thesis suggests that the internships that were perceived of being of higher quality could potentially provide students with deep and robust learning outcomes, as students apply theory to practice and thereby contribute to performance accomplishment and improved technical skills, letting the students learn vicariously. Observation was in most cases, more important for students' learning than the actual work performed in the internships.

The informal learning students were exposed to outside of work in particular through conversation with fellow students, allowed them to get benefits through vicarious experiences, vocational persuasion and emotional arousal in a setting unrelated to both school or work. Furthermore, the inspirational atmosphere that the students absorbed when working alongside entrepreneurs and by living, studying and socialising with other entrepreneurship students triggered affective emotional modes of learning.

Recommendations based on the findings are that the facilitator provides guidance and training for the start-up companies prior to hosting interns. Students and companies should also be educated on the importance of vicarious learning. Other entrepreneurship educations may consider implementing a similar educational model to Gründerskolen to facilitate for students to study in an inspirational and entrepreneurial atmosphere, as it is likely to increase the overall learning experience for the students.

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# Table of Content

1	Introduction .....	1
1.1	Motives of study .....	1
1.2	Limited research on entrepreneurship internships.....	5
1.3	Research question .....	6
1.4	Relevance of thesis for practitioners and academics .....	7
1.5	Structure of the thesis .....	7
2	Gründerskolen .....	8
2.1	Background.....	8
2.2	Program structure .....	9
	Introductory course .....	9
	Host university course .....	10
	Internship.....	10
	Overall teaching methods.....	10
	Kick-off seminar .....	11
	Assessment .....	11
	Summary of Gründerskolen program structure.....	11
	Time and phasing diagram .....	11
2.3	Participants .....	12
	Students .....	12
	Start-up companies .....	12
	Program facilitators at the host destination .....	13
	Overview of interaction between stakeholders .....	14
2.4	Gründerskolen's reputation in Norway .....	14
3	Theoretical framework .....	15
3.1	Different types of entrepreneurship education .....	15
3.2	Learning theory.....	17
3.2.1.	Experiential learning theory.....	17
3.2.2.	Multi-model learning theory .....	19
3.2.3.	Self-efficacy .....	20
3.2.4.	Deliberate practice .....	23

3.3.	Internship education .....	26
3.3.1.	Internship benefits.....	27
3.3.2.	Internship selection process .....	28
3.3.3.	Student, company and facilitator responsibilities .....	29
	Management of expectations.....	29
	Mentoring.....	29
	Emotional expression .....	30
	Type of work and feedback.....	30
	Academic assignments .....	31
4	Research methodology .....	32
4.1	What is phenomenology? .....	33
4.2	How can a phenomenology function as a research approach? .....	33
4.3	Challenges with phenomenology as a research method .....	34
4.4	Phenomenological method used for the present thesis .....	35
4.4.1.	Sampling .....	35
4.4.2.	Collecting data .....	35
4.4.3.	Analysis.....	36
4.4.4.	Use of English in the analyses .....	37
4.4.5.	Backgrounds of the interviewees .....	37
4.4.6.	Students.....	37
4.4.7.	Companies.....	38
4.4.8.	Facilitator .....	39
5	Results .....	40
5.1.	Theoretical and practical understanding of entrepreneurship.....	40
5.2.	Internship structure .....	43
5.3.	Opportunity for observation .....	48
5.4.	Type of work .....	53
5.5.	Students' abilities .....	56
5.6.	Work environment.....	58
5.7.	Matching of students and company.....	61
6	Discussion and conclusions.....	64
6.1.	Application of theory to practice results in robust learning outcomes .....	64
6.2.	Internships needs some structure to be valuable .....	65



6.3.	Valuable internships combines meaningful work and observation .....	66
6.4.	Inspirational environments trigger learning .....	70
6.5.	Informal learning arena .....	72
6.6.	Entrepreneurship students and hosting companies have a conflict of interest .....	73
6.7.	Experience gives internships that are more valuable.....	74
6.8.	Preparation and reflection results in better learning outcomes.....	76
7	Summary and recommendations .....	79
7.1.	Implications .....	80
7.2.	Limitations.....	81
7.3.	Further research .....	82
	References .....	84

## Table of Figures

Figure 1: Overview of Interaction Between the Stakeholders of Gründerskolen .....	14
Figure 2: A Four Stage Cycle of Learning, Based on Kolb (1984), Abstracted from Nieuwenhuizen et al. (2004) .....	18
Figure 3: The Up Hierarchy, Based on Heron (1991), Abstracted from Postle (1993) .....	19
Figure 4: Deliberate Practice Overview, Based on Baron and Henry (2010) .....	25

## Table of Tables

Table 1: Gründerskolen Destinations and Partner Universities .....	9
Table 2: Gründerskolen's Teaching Methods .....	10
Table 3: Gründerskolen Program Structure .....	11
Table 4: Gründerskolen Timing and Phasing.....	11
Table 5: Gründerskolen Houston Students 2014.....	12
Table 6: Interviewed Students.....	37
Table 7: Interviewed Companies.....	38
Table 8: Interviewed Facilitator .....	39
Table 9: Factors and Categories that Influences the Perceived Effects of Gründerskolen .....	40



# 1 Introduction

This study deals with the phenomenon of participating in an entrepreneurship education program that incorporates internships in start-up companies. By examining the Norwegian entrepreneurship program ‘Gründerskolen’ which is taken in conjunction with a master in Entrepreneurship and Innovation at three different universities in Norway, I aim to reveal how Gründerskolen can enhance the learning experience of Norwegian entrepreneurship students, by simultaneously looking at students, companies and the internship facilitator. The first chapter introduces the topic and rationale of the study, as well as provides insights of the research process and the report.

## 1.1 Motives of study

Entrepreneurship is a polysemous term. The word also possess more mystique and transcendence than words like ‘accountant’, ‘lawyer’ or ‘retailer’ for most people. As both an entrepreneurship student and owner of a sole proprietary, I have developed an astute interest for entrepreneurs. In fact, the entrepreneurship literature has often portrayed the entrepreneur as a heroic figure who overcomes a number of obstacles and goes against all odds in pursuit of an opportunity (Souitaris et al., 2007). Entrepreneurs are often associated with people who strive to make society change, are restless and cannot settle for working a ‘normal’ 08:00 – 16.00 job. Through education and by having conversations with several entrepreneurs, I have learned to know many of the challenges and risks that an entrepreneur faces, and therefore admire the ones that try to start something of their own.

A commonly asked question throughout entrepreneurship research is whether entrepreneurs are born or if they evolve through education and experiences. One of the leading management thinkers of our time Peter Drucker, stated “The entrepreneurial mystique? It’s not magic, it’s not mysterious, and it has nothing to do with the genes. It’s a discipline. And, like any discipline, it can be learned” (Drucker, 1987, p.144)

The concept of entrepreneurship intrigues me. I am still not tired of listening to entrepreneurs speak about their journey, motivation, challenges, success and failure stories. Maybe this interest of entrepreneurship is what made it so simple for me to decide that undertaking a maste in entrepreneurship and innovation was the right choice for me. Of course, I have a

dream of one day becoming a successful entrepreneur myself, and I certainly believe that the master degree will help me gain motivation and skills to achieve this.

## **Entrepreneurship in Norway**

In Norway most people can drive a nice car, afford what they want, and live a comfortable life just by working a normal job from 08:00 – 16.00. In many other countries some peoples' motivation for starting their own venture is due to high unemployment rates, or because they want a bigger pay check. One can therefore assume that Norwegian entrepreneurs have a real entrepreneurial drive in order to sacrifice the stable, secure and comfortable life that the Norwegian welfare system provides, and not necessarily the same cultural incentives as you may see in other countries where financial success, may be the strong motivational factor.

Although some academics believe that it is bad public policy to have the government encouraging entrepreneurship (Scott, 2009), Norwegian politicians express the need for more entrepreneurship in Norway to stay innovative and competitive. The Norwegian government's action plan states that Norway shall be one of the most innovative countries in the world and allow for people with courage and creativity to get the opportunities to develop profitable businesses (Handelsdepartementet, 2004). Maybe this is one of the reason why entrepreneurship education is increasingly popular among students and supported by many Norwegian politicians. The Norwegian government believes that entrepreneurship education may stimulate new enterprise creation and small business growth, and thus create new employment opportunities in expanding areas of the economy (Kunnskapsdepartementet, 2009).

Although, there is not a lack of start-up companies in Norway, the problem is that most companies die considerably early. Over thirty thousand new businesses are registered annually in Norway. However, after five years more than fifty percent of these are discontinued (Altinn, 2013). According to Statistics Norway (SSB, 2013) the numbers are even higher in the time period 2006 – 2011, where only three out of ten Norwegian companies survived more than five years.

Some believe that education is likely to form an important part of an entrepreneur's prospective success (Kolvereid L., 2007, Peterman et al., 2003, Kyrö et al., 2008). In the US, the majority of entrepreneurs have higher education, and this education serves as an important

part of the work they do (Shane, 2008). However, education is not always enough. Technologists and other knowledgeable professionals often lack expertise in commercialisation and this can be one of the major causes of firms failing early. One form of mitigation can be to educate aspiring entrepreneurs in these fields.

### **Entrepreneurship education**

Many academics recognise the importance of providing students with skills and knowledge that will help them succeed and in turn boost the economy (Cooper, 2004). Although there is some disagreement whether entrepreneurship education results in more venture creation (Støren, 2012, Fayolle et al., 2006), the Norwegian government nonetheless believes that entrepreneurship education will provide students with the necessary tools to succeed both in small and large companies (Kunnskapsdepartementet, 2009). Students may gain many benefits from undertaking an entrepreneurship education. Training in entrepreneurship gives students the opportunity to use their knowledge and skills in non-traditional ways. In addition it may provide students with incubation resources, important networks, opportunity-identification ability and inspiration (Souitaris et al., 2007). The theories, concepts and techniques that are taught in an entrepreneurship education are also applicable in most jobs and may help students develop successful careers if they chose not to pursue an entrepreneurial path (Cooper, 2004).

### **Challenges with entrepreneurship education**

There are some challenges with entrepreneurship education compared to a traditional business management education. Kuratko (2005) highlights the importance that entrepreneurial educators make sure that entrepreneurship students delve into real problems and issues involved with their ventures: “Students need the exposure to those entrepreneurs who have paid the price, faced the challenges, and endured the failures. We must take the lessons learned from our experienced entrepreneurs” (Kuratko, 2005, p.589). Entrepreneurship is unique in its very nature and requires different means of teaching to educate students sufficiently, compared to a traditional business management education. Kirby (2004) argues that there must be a shift from the emphasis on educating ‘about’ entrepreneurship to educating ‘for’ entrepreneurship. Educating ‘about’ entrepreneurship gives students an understanding of how entrepreneurship affects the economy and the role that entrepreneurs

play in society, while learning 'for' entrepreneurship develops competencies that lead to self-employment and economic self-efficiency. Kirby (2004) explains that educational institutions need to change the process of learning to enable students to develop their right brain entrepreneurial capabilities as well as their left-brain analytical skills.

## **Internships**

Internships and an exploratory pedagogical approach to entrepreneurship education may be imperative simply because this form of education requires unique skills that is not necessarily possible to gain from theory alone. Entrepreneurship education should not prepare students for a career in a set industry or to be employed in large organisations. Rather it should aim to prepare students to start something of their own and it does not have to be limited to a certain industry. Internships may be a good approach to equip students with the necessary skills to achieve this.

Internships come in many different forms and can be paid and unpaid. However, all internships are similar in that a student is working in an organisation over a set period of time with the ultimate goal to learn. Many recommend greater use of internships as a form of experiential education, because it is believed to increase the motivation of the learner, and improve long-term retention of the academic material (Gamson, 1984, Kolb et al., 2001, Palmer, 1987). According to Coco (2000) even the ancient societies must have recognised some of the benefits that internships provide, as apprenticeships are found thousands of years ago. There has been a dramatic increase in the popularity of internships among students, academic institutions and employers over the last few decades. This is likely due to increasing discoveries of the perceived importance of use of internships in education. Taylor (1988) found that by undertaking internships, students could crystallize vocational self-concept and get better employment opportunities. Clark (2003) explains that the most important students' gain from an internship is to learn from experience and to learn to integrate theory and practice, classroom learning and professional experience.

Clearly there are many advantages for students who undertake internships. However, it is not only the students who benefit. Coco (2000) explain that there are mutual benefits for companies and students, as the companies get access to talented students and potential future employees. By advertising internships, firms also market and build their brand name at universities and may attract talented graduates.

## **1.2 Limited research on entrepreneurship internships**

Feldman et al. (1990) explain that although there has been some research done on the benefits that students might gain from internships, there has not been done enough research on how internships should be designed to maximise their utility to students and to their hosting companies. Although there has been a dramatic increase in the use of internships as a pedagogical approach, it is not clear if there are connections between the relevance for students, company and internship facilitators. Narayanan et al. (2010) conducted a literature review of studies on internships and arranged the research based on theoretical base, sample and findings. They found that literature on internships is largely descriptive and anecdotal. Most research was on student learning and other benefits students might gain. They did not find any research simultaneously addressing the roles of student, university and company. The authors wrote a paper with this perspective in mind themselves and found that considering the respective roles of the multiple actors in the internship program is helpful in explaining student satisfaction.

Research on internships as an exploratory pedagogical approach used in entrepreneurship education, is a gap in the entrepreneurship education theory and internship theory. To my knowledge, only one article specifically addresses this by evaluating a program at a university in Scotland, where students engage and work with an entrepreneur on a project over six weeks (Cooper, 2004). Nevertheless, this study only addresses one elective subject at the university, and it is not an internship, although it allows for active involvement with an entrepreneurial company and weekly interaction with an entrepreneur.

While each of the studies done on internships makes an important contribution to the literature, there appears to be several opportunities for additional empirical research concerning internships among entrepreneurship students. In addition, the hosting companies and entrepreneurship students are largely unreached. I attempt to address this in the present thesis. By examining the Norwegian entrepreneurship-program 'Gründerskolen' which is taken in conjunction with a master degree in Entrepreneurship and Innovation at three different universities in Norway, I aim to reveal how Gründerskolen can enhance the learning experience of Norwegian entrepreneurship students, by simultaneously looking at students, companies and the internship facilitator.



There is limited research done on internships in Norway, and thus most of the literature used in the present thesis addresses internships in the US or other countries. Therefore, the theory may not be completely transferrable to Norwegian students even if they undertake internships in the US. However, the general principles should still provide insight and better understanding of the case.

### **1.3 Research question**

The present thesis seeks to contribute to the existing literature on internships and entrepreneurship education by raising the following research question: How can an entrepreneurship education program that incorporates internships in start-up companies enhance the learning experience for students?

In order to understand the success of internships, the dynamic between students' needs, abilities, organisational demands and opportunities, should be examined (Feldman et al., 1990). Companies and students have a different set of expectations about what they hope to achieve from an internship. Students bring a set of skills, attitudes and expectations while companies have their own set of expectations, constraints and opportunities. Consequently, the program facilitator is responsible for finding a good fit between students and companies and minimises frustration that can easily occur on both sides. The present thesis will simultaneously consider innovation and entrepreneurship master students, start-up companies (hosting companies) and the internship program facilitator (Innovation Norway in this instance), to adequately assess the educational experience.

It is important to realise that the present thesis is a phenomenological study of a Norwegian academic entrepreneurship-program that has unique attributes. Firstly, the students examined in the thesis are all entrepreneurship master students and, prior to the internship, had already completed one semester at university studying entrepreneurship from different Norwegian universities and they come from different academic backgrounds. Secondly, the Norwegian students and US companies dealt with cultural differences as the students and the companies are from different countries. Thirdly, all students spent significant time with each other as they lived together and attended a range of social events, during the duration of the stay. Some students also worked together in the same hosting company during their internship.

## **1.4 Relevance of thesis for practitioners and academics**

The present thesis offer contributions to both practitioners and an academic audience. It is relevant to an academic audience, as it provides research on a gap in the internship and entrepreneurship education literature and may help provide new information as well as confirm previous research. It is relevant to practitioners as it may reveal important findings that may help disclose how similar internship programs should be designed and how students and start-up companies should prepare to gain maximum effect from the internships. The thesis appears to be one of the few to incorporate the perspectives of students, companies and program facilitators. By providing these different perspectives, the thesis offers the opportunity to identify differences between the groups. This information could be valuable for reducing potential ‘disconnects’ between the groups, and thus facilitate greater satisfaction for all parties.

## **1.5 Structure of the thesis**

This thesis consists of seven chapters. This first chapter describes the background of the research topic and the research question. Chapter two gives background information about the subject of the phenomenological study. The third chapters presents the theoretical framework developed from existing literature. The fourth chapter describes the research methodology. The fifth chapter presents the findings from the phenomenological study. The sixth chapters discusses the findings and presents overall conclusions. The last chapter presents a summary of conclusions as well as the implications, limitations and further research recommendations.

## 2 Gründerskolen

The following chapter of the report provides the reader with background information on Gründerskolen along with information about the program structure, academic curriculum and teaching methods, and the stakeholders of the program.

### 2.1 Background

‘Gründerskolen’ or ‘The school of Entrepreneurship’ in English, is a Norwegian post-graduate program organised by several educational institutions in Norway. Established almost fifteen years ago, Gründerskolen aims to inspire students to start their own business or work with entrepreneurship and innovation in their careers. The program has grown significantly in terms of student numbers and national and international partners, since its establishment in 1999 when it was part of the Department of Informatics at the University of Oslo. Today, the Center for Entrepreneurship at University of Oslo coordinates and administrates the program.

Although Gründerskolen is an entrepreneurship education, it is not expected that all students start their own business. It is equally important that young individuals with higher education understand the importance of a strong entrepreneurship culture and subsequently may bring with them an entrepreneurial attitude in their future careers. The program teaches technology entrepreneurship and aims to increase students’ chance of success by providing them with relevant theory, experience and networks (Erikson et al., 2014)

All students with a completed Bachelor degree from any discipline can qualify for the program. The program consists of thirty ECTS credits at master level and has three distinct elements; an introductory course on entrepreneurship held in Norway, a twelve-week stay at an abroad destination where students work as interns in a start-up company, and a tailor-made course at a partner university at the abroad location.

The table below lists the current destinations and partner universities.

<b>Work placement location</b>	<b>Partner university</b>
Boston, USA	Boston University
San Francisco, USA	University of California (Berkeley)
Houston, USA	Rice University

Shanghai, China	Norwegian School of Management
Singapore	National University of Singapore
Cape Town, South Africa	Wits Business School

Table 1: Gründerskolen Destinations and Partner Universities

Although, Gründerskolen is a stand-alone program it is also a component of an MSc in Innovation and Entrepreneurship offered at three universities in Norway. The master students undertake the program in the second semester of the first year of their master degree, and the abroad destination is Houston.

In 2014, overall 123 students participated in the Gründerskolen program, compared to only six when the program was established 1999. Since 2006, on average 150 students per year have completed the program. There has also been an increase in the master's degree applicants, which allowed the Houston destination to primarily be reserved for master students in 2013. By including only master students at the Houston destination, the course at the host university can be more advanced as the master students already have completed one semester studying entrepreneurship and innovation. The focus of the present thesis is on the program held at the Houston destination in Texas, USA, with only students undertaking the masters of innovation and entrepreneurship.

## 2.2 Program structure

The next few paragraphs provide information on each of Gründerskolen's components – the introductory course, the course at the host university, the internship, the kick-off seminar and the assessments.

### Introductory course

The introductory course in Norway provides a theoretical understanding of business development, followed by students producing a business plan of their own. There is also focus on research- and knowledge-based innovation as the course aims to give students a basic understanding of innovation processes. Students learn innovation theories and get exposure to case material. The lecturers that are running the introductory course at Norwegian universities

are usually academic staff without business backgrounds. However, the introductory course has many guest lecturers who specialise in a range of topics in entrepreneurship.

## Host university course

In Houston, the course at the host university currently takes place at Rice University and includes about forty hours of coursework. Classes are two nights every week for twelve weeks. In Houston, there is a focus on technology-driven entrepreneurship in America, American venture capital and American patent laws. The lecturers are usually academic staff from the university with a strong business background. Many of them have founded own companies prior to their academic careers.

## Internship

The internship is the main and most important part of Gründerskolen. Students work full-time for eleven weeks in technology start-up companies. The participating companies vary in industry and in size. However, all are relatively small and newly established companies to let students get exposure to innovative problem solving in dynamic and unpredictable environments.

## Overall teaching methods

The overall teaching methods of Gründerskolen are summarised in the following table.

Teaching Method	Introductory course	Partner university course	Internship
Case study work	X	X	
Work experience			X
Exposure to a start-up environment			X
Entrepreneurs who share their knowledge and experience	X	X	X
Real-life assignments for private companies	X		X

Table 2: Gründerskolen's Teaching Methods

## Kick-off seminar

Students attend a compulsory kick-off seminar prior to the placement abroad. The seminar focuses on preparation for the internship and consists of a number of lectures and team building sessions. Students learn about international business culture and creative thinking, and are introduced to several academic articles. The articles cover entrepreneurial theoretical concepts like effectuation, experiential learning and cognitive learning.

## Assessment

Students have no formal examination but have several assignments (both oral and written) as part of the curriculum. In addition, they will submit a reflection report at the end of the internship. The grade is Pass/Fail.

## Summary of Gründerskolen program structure

Course component	ECTS credits
Kick-off seminar and reflection report	5
Introductory course in Norway	5
Internship	10
Course at host university	10

Table 3: Gründerskolen Program Structure

## Time and phasing diagram

Gründerskolen Program	Week of semester																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Activity																		
Introductory Course	■	■	■	■	■	■												
Internship							■	■	■	■	■	■	■	■	■	■	■	■
Rice University Course							■	■	■	■	■	■	■	■	■	■	■	■
Assessments	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

Table 4: Gründerskolen Timing and Phasing

## 2.3 Participants

### Students

As mentioned previously students participating in Gründerskolen are coming from several different academic disciplines. The present thesis is only concerned with selected participants of the class of 2013 in Houston. This class had thirty-four students coming to Houston from three universities in Norway: University of Oslo, Bergen University College and Norwegian University of Life Sciences. The students range from 23 - 29 years of age. Most of the students are between 24 - 26 years old. Students from University of Oslo and Bergen University College have all completed a Bachelor's degree within mathematics, natural science or technology as this is a required specialisation for the entrepreneurship and innovation masters at these universities. Students from University of Life Sciences come from many different disciplines, as there is no pre-requisite other than a completed Bachelor degree for admission to the entrepreneurship and innovation master at this particular university.

University	Number of students	Academic background
University of Oslo	3	Mathematics, IT
Bergen University College	11	Civil engineering, Structural engineering, Industrial engineering, Electrical engineering, Mechanical engineering, Data engineering, Web and mobile services,
Norwegian University of Life Sciences	20	Marketing and sales, Business, Economics, Business Administration, Art, Hotel management, Chemical and environmental engineering, Politics, Marketing, Management, Auditing, Pedagogy, Renewable energy

Table 5: Gründerskolen Houston Students 2014

### Start-up companies

The companies are technology-based start-up companies or other relevant start-up companies. The companies are usually less than five years old and have fewer than ten employees.

## **Program facilitators at the host destination**

Innovation Norway help organise Gründerskolen in Houston, Singapore and San Francisco. In Boston and Cape Town, the partner university also serves as the program facilitator.

Innovation Norway brands themselves as being the Norwegian Government's most important instrument for innovation and development of Norwegian enterprise and industry by assisting Norwegian businesses grow and enter new markets (Innovation Norway, 2014). Innovation Norway has supported the program since Gründerskolen's establishment in 1999. Innovation Norway was at that time called the Norwegian Trade Counsel. They were eager to support an exchange program to foster an entrepreneurial mindset among Norwegian students, and were willing to take the responsibility of organising everything abroad (Erikson et al., 2014)

The program facilitator's responsibilities includes but is not limited to the following:

- Recruiting potential intern-hosting start-up companies.
- Follow-up on companies and students.
- Securing agreement with a partner university at the host destination to provide a relevant course and issue student VISAs.
- Securing housing for the students.
- Arrange at least two social events for the students.
- Be available as the students' main point of contact while abroad.



# Overview of interaction between stakeholders

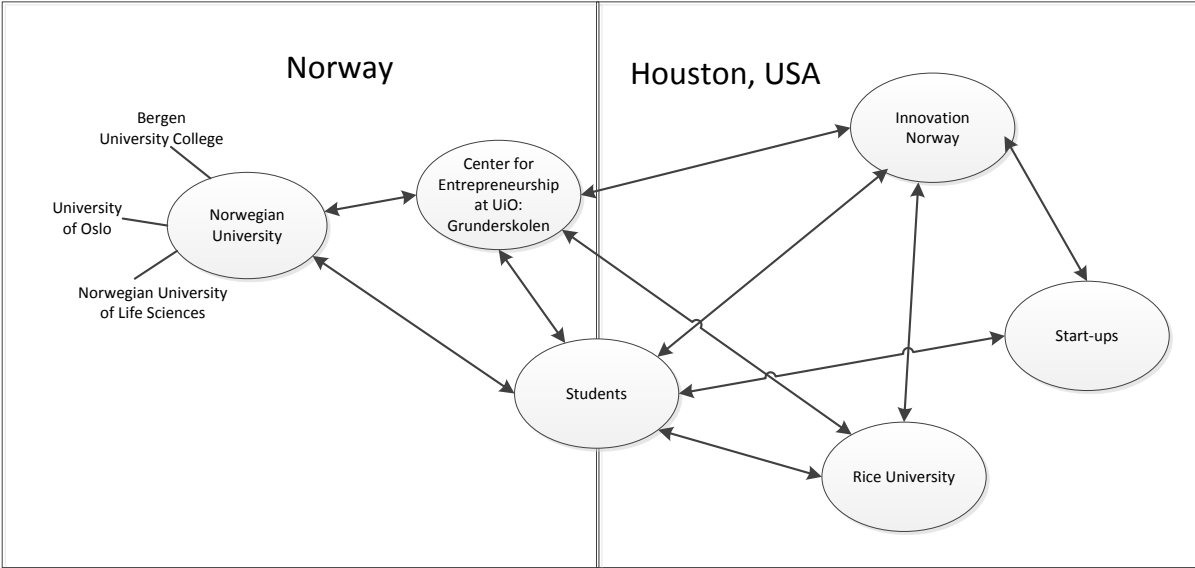


Figure 1: Overview of Interaction Between the Stakeholders of Grunderskolen

## 2.4 Grunderskolen’s reputation in Norway

Grunderskolen has been well received by education authorities and students in Norway. The alumni network has more than fifteen hundred members, which is by far the largest network of its kind in Norway. In 2011, eighty six per cent of the students said that they would recommended the program to other students, and seventy per cent of the 2012 applicants said they knew someone who had previously attended the program. The program has been acknowledged with two prizes. In 2007, the program was awarded 'Best quality of higher education' by the Norwegian Agency for Quality Assurance in Education. In addition, the program was awarded 'Best learning environment' at the University of Oslo in 2006 (Erikson et al., 2014)

# 3 Theoretical framework

The following chapter gives an overview of prior research done on entrepreneurship education, learning theories and internships. Firstly, a brief overview of different types of entrepreneurship education is described. Secondly, experiential learning theory, multi-model learning theory, self-efficacy and deliberate practice is explored. The last part of the theoretical framework looks at internship literature.

## 3.1 Different types of entrepreneurship education

Entrepreneurship education has increased in popularity during the last three decades (Kyrö et al., 2008). It is recognised that entrepreneurship is the main driver for the economy and this has triggered an interest in entrepreneurship research. Research on entrepreneurship has increased steadily since 1986, (Peterman et al., 2003, Gorman et al., 1997, Kyrö et al., 2008), and since entrepreneurship education has become more popular, the research on this field has increased accordingly. The number of colleges and universities that offer courses related to entrepreneurship has grown from a handful in the 1970s (Kuratko, 2005), to over two thousand in 2008 (Fayolle et al., 2008), and the number is likely to have increased even more since then.

In order to design effective entrepreneurship education programs one has to know what types of skills and traits that the program should aim to transfer to the student. The question of how one can educate someone to become a successful entrepreneur is an interesting, but yet challenging question to answer. As discussed earlier most new ventures fail, while only a small proportion are highly successful. By undertaking an entrepreneurship education, many students aim to increase their chance of becoming successful entrepreneurs. However, in order for academics to develop educational programs to achieve this, it is important to understand what it is that makes an entrepreneur successful.

Entrepreneurship education is not as straight forward as many other types of education. Unlike educations like accounting, where it is obvious that students should learn accounting principles and be given assignments that allows them to put these principles into practice and therefore ‘practice’ being accountants, entrepreneurship education has greater difficulties letting students ‘practice’ being entrepreneurs. Åmo (2012) argues that there are three types of

entrepreneurship educations; learning ‘about’ entrepreneurship, learning ‘for’ entrepreneurship and learning ‘through’ entrepreneurship.

Learning ‘about’ entrepreneurship gives students an understanding of how entrepreneurship affects the economy and the role that entrepreneurs play in society. It raises awareness of the importance of entrepreneurship and its relevance for job development and economic growth. Students get general information about entrepreneurship and the curriculum aims to encourage participants to think in terms of entrepreneurship as a career.

Learning ‘for’ entrepreneurship teaches students how to discover new business opportunities and the best way to exploit these opportunities. According to Ucbasaran et al. there are three main dimensions to learning ‘for’ entrepreneurship: business management, decision management and idea development (Ucbasaran et al., 2008, referenced by Åmo, 2012). To achieve this students are provided with functional management competencies such as marketing, finance and management in addition to entrepreneurial skills such as skill-building courses in negotiation, leadership, new product development, creative thinking, and exposure to technological innovation (McMullan et al., 1987). Ability to discover and exploit opportunities is also an important skill, and it has been suggested that this is what separates entrepreneurship from strategic management, economics and other social science disciplines (Venkataraman, 1997, referenced by Corbett, 2005).

In brief, programs teaching ‘for’ entrepreneurship are designed to develop competencies that lead to self-employment and economic self-efficiency (Kirby, 2004). Souitaris et al. (2007) explains that motivating students to actually want to pursue an entrepreneurial path is also an important part of the educational program. In order to raise entrepreneurial attitudes and intention there should be an emotional aspect in the education. They argue that academics should have significant focus on developing the inspirational part of the entrepreneurship program: “Instructors should be trained not only to teach the entrepreneurship curriculum, but also to change hearts and minds” (Souitaris et al., 2007, p.567). They claim that the inspirational part of the program is important because it raises the students’ entrepreneurial intention – and therefore also their likelihood of entering into entrepreneurial careers.

When learning ‘through’ entrepreneurship, students are guided through an entrepreneurial process (Hjorth et al., 2007). Students get to ‘practice’ entrepreneurship. Kirby (2007) explains that by learning through a new venture creation process students may acquire a range

of both business understanding and transferable skills or competences. Learning through entrepreneurship is a good example of active experimentation, as outlined in Kolb's learning cycle (1984), and is part of experiential learning theory.

## **3.2 Learning theory**

### **3.2.1. Experiential learning theory**

Kolb defines experiential learning as “The process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience” (Kolb 1984, p.41). Kolb's learning cycle consists of four steps: concrete experience, reflective observation, abstract conceptualization, and active experimentation. Using an experiential learning approach allows individuals to learn by doing and reflect on actions, and is believed to result in deeper and more robust learning outputs (Cooper, 2004).

While knowledge is a static concept that is activated when it is put into use, either through cognitive mechanisms or heuristics (Corbett, 2005), Kolb (1984) explains that the process of acquiring knowledge is something that results from the combination of grasping and transforming experience. Individuals can learn experientially first through direct experience and then by reflecting on the occurred experience, or individuals can learn vicarious, through observing the action and outcomes of others.

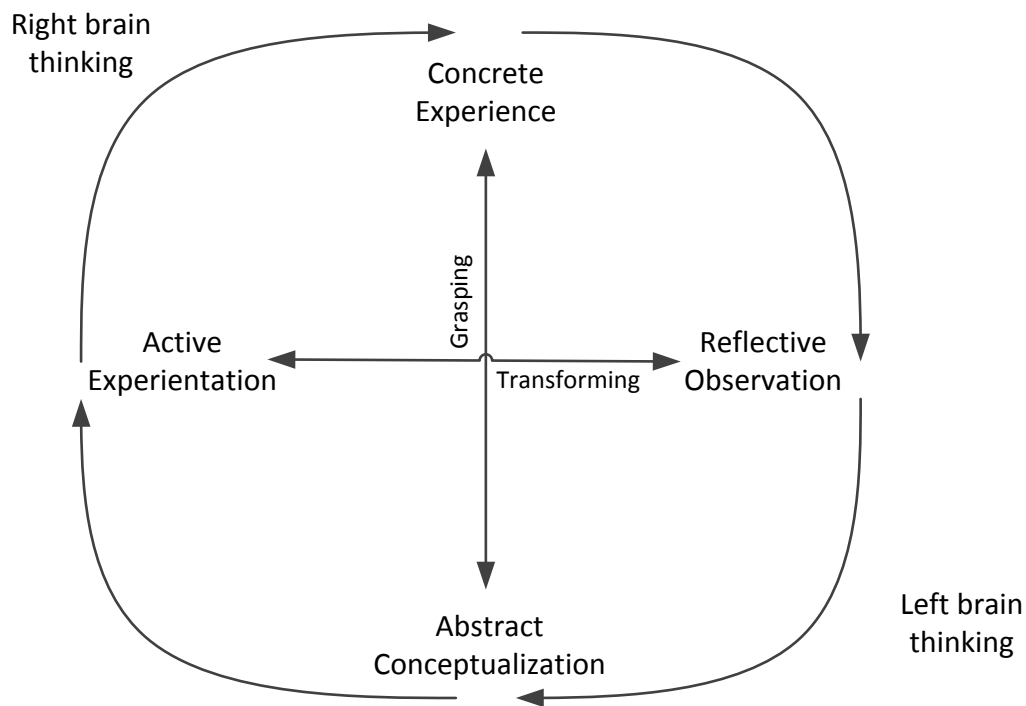


Figure 2: A Four Stage Cycle of Learning, Based on Kolb (1984), Abstracted from Nieuwenhuizen et al. (2004)

Cooper (2004) explains that one of the main differences between a traditional business management education and entrepreneurship education is the use of different pedagogical approaches. An entrepreneurship education program should aim for students to learn skills suited for a small firm. Corbett (2005) proposes that entrepreneurship educators should educate students to understand what learning style that is their strength, so they can search for opportunities that best fit their style as a learner. He also proposes that in addition to teaching students to create business plans and develop ideas, courses on entrepreneurship should focus on the process and how ideas change over time. One way of doing this is to expose students to experiences with entrepreneurship that allow them to grasp and transform experiences in each of the four dimensions of Kolb's learning cycle.

Ardichvili also believes experience plays an important part of successful entrepreneurship (Ardichvili et al., 2003, referenced by Corbett, 2005). He proposes that there is some specific type of knowledge positioning in a relationship between knowledge and opportunity recognition. These are special interest knowledge and general industry knowledge, prior knowledge of markets, prior knowledge of customer problems, and prior knowledge of ways to serve markets. These types of knowledge are obtained through experience and it is not

surprising that also Vesper found that experience is a main factor for why some individuals easily can recognise successful opportunities (Vesper, 1990, referenced by Corbett, 2005).

### 3.2.2. Multi-model learning theory

Although Kolb emphasises that individuals learn from moving through the four phases in his learning cycle, Postle (1993) argues that there are more to the learning experience. However, she believes that adults sometimes are not able or do not wish to attend to the whole of their experiences. She refers to John Heron's four dimensions of learning in his scheme of 'multi-model learning' to understand the whole experience (Heron, 1991, referenced by Postle, 1993). The scheme shows what goes on in the human mind when we learn, and illustrates how the heart can be put back into learning. As Kolb's learning cycle, Heron's first dimension looks at the practical mode of learning by doing. The second model looks at the conventional mode of learning by experience. Postle (1993) describes this features learning 'about' a subject, by making statements and propositions. The third dimension introduces the imaginal mode of learning which refers to learning through the use of imagination. Postle (1993) describes this mode of learning finds expression through envisioning and devising possible futures, but most fundamentally through the intuitive grasps of sequences, processes and situations as a whole. The fourth model, the affective mode of learning refers to learning by encounter and by direct experience. This mode finds expression through the immersion of an experience. Each model is dependent on the other and is arranged in what Heron (1991) refers to as the 'up hierarchy' and is illustrated in Figure 3.

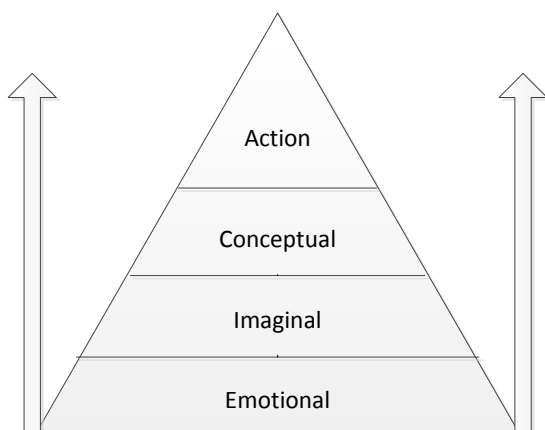


Figure 3: The Up Hierarchy, Based on Heron (1991), Abstracted from Postle (1993)

Postle (1993) describes that the affective emotional mode of learning often is overlooked. She believes the western society often over-valuate the practical and conceptual modes of learning, and that this trend should be turned. She refers to Heron's model and how he emphasises through his model the vital importance of learning through affective emotional mode and imagination and being aware of its contribution to all of humans' perceptions and of seeing this as a whole. Heron believes that knowledge that is well grounded depends on if it emerges out of openness to feelings.

### **3.2.3. Self-efficacy**

Albert Bandura along with Kolb and Heron's finds that direct experience is an important aspect when absorbing new knowledge. However, similarly to Heron, Bandura believes there are more aspects to learning than experiential learning as outlined in his social learning theory. Self-efficacy is central to his social learning theory where he outlines four ways one can increase ones perceived self-efficacy (Bandura, 1977).

Self-efficacy is an individual's beliefs in one's capabilities to organise and execute the courses of action to manage certain situations (Bandura, 1977). Perceived self-efficacy is important to peoples' success because it influences a person's prospect of risk and thereby a person's likelihood of pursuing opportunities that are perceived as threatening. Moreover, the stronger the self-efficacy the more active the efforts. If people fear that a situation exceeds their coping skills, they are likely to avoid it. However, when they judge themselves capable they are more likely to enter into the same situations. Thus, self-efficacy has influence over people's ability to learn, their motivation and their performance, as people will often attempt to learn and perform only those tasks for which they believe they will be successful (Lunenburg, 2011). Furthermore, enhanced self-efficacy may also be generalised to other situations where one believes one has personal inadequacies.

Boyd et al. (1994) suggest that a person's belief in in his or her capability to perform a task, influences the development of both entrepreneurial intentions and actions of behaviour. They believe that self-efficacy is a useful construct in explaining the dynamic process of evaluation and choice that surrounds the development of entrepreneurial intentions and subsequently the decision to engage in entrepreneurial behaviour.

Of course, expectation alone will not produce desired performance if the individual's capabilities are lacking. However, given appropriate skills and adequate incentives, efficacy expectations are a major determinant of people's choice of activities, how much effort they will expend, and of how long they will sustain effort in dealing with stressful situations (Bandura, 1977).

The social learning theory is rooted in many of the basic concepts of traditional learning theory. Although, Bandura believes that direct reinforcement is the strongest way of learning, he does not believe it accounts for all types of learning (Bandura, 1977). He adds a social element to his theory, where he argues that people can learn new information and behaviours by observing other people. Known as observational learning (or modelling), this type of learning can be used to explain a wide variety of behaviours (Bandura, 1977).

Bandura proposes a model where expectations of a person's self-efficacy are derived from four principal sources; performance accomplishments, vicarious experience, verbal persuasion and emotional arousal.

### **Performance attainments**

A performance accomplishment is a source of efficacy information and is especially influential because it is based on an individual's ability to master different experiences. Bandura (1994) believes that expectations of personal mastery affect both initiation and persistence of coping behaviour. The degree of peoples' believes in their own effectiveness and abilities is likely to effect whether they will try to pursue certain opportunities.

When an individual has repeated successes the mastery expectations increase, while repeated failures will lower them. However, if one overcomes the failure it can be turned into a great strength of self-efficacy, because the individual may feel that the most difficult obstacles can be mastered by sustained effort. If strong efficacy expectations are developed after several repeated successes, then the negative impact that a failure will have is likely to be reduced.

The factors that effects the level of performance are:

- The difficulty of the task.
- The amount of effort they expend.



- The amount of external aid they receive.
- The circumstances under which they perform.

### **Vicarious experience**

Vicarious experience mainly leans on social comparison, and thus Bandura (1977) believes it is a weaker and more vulnerable efficacy principal than those that are direct evidence of personal accomplishments. Vicarious experience is related to learning by observing other's failure and successes. Bandura (1977) claims that by observing others one can form a conception of how new behaviour patterns are performed, and the symbolic construction serves as a guide for action on later occasions. Seeing others perform threatening activities without adverse consequences can generate expectations in observers and they persuade themselves that if others can do it, then they will also be able to achieve at least some improvement. Individuals then may improve their abilities by engaging in self-regulatory mechanisms to reach the level of efficacy they believe they should be at. Furthermore, Bandura suggests considerable mental rehearsals of modelled activities. When mentally rehearsing or actually performing modelled patterns of behaviour one are less likely to forget them than those who neither think nor practice what they have seen.

Vicarious experiences are especially effective if people of widely differing characteristics succeed, because the observer then will have a reasonable basis for increasing their own sense of self-efficacy. However, the opposite is also true; seeing someone similar fail can lower sense of self-efficacy.

### **Verbal persuasion**

Verbal persuasion is a popular method to influence human behaviour. Verbal persuasion aims to persuade people that they can achieve what they seek (Bandura, 1994). According to Bandura (1977) this principle is weaker than those who arise from own accomplishments, as verbal persuasion does not allow for authentic experimentation. People might not believe what they are told, especially if it contradicts with their own personal experiences. However, people who are socially persuaded that they possess the capabilities to master a difficult situation and are provided with provisional aids for effective actions are likely to mobilise greater effort than those who are not socially persuaded but also have the aids.

The factors that influence the effectiveness of verbal persuasion experiences are:

- Who the persuaders are.
- The persuaders' credibility.
- How knowledgeable the persuaders are about the nature of the activities.

### **Physiological states**

Different emotional conditions may affect self-efficacy as people rely on their emotional state when judging their self-efficacy. Positive moods enhance self-efficacy while melancholic moods diminish it. Because high arousal usually weakens performance, individuals are more likely to expect success when they are feeling aversive arousal. Bandura (1977) uses an example of people with anxiety who conjures fear-provoking thoughts about their ineptitude, and in this way rouse themselves to elevated levels of anxiety. He describes that emotional arousal is conceived as a drive that activates avoidance behaviour. Thus, in order to strengthen perceptions of self-efficacy, people should take steps to enhance their emotional and physical status and reduce stress levels. Bandura further claims that emotional arousal is important because individuals get feedback on their performance through physiological responses.

### **3.2.4. Deliberate practice**

Baron et al. (2010) suggest that useful insights into why some entrepreneurs are so much more successful in starting and operating new ventures than others are provided by research on expert performance - the nature and origins of consistently exceptional performance. Outstanding performance on a wide range of tasks across many different fields derives, at least in part, from participation in a specific set of activities, collectively known, as deliberate practice.

Deliberate practice occurs when a specific set of activities are performed collectively and consistently, and will eventually result in exceptional performance within a field and enhancements to basic cognitive resources (Feltovich et al., 2006, quoted by Baron et al., 2010). These resources are as Baron et al. states, "general in nature, and can be applied to situations outside the ones in which they were acquired" (Baron et al. 2010, p.58), and are

highly beneficial for entrepreneurs. Baron et al. (2010) compare deliberate practice to individuals who train vigorously with weights and as result, gets increased strengths. Similarly, an individual who engages in highly focused efforts to improve performance will result in enhanced cognitive capacity to process new information and integrate it with existing knowledge.

It is commonly believed that increased performance often is a result of increased experience. However, several researchers argue that the performance only increases to a certain level – or a level that they and others perceive as acceptable – before it plateaus, and some even experience drops in performance after the plateau (Ericsson, 2006, Ericsson et al., 1996, Ucbasaran et al., 2009, referenced by Baron et al., 2010). However, by engaging in deliberate practice one may move beyond the average level of plateau. Since deliberate practice, results in increased capacity to assimilate new information with existing knowledge and skills, it can be related to entrepreneurial learning and new venture performance. Entrepreneurs often engage in specific activities that provide them with cognitive resources. The resources may help them effectively perform important tasks such as identifying opportunities and resources and are related to exceptional entrepreneurial performance.

Baron et al. (2010) outline three enhanced cognitive resources -memory capacity, perceptual skills and metacognition and intuition. Thus, expert performers can adapt under rapidly changing circumstances of time constraint due to increased memory capacity, and make superior decisions by knowing what information that is important and will provide significant value, and what information they should omit due to enhanced metacognition. These enhanced cognitive resources are considerably important for entrepreneurs as they often face similar conditions where decisions must be made quickly with limited information available.

Enhancement to intuitions, or mature intuition results in the ability to draw on large amount of previously acquired information, rapidly and efficiently (Baylor, 2001, referenced by Baron et al., 2010). The enhancement in metacognition also makes it easier to create mental simulations to imagine what will follow from specific actions. In addition, it makes individuals more aware of the capabilities and resources they possess and the ones they do not possess. This may help them avoid overconfidence – again an important resource for innovators as overconfidence is a dangerous and common pitfall for many entrepreneurs (Hayward et al., 2006, referenced by Baron et al., 2010).

Baron et al. (2010) believe that there are certain personality traits an individual must have or obtain in order to engage in deliberate practice. One of these are self-efficacy which has already been explained, but Baron et al. also believes that achievement motivation (Ericsson, 2006, Ericsson et al., 1996, referenced by Baron et al., 2010), and self-control (Baumeister et al., 2007, referenced by Baron et al., 2010) are important.

An entrepreneur usually needs substantial achievement motivation to enter into a new venture as it is not only risky, but also requires significant work and effort. In addition to achievement motivation, self-control is key to success, as it enables individuals to restrain or override one response and thereby making a different response possible (Baumeister et al., 2007). The alternative response, although seeming more unattractive at that point in time, may be the best response in order to achieve success in the future. Training, eating healthy and studying are examples of such responses. It is not surprising that expert performers usually are individuals who have a high degree of self-control (Baron et al., 2010).

In addition to self-efficacy, achievement motivation, and self-control, another specific personality trait is important to pursue deliberate practice and is a significant predictor to successful outcomes of entrepreneurship (Ciavarella et al., 2004). This trait is conscientiousness and refer to individuals that are organised, persistent, capable of hard work and motivated to pursue goal accomplishment (Barrick et al., 1991, referenced by Baron et al., 2010).

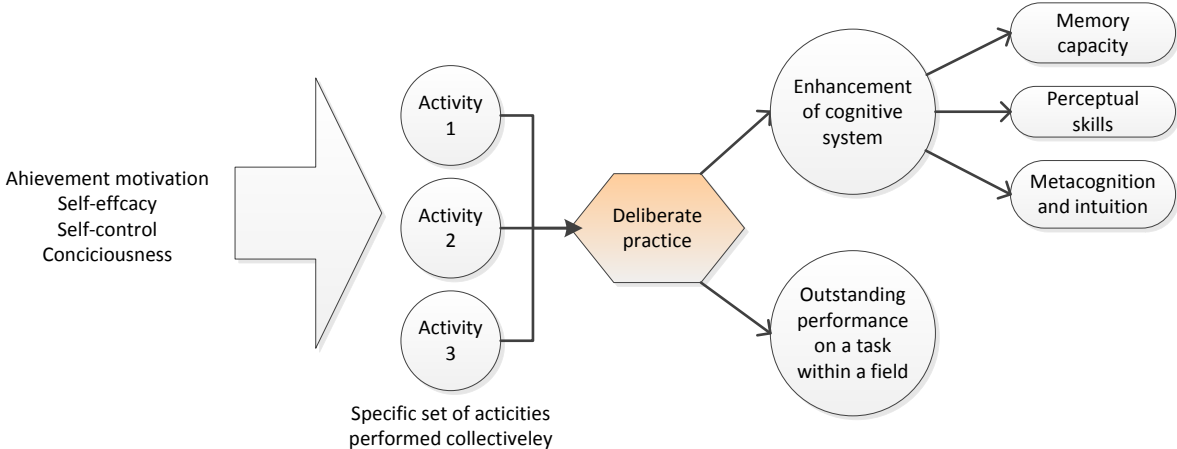


Figure 4: Deliberate Practice Overview, Based on Baron and Henry (2010)

Obviously, entrepreneurs cannot engage in deliberate practice, as they are by definition generalists and not specialists. They operate in an environment that is so dynamic and rapidly changing that engaging in deliberate practice would be close to impossible.

However, entrepreneurs can engage in vicarious deliberate practice. This can be achieved by spending time on careful analysis of highly relevant examples within their domain (Baron et al., 2010). Using vicarious deliberate practice will allow entrepreneurs to build expert performance even if they are working in an environment characterised by time pressures and fast-changing conditions. In fact, Baron et al. (2010) claim that vicarious learning often is more efficient than experiential learning and is highly relevant for entrepreneurs.

Vicarious deliberate practice may also be relevant for entrepreneurship students. Bandura (1977) claims that by providing individuals with carefully chosen information that will help them build accurate mental models and other cognitive resources, the benefits in terms of enhanced performance on key tasks can be substantial. Individuals who engage in vicarious deliberate practice can acquire the benefits observed, in many other fields, by overt deliberate practice.

In summary, vicarious practice can increase perceptual abilities, improve intuition, increase ability to recognise and evaluate opportunities and facilitate the creation of opportunities (Baron et al., 2010). It can also enhance identification of specific resources needed to exploit opportunities. Vicarious practice as part of entrepreneurial learning may shed light on how an entrepreneurship education can be structured to reap benefits such as incensement of cognitive resources.

### **3.3. Internship education**

Internships in start-up companies may be an especially effective approach to engage entrepreneurship students in vigorous practice and a fast way of advancing their proficiency level, as students usually work very closely with the founding team-members of the firm. This type of teaching and learning moves away from the passivity that students get in a lecture hall, and allows students to ‘touch and feel’ the entrepreneurial personality and environment in the start-up. Internships may have the potential of involving students in all four phases of Kolb’s experiential learning cycle.

To the degree that internships are relevant to a student's professional education; practical knowledge about their field of study is gained (Clark 2003). Internships are a natural setting in which students can integrate thinking and doing (McCormick, 1993, referenced by Clark 2003). Students should reflect on their experiences and learning both in terms of experience and knowledge. Schön (1987) refers to this as reflection in action. He argues that advanced thinking comes when students turn their working experience into a dialogue between theory and practice, classroom learning and professional experience (Clark, 2003). Accordingly, vigorous practice within an internship context may be highly beneficial for entrepreneurship students who wish expand their cognitive abilities. Of course, there are also many other important pragmatic benefits to internship programs.

### **3.3.1. Internship benefits**

By undertaking internships students get hands-on experience, insight and knowledge they would not get solely from classroom teaching. D'abate et al. (2009) explains that the challenge for business schools is to develop good academic programs that fully exploits the power experiential-learning experiences may have for students. Appropriately designed internships put students in learning situations where they are encouraged to apply theory to practice, and as a result enhances management and decision-making skills (Clark, 2003). Other pragmatic benefits of internships are that they make the transition from the classroom to the 'working-life' easier, crystalizes personal interests and career ambitions, and increases self-esteem (Taylor, 1988, Coco, 2000). Coco (2000) even portrays internships as a symbol of maturity and competence. He explain that internships helps foster an awareness among students of the constant need for adaptability and creativity in our rapidly changing world. Internships also provide students with an understanding of the similarities and differences of how classroom concepts relate to practical application. Students reap the practical benefits of enhancing their professional skills and simultaneously increase employability and the benefits of becoming 'reflective practitioners' and attaining greater intellectual maturity (Clark, 2003). In addition, Coco points out that on average, interns receive higher starting salaries and more job offers than non-interns. Internships may also be essential for students seeking desirable jobs, as it has been estimated that almost 80% of all American graduating college seniors have at least one internship experience (Feldman et al., 1999, referenced by Zawel, 2005).

Obviously, internships are not only beneficial for the students, but also for the company and the faculty. Identifying what makes the practical experience valuable for the individual student, the supervisor or the faculty member is important to understand how to design good internships (Tovey, 2001).

Cooper (2004) argues that internships is a rich experience for the student and for the company, as learning is a two-way process in work placements. In fact, internship programs are designed to provide mutual benefits to all parties (Piskurich, 1997, referenced by Coco, 2000). The participating company gets the opportunity to screen and recruit potential hires almost risk free (Gabris et al., 1989, referenced by D'abate et al., 2009) and is an opportunity for employers to get inexpensive, highly motivated, productive, competent labour. In addition, they may release full-time employees from routine tasks (Coco, 2000).

### **3.3.2. Internship selection process**

Not surprisingly, companies pick interns who can solve specific needs in the organisation. They also value leadership potential, and individuals with motivation, energy and a winning attitude (Coco, 2000). Students must also choose carefully so they engage in work they find meaningful to maximise the benefits of the internship.

Accordingly, program facilitators are an important factor, in the internship selection process, as they often recruit both the companies and the student. They usually also facilitate the recruitment process. The selection process is critical for both students and companies as it can make the difference between a very successful internship experience and a negative experience.

Of course, a successful selection process alone is not enough to guarantee a good internship experience. In fact, Feldman et al. (1990) found in their study of college retail summer interns that the recruitment process did not play a great role in the outcomes of the internship experience. However, this may be because there was very little variance in how students were recruited and interviewed for these specific internships. They found that the design of the work that the intern perform in the internship, play a more important role in how the internship is evaluated.

### **3.3.3. Student, company and facilitator responsibilities**

There are measures both the student and the company can take to increase the chances of a successful internship. The literature emphasises the following five measures -management of expectations, mentoring, emotional expression, type of work and feedback, and academic assignments.

#### **Management of expectations**

Students' expectations of the job before they start working can influence their later evaluation of the internships (Wanous, 1980, Premack et al., 1985, referenced by Feldman et al., 1990). Students should therefore get realistic job expectations through their own research and by the company to avoid being disappointed. These efforts may result in better decisions about whether to pursue a given internship.

#### **Mentoring**

Mentoring has been identified as a critical element to internship effectiveness (Anson et al., 1990, referenced by Narayanan et al., 2010, Feldman et al., 1999). Supportive supervisors who act as mentors strongly influence internship satisfaction and hence whenever possible, interns should be assigned to supervisors with strong mentoring capabilities. Moreover, Narayanan et al. (2010), recommend to combine some type of formalised mentoring program with internship programs. Tovey (2001) formal orientation programs may help students reap important benefits of experiential learning such as socialisation and acculturation into an organisation

Liu et al. (2011) did also find that mentoring and learning were important factors for the success of internship programs. However, they were surprised to find that mentoring did not have a significant correlation to job satisfaction. Their results showed that learning was a much more important factor. This could be because interns do not expect their relationship with the mentor to last, as their employment is only temporarily.

On the contrary, Feldman et al. (1999) examined the demographic diversity between mentors and interns on international internships, using a sample of 138 interns on a six-month



overseas assignments, they found that mentoring on overseas internships has consistently positive impact on the socialisation of interns. It also affected the amount of learning gained through internships, and on the likelihood of interns receiving and accepting permanent offers from their hosting companies. However, they point out that the more demographically different interns are from their mentor in terms of gender and nationality, the less likely they are to receive task, social, and career-related support.

Although mentoring has been identified as a critical element to internship effectiveness by several researchers, Tovey (2001) claims that even companies with such program in place, seldom offers them to interns.

### **Emotional expression**

Liu et al. (2011) argues that students play an active role in shaping their own internship experiences. They found that students' emotional expression and social activities at work were significantly related to the learning they obtained and mentoring they received in their internships. Skills in interpersonal interaction are strongly related to the degree of mentoring received and the actual learning outcomes. When masking emotions, the chance of learning from co-workers and to be effectively mentored decreases. By expressing emotions and not mask their feelings, students may experience greater learning and an increase in job satisfaction.

Further, social activities at work where the interns were included were positively related to mentoring from supervisors. It seems more beneficial for interns to be emotionally open and honest, proactive in social activities, and not to hide their real feelings. Thus, the companies can contribute to create good internships by nurturing an organisational climate that encourages these positive behavioural patterns of interns.

### **Type of work and feedback**

D'abate et al. (2009) found that students are likely to be more satisfied with their internship if their work significantly affects other people and the organisation as a whole. They suggest that companies give the intern responsibilities and tasks that are of importance to other employees and are part of the organisation's core operations. Interns should also interact with

many employees throughout the organisation. D'abate et al. (2009) also found that feedback was another job characteristic that also influence internship satisfaction. Thus, internships should be designed with both formal and informal feedback mechanisms, which occur frequently.

In accordance to the above, it is important that organisations are aware of the factors leading to internship satisfaction so that they can incorporate them into their internship programs. The company should try to ensure that the work environment is rewarding, have supportive supervisors or mentors, provide training as needed, explain the rationale behind work assignment and treat interns as part of the organisational staff (D'abate et al., 2009, Coco, 2000)

### **Academic assignments**

Supplementary academic assignment can also enhance the educational value gained from an internship. Clark (2003) explains that the most important students gain is to learn from experience and to learn to integrate theory and practice, classroom learning and professional experience. To do this most efficiently she argues that academic assignments should be given to students while they are undertaking the work placement. There are many different assignments that can supplement internships. Some of the tasks mentioned by Clark is writing a reflection report, keeping a daily journal and holding presentations in front of other students about the internship. By engaging in similar academic activities, Clark explains that students learn to understand themselves, their job, their colleagues, and their working environment and this helps build better professional skills and increase success in their internship.

## 4 Research methodology

There are many methodologies one can use when researching entrepreneurship education and internships, however it seems as almost all researchers use a quantitative approach where survey respondents are the key data. I also found there are several researchers who argue that there is limitation in entrepreneurship research. Dainow (1986) conducted a survey of entrepreneurship education literature from 1974 to 1984, and concluded that there was a need for more systematic collection and analysis of data, and a more varied methodology to build a stronger empirical base. Gorman et al. (1997) conducted a similar survey with the same perspective but from the time period 1985 to 1994. They found that since Dainow's research, there has been an increase in empirical market research, especially in the educational processes and structure, however, they point out that there still are methodological limitations. Aldrich (1992) also believes that although entrepreneurship research seems to have been purely reliant on mailed surveys and questionnaires, this is not necessarily always the best way to research entrepreneurship.

Berglund describes entrepreneurship as a “practice-oriented endeavour that requires a sensitive and committed engagement with a range of phenomena in the surrounding world.” (Berglund 2007, p.75). Since entrepreneurship often is recognised as a form of art, some believe that a pure quantitative approach will not be sufficient (Alvarez et al., 2007, Berglund, 2007, Detmer, 2013, Gartner et al., 2002, Cope, 2005). Gartner et al. (2002) argues that substantive issues in entrepreneurship often are overlooked, and that many of the important questions in entrepreneurship only can be addressed through qualitative methods and approaches. Lately, several entrepreneurship researcher have expanded their methodological toolbox. One of these is a phenomenological interview approach (Berglund, 2007, Kakkonen, 2006, Cope, 2005). Gartner et al. (2002) explains that a phenomenological interviews is a good way to address the imbalance of research approaches and argues that qualitative research should not be a ‘special case’ within the entrepreneurship and small business research domain. Cope (2005) argues that phenomenological interviews can be an extremely powerful and valuable methodology that produces an unusual depth and richness of data. This richness and depth of data is necessary to fully understand students’ learning of entrepreneurship and thus, the present thesis uses phenomenology as its research methodology.

## **4.1 What is phenomenology?**

According to Detmer (2013) phenomenology is one of the most important and influential philosophical movements over the last century. Edmund Husserl was the first to introduce the concept of phenomenology in the 1900. Phenomenology aims to focus on the world as given in experience, and to describe it without reference to assumptions or theory (Cope, 2005). One can look at phenomenology as a way of thinking about ourselves. Instead of trying to figure out what we really are in a physical sense, we base who we are of phenomena. Phenomena are experiences we get from our senses. Things that an individual experiences and how the individual senses and enacts in his or hers everyday life is what is real. For example, an object experienced in a dream is just as important as an object seen in real life. It is the significance of the object that is important in phenomenology. Berglund (2007) explains that things do not exist in a phenomenological sense, but is the meaning that individuals attach to it. Phenomenologists do not believe that there is a separation between consciousness and matter, and reality and appearance.

## **4.2 How can a phenomenology function as a research approach?**

As Cope (2005) describes, the aim of phenomenological inquiry is to understand the subjective nature of the lived experience from the perspective of those who experience it. This can be achieved by exploring the meanings and explanations that individuals attribute to their experiences through in-depth interviews. According to Kakkonen (2006) phenomenological interviews can be regarded as an open, in-depth interview where a researcher intervenes and generates, rather than collects the data.

However, translating interpretive experiences that an individual gives is challenging and complex. Gartner et al. (2002) explains that qualitative researchers often get overwhelmed by all the information they get from using this research approach, but argues that this overload is where certain knowledge and wisdom occur. Gartner et al. (2002) even claims they can tell when a researcher involved with entrepreneurs have used a qualitative method, as the knowledge and insights seem to ring more true and clearer.

Phenomenology can also be used more directly to explore what meaningful experiences and feelings that are associated with different situations. Berglund (2007) explains that an

important goal of entrepreneurial research should be to capture and communicate the meaning of entrepreneurs' experiences in everyday life. The same goal can be applied to Gründerskolen students, and hosting companies.

In the role of a phenomenologist, my main task is to investigate the meaning of the phenomenon of an individual's experience of Gründerskolen. The person being observed should ideally be examined in full complexity, from every viewpoint that is experientially conceivable (Kakkonen, 2006).

### **4.3 Challenges with phenomenology as a research method**

As with any research methodology, there are some pitfalls that must be considered by the researcher. Cope (2005) explains that the researcher must be cautious not to impose any rigid or pre-existing framework on the interview process. This represents a methodological risk as participants are given significant control during the interviews. Some academics also question use of phenomenology interviews as it might be challenging to achieve openness from the interviewee. Openness is not something that not suddenly appears, but needs to grow as the relationship between the interviewer and interviewee develops. Some individuals will also sometimes be wary, reluctant or defensive, when telling about their experiences to people they do not know very well. A phenomenology researcher needs to understand the whole context within social action or behaviour to accomplish a search for understanding based on what is apparent in the individual's environment and not on interpretations (Remenyi, 1998, referenced by Kakkonen, 2006)

Nevertheless, understanding the context in the present thesis was achieved without great effort due to my recent strong involvement with Gründerskolen. However, at the same time it also made it challenging to avoid understanding the individual's environment without making any interpretations. I was confronted with two different life-worlds. I was in the entrepreneurship-student's life-world and in the researcher of entrepreneurship-students' life-world. I had to be cautious to separate these two worlds and be only in the researcher life-world when conducting and analysing the interviews.

## **4.4 Phenomenological method used for the present thesis**

In order to achieve results that are an objective description of the transcendental structure of the phenomenon as it is experienced by some of Gründerskolen's stakeholders, I used a phenomenological method developed by Berglund (2007). The method is described by Berglund as a middle ground between outlining the general structure of an experienced phenomenon and re-creating a local experience.

### **4.4.1. Sampling**

According to Narayanan et al. (2010), including all three relevant actors within one theoretical model is an important element in adequately assessing the internship experience. They explain that in the transfer literature, each actor has distinct objectives, and hence they have different expectations to what the outcome will be.

Since the internship is a significant part of Gründerskolen, I looked at the participating parties to the program. In phenomenological methods, statistics is not a concern and the sampling of the selection of interviewees draws on a purposive sampling strategy. I talked to eight students and seven companies who were all participants of Gründerskolen in last year's program. Some of the companies were already planning to have interns in the present year's program. By interviewing participants from last year's program, I could get a sense of how they experienced Gründerskolen and the perceived effects of it, after having almost one year of time to reflect on the experience. In addition, I interviewed the project leader at Innovation Norway that has been responsible for facilitating the program for the last four years.

### **4.4.2. Collecting data**

I used semi-structured interviews to collect the participants' descriptions of their experience. Interviews lasted between thirty minutes to one hour. Most interviews with the companies and the interview with the facilitator, was performed face to face at their work place or at a restaurant. One company was interviewed over the phone. Due to the geographical distance, the Norwegian students were interviewed over Skype with the exception of one who were conducted face to face. All interviews was recorded. Two of the sixteen audio files were corrupted and I had to write out the answers as I remembered them. The structure of the

interviews were slightly different in each case, but some basic guidelines were followed. I did as Kakkonen (2006) and began each interview with an ice-breaking stage. In most cases, this happened over a cup of coffee, as this would make the interviewee feel more comfortable. I started every conversation by asking the interviewees to talk about themselves and their background, because this is something most people are comfortable doing, and it allowed the conversation to flow into the main topics of interest, more smoothly. I let the interviewees talk without intervening. However, I guided participants into topics of relevance and encouraged them to give a full description of their experience. Sometimes, I asked for clarification of details. I tried to avoid suggesting what I was looking for.

According to Kakkonen (2006) the in-depth interviews in phenomenological research is characterised by maximal mutuality of trust, attaining a genuine and deeply experienced caring about interviewer and interviewee. They are committed to joint search for shared understanding. Openness and attempt to construct an environment of trust is important for a successful interview. Since I completed the Gründerskolen program less than a year ago, and are involved with planning and executing the program on behalf of Innovation Norway for the students this year (2014), it was easy to gain trust and a common understanding of the case at hand. This minimized simplistic question and-answer exchange, and the conversation flew freely. However, my involvement with Innovation Norway could influence the interviewees' response, so I made sure to clarify that the thesis was not performed on behalf of Innovation Norway, to make sure that everyone felt they could talk freely.

### **4.4.3. Analysis**

As recommended by Berglund (2007) all interviews was studied closely and broken down into discrete parts with respect to visible changes in meaning. Berglund refers to these discrete parts as meaning units (MUs). As I worked through the list, I cut MUs with similar meanings out of the original document and pasted into a new document with a tentative category heading. Each new MU on the list was similarly either clustered into an existing category, or given its own new category heading. This approach was used to capture specific homogeneous qualities of what was said by the participants. At the end I had dozens of categories and factors. To make the findings clearer and more concise, I clustered semi-overlapping categories and factors. At the end of the analysis I re-read the original protocol while questioning the bases of categorisation to minimise the use of pre-existing theoretical

categories and be true to the participants original expressions. The above method are all based on Berglund's work.

#### 4.4.4. Use of English in the analyses

The interviews with the students and the facilitator was carried out in Norwegian, while with the expectation of one, the interviews with the start-up companies was performed in English. I first made the analysis and the synthesis in Norwegian in order to maintain the expressions relating to their experiences with Gründerskolen as original as possible. I then translated everything into English as I did the analysis. The translation process of the analysis could have caused small changes in the original expressions, but I tried to maintain the original meaning of each expression to my best ability.

#### 4.4.5. Backgrounds of the interviewees

All interviewees are anonymous and the names in the tables below are used as placeholder-names to keep the identity of the individuals unknown.

#### 4.4.6. Students

Name	Age	Gender	Educational Background	Type of internship projects	Number of interns in company
Sam	24	Male	Economics and IT	Market research	2
Mary	24	Female	Civil engineering – structural engineering	Cold calling, Reviewing website	2
Miriam	26	Female	Chemical and environmental engineering, major in wastewater treatment	Shadowing the CEO, Helping with small assignments	1
Simon	26	Male	Hotel management and economics	Office administration	2
Roger	30	Male	Economics	Market analysis, Finance	2
Melissa	24	Female	IT systems	Product testing	2
Lauren	25	Female	IT systems	Marketing	3
Nils	27	Male	Mathematics	Generating reports, Market analysis	2

Table 6: Interviewed Students



Most of the students chose to study entrepreneurship and innovation, because they had an interest for business development and they did not wish to work in their field of study from previous education. Some said that they want to start businesses, while others wanted to learn about innovation. Many pointed out that the placement abroad with Gründerskolen was one of the main reasons for them applying for the program.

All students I talked to are planning to start working after completing their degree. Most describe that although they want to start something of their own, they did not currently have a good business idea, and therefore they wish to work until the right opportunity arises. Most students tells they want industry experience and build a network before entering into something of their own.

The students had very different internships, across different industries, different sizes and different structures. Most students work together with another intern, while one worked alone. Most of the students did not get their first choice of company, but all students got one of their top five choices.

#### 4.4.7. Companies

Name	Age	Educational Background	Role	Type of company	Years company has been established	Year participated	No. of interns	No. of employees
Greg	30-45	Finance	CEO	Smartphone game	1	2013	3	
George	30 - 35	Chemical engineering, Masters in entrepreneurship and finance	CEO	Incubator of start-up companies	10	2013 2014	2 2	10
Oscar	30 - 35	Undergrad computer science	CEO	Mobil strategy and development company	4	2013 2012	4 3	34
Martin	40-45	Accounting and law	CEO	Water treatment	2	2013 2014	1 2	3
Stephanie	25-30	MBA – marketing	Marketing Manager	Accelerator	3	2013 2014	1 2	3
Susan	35-40	PHD - cyber security	CEO	Cyber security	10	2013 2014	2 1	10
Steven	35-40	Computer science	CEO	Energy solutions		2011 2012 2013	1 1 1	3

Table 7: Interviewed Companies

Most of the founders always knew they wanted to start their own companies. Although most of the founders explains that they started their own companies for the fun and challenge of it, one explains he only did it because he needed money to pay for his education. All founders seems to have a strong ability to discover opportunities. They also emphasise the importance of motivation, stress, risk and teams to succeed as an entrepreneur. Most of the companies heard about the internship through friends or business acquaintances.

**4.4.8. Facilitator**

Name	Age	Role	Background	No. of years facilitating Gründerskolen
John	29	Project Manager	Bachelor of ICT/Law	4

*Table 8: Interviewed Facilitator*

Innovation Norway is responsible for running the program on several destinations and has great freedom to organise and structure the program. John is the facilitator of the program for the Houston destination. John is Norwegian but has lived in Houston for the last twelve years

# 5 Results

This chapter of the report lists the results from the interviews. Table 9 sorts the findings into several factors consisting of different categories. These factors and categories influences the participants’ perceived effect of Gründerskolen.

Result	Factor	Categories
Perceived effects of Gründerskolen	Theoretical and practical understanding of entrepreneurship	Theoretical framework
		Practical application of theory in the internship
	Internship structure	Unpredictability
		Preparation for the internship
		Management and the interaction between company and intern
		Ability to leverage other people’s skills
	Opportunity for observation	Involvement in the company’s daily operations.
		Observing American students and entrepreneurs
		Social aspects
	Type of work	Type of work tasks
		Project structure
	Students’ abilities	Communication between company and student
		Capability, willingness, positivity
	Work environment	Inclusive environment
		Key people
	Matching of students and company	The balance of company and student’s interests
Preparation for the matchmaking-event		

Table 9: Factors and Categories that Influences the Perceived Effects of Gründerskolen

The remaining part of this chapter lists the results based on each factor in the order of the above table. Each factor has corresponding findings based on the interviews and where it is appropriate some of those interviewed are quoted.

## 5.1. Theoretical and practical understanding of entrepreneurship

### Theoretical framework

The masters of innovation and entrepreneurship involves a combination of theory and practical-based subjects. The students are provided with a theoretical understanding of

entrepreneurship by attending classes in Norway, preparing them for their stay abroad in Houston. Many of the students describe that they enjoyed undertaking the theory-based subjects during their first semester in Norway because it helped prepare them for Gründerskolen. However, all students admit that they preferred the practical aspect of the subjects, in particular that they were predominately based on real business cases.

All students found that the classes at Rice University were applicable for the work they expected to do throughout their internships. One of the students –Miriam, adds that when attending investor meetings and other meetings throughout her internship she often had questions for the meeting attendees, but that she did not always feel it was appropriate to raise them. However, Rice University was an arena where she could do so with ease. Another student -Sam, reports that the schoolwork at Rice University helped him to develop structured approaches that he could use in the work he did in the internship, in addition to triggering different means of thinking. Lauren, a student who worked for a start-up currently raising their A-round of funding, adds that Rice University allowed her to apply what she learnt in the internship from the perspectives of other industries, companies and people. She argues that the lectures at Rice was of better quality than those in Norway, due primarily to the experience of the teachers: “Matt [the main teacher] had lots of experience from the start-up scene himself, so we learned plenty by just listening to him talk about his experiences. I felt that Rice had more practical lectures than in Norway. In Norway I felt that we were listening to teachers that did not really know what they were talking about, because they had not done it themselves”. Nils, another student, agrees and explains that one of the things he loved about Rice University was that he felt that the teacher cared about the topic they lectured in as well as cared for the students: “He really did care about us; he got involved, and was really engaged in everything. That was excellent.”

### **Practical application of theory in the internship**

Some students explains that they felt that the theory gained from education is useless unless applied to practical assignments or internships. Another example of this is Sam explaining that: “You have studied it carefully, got every theory spoon-fed. You have had exams on it. And normally that’s it! You do not get to use it. That is why I am really happy I participated at Gründerskolen. The timing was perfect. I got to use what I had learned right after my exams. And that was awesome!”

Several students describe that the combination of the theoretical framework from the University in Norway, Rice University in Houston and the practical application of the theory in their internships resulted in valuable learning outcomes. This is illustrated in the following quote by Roger: “It’s hard to point out what exactly it was that made it so good, but I learned a lot from being there, it was probably a combination of the internship and the way the classes at Rice was structured. Obviously, what we learned back in Norway was useful too, but it was something about the atmosphere at Gründerskolen. It was more appealing to me. I feel equipped to start something of my own after the stay. I can even safely say that I learnt more from the three months in Houston than I learnt from one and a half years of studying in Norway.”

Roger undertook an internship at a company that was part of a three-month accelerator program, and that the company was in the middle of clarifying their go-to-market strategy and attracting potential customers. He tells that the company helped him gain a better understanding of the significant differences between theory and practice: “When completing the theory-based subjects in Norway, I gained an understanding of why firms need a business plan. However, before coming to Houston, I did not fully understand what characterises a good business plan. I saw business plans being used in my company’s daily operations, and the importance of having it updated with relevant and good market data”. Roger further reports that: “I realised that in the beginning a business plan usually is only present in the minds of the founders. However, when things in the business start falling into place and the employees start getting a good idea of what they are doing, that is when they actually start writing it. A business plan is the last thing you write”.

Roger points out that he was surprised when he came to Houston: “Since I am doing a master in entrepreneurship and innovation, I was expecting to be the expert. However, the business I worked for was part of an accelerator program where they had mentors who had been in the game for ages. I noticed that practice and theory are very different. Everything at school had gone just fine, and then I arrived in Houston, started my internship and I basically had to throw away everything I had learnt and I had to start all over again. It was like everything was put upside down from what I had been taught at home. I had to put the ‘student hat’ back on, and start learning instead of being a resource to them by offering expert advice.”

Most of the students express that it was tough to return to Norway to attend theory-based classes after participating at Gründerskolen. Sam tells that he got a nasty feeling of just sitting

around and not doing anything. He describes that he felt forced back into being a passive student in the lecture halls. Roger agrees and adds that Gründerskolen allowed him too: “...pick real entrepreneurs’ brains for months, talk to them, and help them”, and now he had to return to classes and learn about what he had experienced by relating it to theory. He claims that: “The teachers had nothing new they could teach me”.

## **5.2. Internship structure**

### **Unpredictability in start-ups**

John, the Houston based facilitator, explains that the primary requirements for a start-up to host interns from Gründerskolen, is that they are high-tech and that the students will have an office to report too, as well as providing them with a method of transportation to and from school and work. It is very tough to assure that the participating companies will live up to the program’s intent; to give students a ‘real-world’ experience in an entrepreneurial environment, providing them with insight into the operation and management of a company in the start-up phase. Depending on the number of companies that have indicated interest in participation, some further quality assurance may be performed. For instance, they may check that the industry of the company can potentially be interesting based on students’ backgrounds.

John talks about the challenges of hosting interns in start-up companies, due to their unpredictable environment: “We are meant to find start-ups and early phase companies, but based on my experience; it is not always optimal to get too early phase start-ups, because they do not have things in place. They tend to lack structure, and often cannot put together an internship that is valuable for the student”.

Several of the smaller companies emphasise the difficulty of organising structured internships. Greg, the CEO of a mobile gaming company, reports: “It was probably not as structured as it would be at a big company, where you would come in at eight to five every day. [...] Some days we would be like ‘hey show up here, or show up here, or go to this’, even if it was outside of work hours.”

Steven, the CEO of another company that had hosted interns from Gründerskolen three years in a row, describes how it was almost impossible for them to create predefined projects, as the

business would change so rapidly: “We pitched the project in early March, and nearby mid-March when the interns start working, already our business had changed so much. [...] We kind of changed the projects multiple times during their internships. However, with the last intern I think we did a better job at staying a bit more concrete and focused.”

Susan, the CEO of a technology company adds: “Working in our company is not like being in a large organisation where there are concrete projects you can spend all your time working on. Here it changes all the time. [...] We have tried to make a fairly defined project for our new intern this year, but I am sure that it's going to change eventually. As an intern for a small start-up, you have to help shaping the internship yourself. Because everyone [in the company] is running around everywhere all the time. So unless you can tolerate working in an unstructured environment, it is not a good fit.”

### **Preparation for the internship**

Steven explains that although he always has a flexible approach to internship programs, he did some planning: “Actually all the three years we participated, we went in with a very open and flexible approach for what we were looking for in an intern. However, we always tried to have several options for different types of projects that the interns could work on, all of which would be valuable to us. Different projects might play to different strengths or interest of the different interns. [...] Once you are a big company and you are well established I think it is easier to have specific pre-defined and very find-eyed constrained projects that you can assign to interns. In my experience from start-ups, it's harder to do that.”

Martin however, the CEO of a company that were hosting interns from Gründerskolen for the first time, admits that there had been no internal preparation for hosting the interns in his company: “I did not have a prescribed project. It's just me, it's not like there is an office full of people.” He explains that he wanted his intern too learn as much as possible, but not through predefined projects. He wanted the intern to shadow him and his work.

Greg tells he was assigned students that did not have the qualifications he needed for the original projects he had put together for the internship. Therefore he tried to tailor-make roles to each of the interns. However, he explains that he would not do that again. Instead, he would put greater effort into getting the interns that had the qualifications he needed and if the

interns did not like the specialized roles or got bored with it, he would rotate them around in the roles.

Susan describes that after hosting two interns without having any structure, she had decided to create a small roadmap and a small plan prior to hosting interns the year after: “It's more organised this year. Now we have a product we expect from him [the intern] in the end. The first internship was probably not as structured as one might want it. We have tried to do it a little better this year. We have made a plan.” Susan explains she still expects the project will change during the internship period.

George, the CEO of an incubator, highlights the importance of planning and preparing for internships before hosting students: “You need to have a syllabus, a strategy, or an outline, or schedule for working with these interns, so they know what's expected and when things needs to be done. This is because they come from school where everything is structured and they do not know your business.“ He explains that he had analysed how many interns his company could handle: “I remember that another company took on three interns. I was like ‘guys what are you doing! And he [the other company] was like ‘do you want one of ours?’ I said no. I had thought long and hard of the type of resources I could dedicate to the interns. [...] I think the quality of interns from this program, demand and deserve a little more attention, than what a lot of the companies could offer them.”

### **Management and the interaction between company and intern**

Several companies express concerns of the costs associated with hosting interns in form of training and supervision required. Especially because the interns leave after three months. Oscar, the CEO of a company that hosted interns from Gründerskolen two years in a row, tells: “I mean it's not a free ride to have an intern. It costs money. It costs time. Especially this type of intern. I think the biggest challenge of the facilitator is to read out companies that actually take the time to train and are willing to train interns. That is the toughest part for companies because they [the interns] are leaving. They [the interns] are only here for twelve weeks. It's not very long, and it's a huge investment”.

Steven, who hosted interns from Gründerskolen three years in a row, agrees as pointed out in the following quote: “There is always a trade-off in my experience, not only in this internship program but also previously when I have hosted interns. [...] I was getting interns because



they were less expensive than hiring professionals were. They [the interns] are often enthusiastic, smart, eager, and ambitious, but the trade-off is that they are often just less experienced in the business world and certainly in the start-up world. If anyone joins your company, whether it is an intern or a full-time employee, that person needs some amount of time to ramp up and become a real contributor in the company. That is one of the challenges in terms of internships. Its such short duration, that you really have to get past that hump quickly so they can start contributing and also learning and not feeling like they do not have enough pieces to the puzzle to be effective [...] Even if an intern is quote unquote ‘free’, there is a cost associated with it. There is a cost of management, and I would say they often require more management than people that are more experienced in the work force.”

Steven adds that hosting too many interns will result in negative value for both company and students: “You cannot just blindly say OK I'll take twenty interns. That is exactly what I did in a different internship program. I was young and foolish and I think one year I had hired four interns and it went really well, and the next summer I think I hired like seventeen interns. There were only seven of us that were actually employed in the office so we had more than twice as many interns and it was such a big fiasco. It was a total management failure. We spent all of our time trying to manage the interns, and we ended up failing on some of the other aspects of our business. In our case, we are still a very early stage company. [...] We only have two of us working full-time in the office in Houston so I knew that we really at most could only handle one intern just because I would be managing that intern very directly [...] It's even enough of a commitment if you are in the office every day, but especially knowing that I was not going to be, one intern was enough.”

Oscar also argues that hosting too many interns can result in negative value for the company. He states that: “If we would do it this year we would look for fewer people, maybe one or two as opposed to four. It is a lot of work to manage them, make sure they get enough work, making sure they are producing well and are evaluated. There are many different things to think of. So I think it's better for us to pick one or two [...] If we were to do it this year, we would pick the top two and if we did not get our top picks we would probably not do it [participate in the program].”

Susan describes that she too feels that she did not have enough time to properly manage her interns. She explains that the interns had to self-manage their day: “They were seated pretty much alone. We had to give some guidance and stuff like that, and we are trying to make time

for that in the middle of everything else.” Susan argues that too much management is not to the benefit of the interns: “...at least half of learning must be that they feel some of the frustration that arise when working in a start-up.”

Martin describes that due to him being the only person working in the Houston office, the intern would get very little supervision: “I am always busy, running around to meetings, and raising money, you know? I still think that a large part of the time she [the intern] was bored. That is my guess [...] I tried to feed her stuff [work]. But I also figured, she’s young, she’s got the internet, she can go online and chat with her friends”.

Greg points out that it was hard to manage the interns, because people in the company did not work in the same office building as the interns and everyone was very busy during the internship period: “We were trying to raise our seed capital at the time. I would not see them every day, and I could not keep up with their progress. They were in a structured office with their own desk, so they were able to do whatever they were assigned, but I was not able to give them the attention that they needed. The good thing about the technology today is that we could all communicate anyways. [...] They did not interact that much with the actual team. They were a little isolated. They were interacting with people at the [shared] office-space, but that was people who had nothing to do with our company.”

From some of the students’ perspective the lack of management and structure felt frustrating. Melissa states she had expected more supervision and describes that: “No one was managing or checking up on us. We had no supervision and could always do exactly what we wanted. That left us with a lot of time where we did not know what to do. So we used most of the time at work to do schoolwork. [...] I wish the internship had been a bit more organised especially in terms of what tasks they wanted us to do.”

Miriam agrees: “Although I appreciated being taken to lots of different events and seminars, it was not enough to keep me busy every day. I did not appreciate all the hours I was in the office all by myself, banging my head against the wall because I was bored”.

Lauren worked in a shared office-space, where the people in the office did not work for her company. She describes that she wished the other team members were present and involved in the work that she and the other interns did: “We did not get to talk to the actual team on a regular basis. We only met them on special occasions. It would have been fun to be a bit more

involved with the people who actually had come up with the idea and developed the product that we worked with”.

Nils feels he was not given enough training and attention to do a good job. He says: “I created a situational analysis, but at the end I realised that there were some parts of it that I had not completely understood. However, I realised that too late, and that was because the company had not properly included me in their business”.

### **Ability to leverage other people’s skills**

Steven points out the importance of being able to leverage other people’s skills in order to create successful internships. He explains that the matching of company and students is not necessarily that important: “I am not sure how well the company or the students really know what they want from the other person, based on a short presentation and a short conversation. It less important to get the match right and it is more important to face whatever the match is, and get a really good creative experience out of it”.

However, not all companies manage to leverage other people’s skills successfully. Greg admits that he could have been better at capitalising on the students’ skills set. “A lot of the stuff they were learning at Rice is applicable to what we are doing. It would have been better to have that formalised and leveraged those skills.”

Some students also felt they could have been utilised in a better way. Melissa argues: “They could have used us better and have us do much more work. We had been told that we would be extremely busy at Gründerskolen, but we just sat there in the office, surfing the Internet. We did schoolwork at work. We had a lot of spare time, which of course was nice, but in hindsight, I wish it were a little more intense. I wish I had greater learning outcomes from the experience.”

## **5.3. Opportunity for observation**

### **Interns involved in the companies’ daily operations**

Some companies gave students their own projects and left them with little supervision, while others to a large degree had the interns involved in the companies’ daily operations. It is apparent that students appreciate being included in the day-to-day activities because they

learn from observing, even if they did not contribute anything of value. Miriam tells: “I thought it was awesome that I got to participate in meetings where my start-up tried to gain funding. I appreciated that they included me in these types of meetings from the very first day.”

Roger talks about how he wishes he was included more in his company’s daily operations: “If there is one thing I wish we did more of [in the internship], it must have been to be included in the meetings and discussions that she [the founder] participated in. But, we only worked for a set time every day and had school two nights a week, while her schedule was more flexible and therefore she often attended meetings when we could not join.”

Students, who worked closely with the founders of the companies and were allowed participation in most of the business’ day-to-day activities, seemed to have a good understanding of many aspects of entrepreneurship. Miriam for instance, talks about the emotional drain that running a start-up may have on its founders. She explains that she participated in sales-meetings and that the potential investors acted as though they were incredibly interested in her company’s product. However, they were slow to give a final answer to whether they would invest or not: “After a month of follow-up calls and stress, we always ended up with a ‘no’. I could tell that my boss was feeling really depressed because of that. He used so much of his time on investors. It affected his time at home with his wife and kids too”. Miriam further tells that one of the biggest learning outcomes from Gründerskolen was the understanding of how difficult it is to run a start-up company. Before coming to Houston, she explains that she did not have a realistic view of how challenging it is: “One thing is to read about it [the challenges] in the literature, but another thing is to see it actually occurring in the real world. This makes you think twice about whether this is something you want to do, before you do it”. However, Miriam points out that she has not lost motivation to start something on her own. She just realise it will require more preparation than expected, and that she will never do it without a talented team. She describes: “It is scary to put all that money into a business. But, then you look at the CAP table and what you get if it works. The risk is something you have to take. Although you might not have been born with the ability to take risks, you can learn how to do it”.

Roger observed how the key people in the start-ups used their network to grow their team, and how important it is to know the right people to be able to successfully execute ideas and get ahead of competition. He reports that: “It is important to have a clear goal and to use the

right people to reach that goal. Roger further talks about the importance of networking and having good industry contacts: “Our boss had an enormous network in Houston. He could just pick up the phone and ask for a meeting, and they would accept. He would constantly work to build his network that at a later stage could result in new opportunities.”

A few companies appreciate the value the company gains by including interns in the daily operations of the business. Oscar describes that: “I would bring the interns with me to as many work related things as possible, because if you do not give people context they cannot solve a problem. If I say ‘go turn that screw’ they can go and turn the screw, but they should know why they are turning the screw. Is there any benefit in turning the screw? Is there a water leak that they are fixing, or are they trying to build a house? What are they trying to do? What’s the objective to turning the screw? If you work for a really large corporation, they will just say ‘go turn the screw and stop asking questions’. But I have always been the kind of person that asks why am I doing it? Can I not turn the screw and still give you the outcome you were asking for? Involving interns will allow them to start thinking for themselves and they will solve problems better.”

Martin explains that he wanted to share as much knowledge as possible with his intern because he knew that it was highly beneficial for her learning. Martin describes that the only reason why he took on an intern was to ‘give back’. When he was a student, he had undertaken a good internship. He tells: “I was surprised when we went to pitch our company [at the matchmaking-day], and so many companies said ‘I need you to write some code for my program’. That is not an internship. That is a job! In an internship, you are meant to be mentored and taught, and advance your skills. Yeah you may write some code, but you should be doing it with someone in the company. It seemed like they were going put people in a little room and have them turn in a project, and they would almost be like slaves. I mean that is not a nice word to use. It is not fair. However, I was surprised. I got there and I said, ‘You know, I do not have that for you. For me this is to learn about entrepreneurship, by you basically shadowing me. Maybe you will be bored doing it and maybe you will find it exciting’.” Martin continues by describing that getting value out of the internship from the company’s standpoint was just a bonus: “I did not look at this thing as something I should get value out of. It was more about me giving back.”

Although Greg, did not work in the same office-space as the interns, he also explains he would try to share everything that was going on in the business to increase the interns’

learning of entrepreneurship: “When you are young, the part you do not realise about being an entrepreneur is the emotional ups and downs. It is OK when you are young because you are not supporting a family or anything. Unless you experience it, it is hard to understand. We would be very open about what was going on in our business. We would say ‘We need X amount of dollars, and we were stressed because of this.’ We would let them know on a personal level, what was going on in our company.”

However, some companies feel it is challenging to include interns in every part of the business. Susan reports that: “We included the interns in a couple of investor meetings, since they asked us if they could participate. They also participated in one partner meeting. But unfortunately other than that, there were many meetings that were, you know, client meetings and stuff like that, which was not appropriate for them to sit in on.”

Stephanie, the marketing director of an accelerator program where several of the participating companies host interns from Gründerskolen, talks about some of the difficulties that some start-ups have in including interns because of their busy schedule. She explains: “All the Norwegians [interns] go to lunch together. It is a shame because it makes them less included in the company. I mean, I completely understand why they do go for lunch together. Most of the companies eat at their desk because they are so busy. These companies [hosting start-up companies] are incredibly busy. They work all around the clock.”

### **Observing American students and entrepreneurs**

One of the central learning elements that students comment on is the cultural differences between Norway and the US. By observing American students, several students were impressed by the hard-working American students that they witnessed participating in the Rice University Business Plan Competition. This is illustrated by Simon’s quote: “I thought about this the other day actually. In Norway we get free education and we do not feel as privileged when we are accepted into a university, so we do not work as hard. But, here [in the US] where students either get a scholarship or their parents have saved up money for years, they want to make the most of it. I think that if there was a business plan competition in Norway, the quality of the competition would not been as high as at Rice University. I was impressed by how good they were. When I read the business plans I saw all the external sources they used, the mentors they had recruited, and all the funding they had gained. I was impressed by that.”

Many of the student reported that they developed and changed their personality slightly during their stay at Gründerskolen. By observing American entrepreneurs, several students realised that the average Norwegian often are more closed and reserved than the average US citizen, and that they deduced that it could be beneficial to be more open and outgoing. Sam describes how he constantly developed his social skills and in particular his mingling skills throughout the stay. The matchmaking-event, undertaking the internship and attending lecturers at the host university, all resulted in slight adjustments in his personality. Simon also changed his attitude after participating in Gründerskolen. He reports that: “We should take some of the culture here in the US home with us. Be a bit tougher. I did that. When I was back in Norway, I decided to give my old boss a call and bluntly ask her if she could get me a job. I have done a bit more crazy things like that after having lived in Houston.”

### **Social aspects**

John emphasises that he makes an effort to make students feel safe and comfortable so that they do not hesitate to reach out to Innovation Norway if there are any issues that need to be addressed during their time in Houston. He aims to help students increase their network in Houston outside of the formal boundaries of the program and provides arenas for the students to interact with other students that they may not usually socialise with, by organising a range of social events. For instance for the two last years he has invited all of the students, home to this parents’ house for Easter dinner: “It helps to spend time with the students in a range of different situations, to make them feel safe and for them to feel comfortable to call us if they are experiencing any problems. Some feel reluctant to make formal complaints, but by interacting with the students at social events, we become more friends than formal facilitators, and that makes it easier for them to pick up the phone if there are issues or concerns.”

The social gatherings that were organised by the facilitator seemed to have a strong impact on the students’ view of the experience of Gründerskolen and most students puts great efforts into explaining the social aspect of the program. In fact, all students talk about developing close friendships with participants in the program and that mingling with fellow students was a good way to unwind after a long day with work and school.

It is apparent that the students’ well-being during the program highly influences the students’ perception of their experience of Gründerskolen. Students explains that they enjoyed the stay

in Houston, not only because of school, but also because of the social aspects. Several students explain that they developed friendships that they will keep for life. Lauren even describes that her overall experience in Houston was excellent, even if the internship did not live up to her expectations. She learned from other aspects of the program such as Rice University, events she attended related to entrepreneurship, and she developed an invaluable network of Norwegian students who had similar interest and ambitions as herself.

## **5.4. Type of work**

### **Type of work tasks**

Students who felt a sense of achievement seemed to be more satisfied with their internship. Most students explain that they needed feedback from their colleagues in order to understand if the work they had done actually could be of value to the start-up. Sam describes that he and the other intern, decided to call the boss in the UK and ask them if they were happy with the work they did: “We wanted to ask them directly. It was really important for us to know if the work we had done had any value to them.”

The degree of learning derived from the internships was, not surprisingly, related to the tasks the students were expected to do in their internship. Students who were delegated non-entrepreneurial related tasks had a learning outcome different to the ones doing entrepreneurial related tasks. Simon for instance, who was mostly doing office administration work, listed skills that were non-entrepreneurial related when asked about learning outcomes. He explains that he learned how to use office admin systems such as Outlook and video conference systems. However, he did also describe some management related skills such as the importance of team-building, and the importance of knowledge-sharing. Simon emphasises that the work he did was highly irrelevant to what he was studying: “One task was to compare two spreadsheets. It was routine work that took approximately one minute but it had to be repeated multiple times. I did this all day, every day for a couple of weeks. Things got a little better in the end. I helped with updating their website and was given some more responsibility. But, nothing we did was related to entrepreneurship and innovation.”

Mary, one of the students who was less satisfied with her internship, explains that her company was not allocated interns with appropriate backgrounds to perform the companies’



prescribed projects, and that her company therefore were unsure how to use her and the other intern. The company decided to have them cold calling: “Everything we did every day was cold calling. I learnt absolutely nothing about entrepreneurship and most of the time we were sitting alone without supervision. The office was noisy with barely any space for us. The boss never took us to anything. If it had not been for our company participating in an accelerator program I would not have learnt anything about entrepreneurship.”

Melissa describes that her only job was to test the company’s product: “I did not feel like the internship was relevant to entrepreneurship at all. The company was established in 2008, and the product was still not launched. The start-up had extremely slow processes. The work we were assigned was not related to what we were there to learn“. Melissa further tells she was in an internship where she felt there was no need for her: “It was a start-up that was in such an early phase it was barely a company. I wish I had been in a business where the product was launched and we could see how the product would be received in the market. There was nothing we could contribute to since the product was not ready.”

Students that were in companies where they were given entrepreneurial related tasks had a stronger understanding of entrepreneurial activities. Sam was doing a specific market research project in Houston. He says that he had learned the importance of creativity and networking when having trouble reaching out to potential customers: “They simply would not talk to me. We had tried everything. And then suddenly it hit me. We could contact a large industry association and they could refer me to more people. This way I would get many recommendations of people to contact within the industry and I would be referred to people instead of having to cold-call. That worked and the ball started rolling. I realised you have to be creative. People will not talk to you if you do not have contacts. You need a foot in the door.”

Roger tells that when his hosting company realised that he had a strong finance background, he was asked to do the company’s financial projections. He describes that although he found the work he did boring at times, he still enjoyed it: “I actually learnt a lot about the company by doing the finance bit for them. By doing this, I was able to contribute more effectively in other type of tasks.”

## **Type of projects**

Some companies gave students individual projects, while others gave the students tasks on an ad-hoc basis. Sam had his whole team in the UK, while working alone with another intern in a shared office-space in Houston, on a specific project, with little supervision in the beginning. However, he enjoyed the challenge of working independently. He tells about how he had to accept that he and the fellow intern were on their own, and they would need to tackle all issues and troubles independently: “By being provided with almost no help, I got to experience first-hand how it is to work for a small start-up with little resources.”

Stephanie, explains that her company needed help with easy and trivial tasks to allow the team to spend resources on other more important aspects of the business: “There was always stuff to do. He [the intern] was like a small version of our CEO and would help the CEO with everything. We needed help with trivial things like fixing the printer. Most of the work he got was tasks like that. We tried to give him some meaningful work too. We let him help give feedback to companies practicing their pitch and he was also involved with preparing our main event of the year.” Stephanie adds that she struggled to find tasks for the intern that did not require much training: “I just did not have time for training. That is one of the challenges of hosting interns. You have to give them work that does not require too much training because they will leave soon anyways. I will train people at repeat tasks but not for tasks that is done only once. It is just not worth it. The challenge is finding tasks that are easy enough for the interns to perform without having to provide too much training and not tasks that are too easy so that the intern will not get some value from it.”

Based on experience, Steven finds it effective to provide interns with an ongoing project throughout the internship, in addition to providing them with smaller tasks on an ad-hoc basis. “Some of our learning was that it was helpful to have a clearly defined overarching project over the course of the internship, because that meant that even if things changed or I disappeared for a week for business, there would be something that the intern could go back to and keep working on and make progress on. At the same time because our needs changed so frequently it was also helpful to have sort of smaller mini-projects that the interns could work on. [...] It could be a new investment opportunity where we would have to come in and pitch in a couple of days. It was helpful to have interns that could mobilise quickly and put together a couple of power point slides of that specific issue. However, when that issue kind

of died out, and all of the sudden I was not there anymore, it was helpful to have this kind of overarching project that the interns could fall back on.“

## **5.5. Students' abilities**

### **Communication between company and student**

The level of communication between intern and company can strongly influence the effects of the internships. Miriam was not happy in the first weeks of the internship, but after communicating this to her boss, things changed and she ended up getting good learning outcomes and was overall very satisfied with the internship. She explains that she was given work she believed gave little value to the business and it was not enough work to keep her busy. However, as it was only her and the founder in the Houston office, they developed a close relationship, and she felt comfortable explaining to him how she felt and they discussed possibilities of how to solve this issue.

Mary, who was not happy with having cold-calling as her only task, also decided to communicate to her boss that she was not happy, although she did not feel the same ease as Miriam in doing so. She talked to her professor at the host university and was advised to talk to the manager. After talking to her professor, she felt more comfortable and did address the dissatisfaction she was feeling with her boss. Things got better after this, and in one of the lectures, she was asked to speak about her experience. She concluded: “I did learn that it helps to discuss issues if something is not working and I learned how to do it in an appropriate manner.”

### **Capability, willingness, positivity**

The level of initiative taken by the student can also enhance the quality of the internship. In fact, several companies believe that the level of independence and initiative taken by student was the main cause for a valuable internship. With the expression: “Although I trained the interns with the basics, it was still up to them if they wanted to make an impact or not”, George obviously believes an intern’s attitude is key for a successful internship.

Sam was one of the students who had little supervision since the whole company was situated in another country, and describes that he felt lost at first. After a few weeks, he had taken

initiative to solve the problem without guidance, using his own ideas and approach. He describes that instead of feeling lost he felt positively challenged: “I learned a lot. You should not give up, you just have to think in new ways, and that is what we kept doing throughout the internship.”

All the companies interviewed emphasise that they value interns that proved to be independent and that took pride in their work. This is illustrated by Oscar’s quote: “The smart interns were very focused. They were almost like; if they did not accomplish something, they felt like their time was being wasted. That was good for our company”.

Martin explains that prior to the matchmaking-event he would look at the students’ resumes but that the interviews with the students was what they based their decision on: “We wanted people that were outgoing and seemed genuinely interested in our company. Susan agrees and explains that they wanted someone who had guts and was able to dive into new and unknown territory. They also wanted someone with another mindset than the technologists in the company. She uses an example of creating an investor presentation: “It is better to get someone new that does not know the product that well to create investor presentations. If you are the inventor, it often gets too complicated. By hosting interns, I learned how to explain the product in a less complicated manner. I have improved my communication skills. Before, we struggled with the way we explained things.”

Most companies say that one of the main benefits of hosting interns was hearing the interns offering a second point of view and bringing new ideas to the table. Martin reports: “She [the intern] went to investor meetings. She actually got very good. She contributed. One thing I liked about her was how she was very wise for her age. In meetings she could bring up points. She was not afraid to do that, she did not ask permission, and it was awesome! It was great to have her contribute. One time I had an issue, and it was something related to the rest of our team who are situated in another city, and she came up with a brilliant way to handle it. And I was like ‘Why didn’t I think of that?’ That is what I look for in people. I want people who do not need to be supervised, are smart, can think for themselves, and are not just trying to do what they think I want them to do. I want to have that dialog, if you disagree with me. Cause you know, maybe I’m wrong.”

George also describes how he appreciates getting the interns point of view: "Although they would always be nervous while presenting, they usually presented very good solutions, and

often different solutions than I was expecting”. However, Oscar argues that not all interns are capable of making an impact based on their mindset when undertaking the internship: “I think that the smarter ones adapt very quickly and I think they are smart when you put them in the right situation they can quickly adapt, and quickly evolve to provide value. The ones that do not are kind of clueless, because they do not know what to do. They come in everyday and just kind of go through the motions and then they go home right. But, I feel like some people evolve much faster than others. I think the question is what they want out of it. I think that is a question that the program organisers should ask the interns.”

## **5.6. Work environment**

### **Inclusive environment**

Nils talks about the importance of feeling included and appreciated at work: “I did not feel included by my company. I felt that they treated us as external consultants and that we were left to do our own stuff without them really caring. We were expected to find all the answers ourselves. If we needed to know something, we had to book a meeting with the appropriate person along with a meeting room. They were not good at training people, but that is maybe because they are not used to it.” Nils explains how he felt that although people were friendly to him at the office, he felt no sense of belonging or commitment to the company: “Everyone working in our company was very busy [...] There was one person who tried to create a good and positive environment at the office. Of course, there were others that were friendly too, but I did not feel like we were part of the company. It is hard to know what to expect of course. But I would probably have enjoyed myself more if we had been more included. If I had felt that they cared about us. I did not like the feeling that we were constantly expected to deliver in order to be appreciated. The whole thing felt impersonal. We did not develop any good relationships with our colleagues. The whole environment at work felt a little cold.”

Nils further adds how he felt alienated in relation to the company and the company’s goals, resulting in less value gained from the internship: “I did not enjoy what I did, because I did not care about the company. If they are successful or fail now, I would not care either way. I do not feel like I was left with much value from undertaking the internship, because I did not like it “.

There were of course, many students who were tightly integrated into the company culture, and they seemed to have better learning outcomes and a more positive attitude towards the internship based on the close relationships they had developed with people within the company. Miriam explains that in contrast to Nils, she had tears in her eyes, the last day at work. When using the expression: “I was taken under his [the founder] wing”, it is apparent that Miriam felt both appreciated and included. Lauren explains that she greatly appreciated when the company took her out to lunches or dinners, and that it made a big impact on her internship experience.

Unfortunately, not all companies could afford to take the interns out to social events as often as they wished. Martin, who represented one of the smaller companies, explains that this affected his popularity among students at the matchmaking-event. He describes how other companies had pitched their companies to the interns: “They try to woo you [the students]. Some of the guys were like ‘we are going to have a party and we are going to this and this’. It is like a salesmanship thing. I wish we could do more of that social stuff too, but we just did not have the money.”

## **Key People**

The key people in the company that the students interacted with effected the students’ perceived value of the internship. Sam reports that his supervisor did not work directly for his hosting company, but that he was the head of the office-space where Sam worked. According to Sam, he cared little for the students, spent too much time talking about himself, and interfered in the interns work. Sam states that this person gave negative value to his internship. However, mid-way through his internship he got a new supervisor that was more energetic, with great management skills. Sam explains that: “When he started working with us I felt almost like ‘oh my, if this guy had been there from day one, then this would have been the internship of my dreams.’ He really took us under his wing, and helped us with the market research. He helped us find the right people to call. He was a strong and important resource in my internship and he actually increased the quality of the internship dramatically”.

Melissa explains: “I imagined being in a business that had a little younger people. The CEO where I worked was seventy years old! [...] The two other people in our co-working space were almost eighty. So that ruined the internship experience a bit for me. I did not form any close relationships with them, at least not outside of work.” Melissa also says that the number

of people working at her company disappointed her: “I had imagined working in a company that had a better and more interesting work-environment and some more people. Maybe four. It seemed so much more exciting to work in firms with younger people and a place where there was more to do.” Melissa tells that she and the other intern were spending most of their time in the office by themselves. The actual start-up did not have an office and the founder was working from home. There was only two other people in the office but they did not work directly in the start-up company and most were often not present in the office: “We spent a lot of time alone in the office. The founder came by the days he was available and stayed half an hour to an hour and just talked [...] In the beginning we had meetings with him every day, but suddenly he had a lot of personal matters to take care of so he was gone for weeks at the time. We would not see him at all. There was little follow-up and managing on his part. We did not do much work when he was gone.”

## 5.7. Matching of students and company

### The balance of companies and students' interests

One of the most important tasks for the facilitator of the program is to match students with a respective start-up company for the internships. The matching of the student and the company takes place during an afternoon event. The students and companies know about each other prior to the event, by exchanging resumes and company descriptions on a website. John explains that since the program is created for students to learn about entrepreneurship, the matching slightly favours the students' choice more so than the companies'.

However, John explains that they are concerned about keeping the companies happy too: "We have created a good reputation for Gründerskolen in Houston's start-up environment. If too many companies spend resources on planning potential internship assignments as well as spending a day out of their busy schedule at the matchmaking-event, and do not even get an intern in the end that is not good considering the reputation of the program. It is difficult to find a good balance of addressing this issue. We want to please the students but at the same time we do not want to hurt our relationship with the Houston start-up community".

Many companies do not get their first choice of students. Since there are a variety of student backgrounds, many companies end up with students that do not necessarily have the backgrounds and qualifications that allow them to complete the envisioned projects. Greg describes that he did not know how many interns they would be able to handle, and asked for three assuming they would get some technical people and some marketing people. They ended up with three students, none of whom was technically inclined: "We were like 'Holy cow, what should we do?' Once our plan went out the window, we just had to change it up". He further adds that: "We ended up getting so many people that were interested in marketing. I was amazed and I could not even remember studying them. It is only hectic at the matchmaking because we were not prepared properly. [...] For some of these bigger companies they do not care as much. They just want to find somebody. But for me, a fresh company, we wanted not only to get the best people we thought was the best fit for us, we also wanted to make sure they [the students] were happy with us. We were going to make the internship really special for them. We were going to give them a really good experience. We just were not prepared properly to do that."



## **Preparing for the matchmaking-event**

Some students had clear ideas about what they wanted to gain from the internship and had defined individual learning goals. Some wanted to learn as much as possible about entrepreneurship, others wanted to act as entrepreneurs, and some wanted to gain entrepreneurship specific skills such as market research skills. Even if students had defined some learning goals, they were flexible in terms of what companies they wanted. Sam states: “There was only one company I knew I did not want to work for. In this company you had to move a database into some new folders, and that was not something I was interested in doing. I was there to learn about entrepreneurship, not to learn about using a Dropbox tool or something. I immediately knew, that company was not the right fit for me.” Sam wanted to learn about market research, and ended up applying for a start-up company based on their advertised project: “The project seemed tempting. They said I would get some guidance, but also that the work was highly independent. That was exactly what I wanted from the internship. I wanted to learn how they do it in the real world right? I have never done anything like this previously. I have never had a professional job. I wanted to learn hands-on how to do it. And I felt the company I ended up with could actually teach me that.” Roger also had a clear idea of what he wanted to get out of the internship: “I wanted to learn more about the different processes that occur in an early phase start-up, and I choose companies I believed could teach me that”.

However, not all students knew what they wanted to get out of the internship. Stephanie explains: “I felt terribly uncertain when I wrote my list of preferred companies. I did not know what to put first and what to put last”. Lauren states: “I only knew I wanted to work in a company that was in a fun industry and did something I already found interesting. I did not know what I wanted to get out of the internship.” Nils said he wanted to work for one of the more established companies, but did not have any clear thoughts about what he wanted to gain from the experience. Mary explains that it was important for her that she worked in a company where she could add value to the company by using her background in engineering, and that she wanted to gain experience in actually starting a company, preferably in her own industry. However, there was no such company participating in Gründerskolen that year and therefore she chose companies randomly at the matchmaking-event.

Several companies express that they too wish they had thought more about what they wanted to get out of the program, prior to the matchmaking-event. For instance, one of the benefits of

hosting interns is that it usually allows for screening potential employees. However, with Gründerskolen this is usually not the case. Students undertaking the master program have to return to Norway to complete their degree, and many do not wish to seek permanent work in Houston. Not to mention the Visa issues related to moving to the US. Some companies were not aware of this, and felt that they lost some of the value by not being able to offer the best interns jobs. Oscar even explains that he thought that the Norwegian interns performed worse because of it: “It is like ‘Yeah, I’m just going to hang out for a few months and then leave’. That results in a different outcome than if you ask someone who needs to get the experience from the internship because they need the job [...] I think we have gotten better at thinking about outcomes, because if we were to interview someone this year, I would ask them ‘Why are you here? Why do you want to do this?’ And if they were like ‘I am just here for the experience and extending my horizon’ then that is not the right fit for us. We do not have time for what we did the first year [when participating in Gründerskolen].

On the other hand, Stephanie explains that her company was happy there was no pressure to offer employment: “For us it is good that interns only stay for a few months, and that they do not expect to be offered a job in the end. When we look for interns in the US it is always challenging, because the interns will ask us for hiring opportunities and there are not any! While for this program we do not have to worry about that and that is one of the reasons why we participate.”

## 6 Discussion and conclusions

The outlined factors derived from the interviews are all influencing the participants' perceived effect of Gründerskolen. Some factors overlap and are not mutually exclusive. The present thesis suggests that some factors are more influential for the students' learning and some are more important for the companies' benefit. There are significant variations of the obtained proficiency-level of students and the value given to companies, based on different exposure to the factors.

The following chapter discusses the results from the interviews with the theoretical framework. The discussions are organised under each main finding.

### 6.1. Application of theory to practice results in robust learning outcomes

The pre-courses students had completed before participating at Gründerskolen gave them a knowledgebase that increased their self-efficacy, which resulted in students feeling confident and wanting to take on challenging assignments. Bandura (1977) explains that people who believe in their own effectiveness and abilities are more likely to try to pursue certain opportunities. The students who felt confident in the knowledge they had gained from the pre-courses before starting their internships, seemed more likely to pursue challenging and meaningful assignments.

Theoretical and practical understanding of entrepreneurship therefore resulted in an increase in the students' proficiency of entrepreneurship. Students who could apply what they learned in class through practical work in the internship were more confident about their entrepreneurial abilities. This is consistent with Hjorth et al. (2007) who describes that this form of learning is strong because it guides students through an entrepreneurial process.

By attending theoretical courses on entrepreneurship, engaging in internships, and simultaneously writing papers, students moved through all phases of Kolb's learning cycle - concrete experience, reflective observation, abstract conceptualization and active experimentation (Kolb, 1984). Most students seemed to prefer the active experimentation and concrete experience that the internship component of the educational program provided. As

the students in question are students of entrepreneurship it is not surprising that their learning styles are similar to those of entrepreneurs, who tend to lean on right brain thinking (Nieuwenhuizen et al., 2004)

It was obvious that the students, who achieved experiential learning through their internship, got deeper and more robust learning outcomes. Knowledge gained from previous courses, was only a static concept before it was activated by being put into use. Depending on how much students practiced their skills, many seemed to have moved away from having little discretionary judgment and adhering to all rules in theory, to use the rules as guidelines for different aspects of a future goal. This is illustrated by Roger's quote: "I realised that in the beginning a business plan usually is only present in the minds of the founders. However, when things in the business start falling into place and they start getting a good idea of what they are doing, that is when they actually start writing it. A business plan is the last thing you write."

## **6.2. Internships needs some structure to be valuable**

How the internship was structured played a big part in how students perceived the effects of Gründerskolen. Clark (2003) explains that appropriately designed internships can put students in learning situations where they are encouraged to apply theory to practice. However, it was obvious that most start-up companies struggled to create structured internships for the students due to highly unpredictable environments. Although some students needed more structure than others did, all students wanted at least some structure.

Lack of structure often resulted in little to no management, supervision or mentoring. Mentoring has been identified as a critical element of internship effectiveness (Anson et al., 1990, referenced by Narayanan et al., 2010, Feldman et al., 1999). Narayanan et al. (2010) claims that supportive supervisors who acts as mentors strongly influences internship satisfaction and hence whenever possible, interns should be assigned to supervisors with strong mentoring capabilities. Moreover, they recommend combining some type of formalised mentoring program with the internship programs. By not being supervised or mentored, interns would not interact much with the key members of the start-up company, and consequently could not reap the benefits of vicarious learning, or in other words learning through observation. Bandura (1977) believes vicarious learning is one way to strengthens

ones self-efficacy. Bandura et al. (1963) explains that students may develop emotional responses observationally by witnessing the affective reactions of others ongoing painful or pleasurable experiences. People have the capacity to learn by observation and this enables them to acquire large, integrated units of behaviour by example without having to build up patterns gradually by tedious trial and error. Interns who were excluded from close interaction with key members of the start-up company would find it harder to identify with them. Consequently, these students would not feel a social comparison where they could develop reasoning such as: “If they can do it, I can do it”.

Baron et al. (2010) claims that vicarious learning often is more efficient than experiential learning, and can be achieved by spending time on careful analysis of highly relevant examples within their domain. Thus, those students who were able to observe people and situations could increase their expertise towards expert proficiency. Of course, observing the unpredictability in a start-up is also part of the learning. However, students had to work closely with the founders and understand the operations of the start-up company to develop understanding of *why* the environment is unproductive. Thus, the start-up companies that managed to offer some guidance and interaction with the students seemed to have more effective internships – both from the students’ and the companies’ viewpoint. Students are used to structure and rules from school and this consequently makes it easier for them to perform. By not being provided with anything, some students felt frustrated, helpless, and some felt they were failing. This is a concern as performance accomplishment is especially influential to one’s self-efficacy, and failures may lower it (Bandura, 1977).

### **6.3. Valuable internships combines meaningful work and observation**

Start-up companies find it difficult to allocate work to students that does not result in a feeling of failure, but at the same time is challenging, because this balance is highly dependent on each student’s ability and existing sense of self-efficacy. Students will need to struggle with their work in order to get personal mastery experiences, and feel like they overcome obstacles they did not realise they could overcome, in order to maximise the benefits of direct experience. However, there is a fine line between failure and overcoming obstacles, and it is therefore not that surprising that many start-up companies struggled to provide the right balance for the interns. Many students have their first real work experience with

Gründerskolen, and thus throughout the internship often finds themselves in situations outside their comfort zone. However, the students who manage to overcome these problems are the ones who benefit the most. This experience is valuable for students and an important factor for raising their perceived self-efficacy.

However, not all students were in internships where they could achieve these personal mastery experiences. Although, some students explain that the lack of supervision forced them into being independent and allowed for creativity and in turn increased performance accomplishment, this was dependent on the nature of the assigned work. Some students had no room for creativity in their work, in combination with no management or interaction with the company. This resulted in low learning outcomes. These internships provided work that was tedious and elementary, and the students being victims of this, often felt little to no satisfaction of performing work tasks successfully because they did not feel challenged. Kuratko (2005) argues that it is important that students delve into real problems and issues involved with their ventures to increase learning. Reflected by students who explain with enthusiasm how they used their knowledge to provide expertise to the business, there was a distinct difference from students who did work that did not require prior knowledge from their education. From a company perspective, not leveraging the students' skills to its full extent, also results in less value for the company as well. However, many companies seemed oblivious to this.

A combination of tasks that did not leverage the expertise of the student and subsequently did not allow for task mastery, in addition to little interaction between team and student, seemed to result in the lowest quality internships and overall learning experience for the students. On the other hand, students who were provided with meaningful work and subsequently reaped benefits from performance accomplishment, and had opportunities for vicarious learning through observation, had the best learning outcomes. An example is Roger who did meaningful work and worked closely with the founder of the company and his colleagues. Roger believes he has significantly developed his entrepreneurial abilities: "If I had not participated in Gründerskolen I would not even have known how to get in contact with a venture capitalist. By participating in the program, I have learned how to attract investors, how to talk to them, and how to pitch. This knowledge is not something we would learn at school in Norway. This is something Gründerskolen has taught. We got a good knowledgebase in Norway, but Gründerskolen taught me how to leverage this knowledge."

Students who were provided with opportunities for observation, but who were not assigned meaningful work could still achieve good learning outcomes. Although, Miriam was undertaking an internship that did not give her work where she could practice her skills and contribute with knowledge from her education, she developed deep insight into the running of start-up companies, the importance of networks, and how to interact with clients. She also tapped into the emotional aspects of entrepreneurship, such as the constant feeling of being at risk and other emotional ups and downs. Bandura (1977) explains that the observational experience occurs by observation in and outside of work. Miriam was not only included in the daily running of the business, she built a friendship with the founder also outside of the work setting, which allowed for a more open and trusting relationship, where Miriam could tap into his feelings about the business whether he was feeling concerned or excited. Although, she expresses that she wishes she was allocated meaningful work and that she found some of the work she did tedious, the reflections she had on her learning outcomes was one of the strongest and most mature out of the interviewees. The vicarious experience occurred at the office, in other work-related settings, and outside of work as she developed a friendship with the founder. Miriam could truly observe the full emotional rollercoaster that the founder experienced as a bi-product of being the CEO of a start-up in an unpredictable environment.

This finding aligns with Baron et al. (2010) claims that vicarious learning often is more efficient than experiential learning and is highly relevant for entrepreneurs. Bandura (1977) believes that by providing students with carefully chosen information that will help them build accurate mental models and other cognitive resources, the benefits in terms of enhanced performance on key tasks can be substantial. Individuals who engage in vicarious deliberate practice can acquire the benefits observed, in many other fields, by overt deliberate practice.

Although Bandura believes that performance accomplishment is the most effective way to increase self-efficacy, the findings in the present thesis indicate that the vicarious experience is an even stronger means to increase students' learning. This is of course likely to be due to that students only work *for* an entrepreneur in their internships, and are not experiencing directly how it is to run a company of their own. Instead, the direct experience involves entrepreneurship related tasks, and this is an important part of their learning, however, it does not allow them to feel the emotional aspect of entrepreneurship directly. It is not directly *their* money that is at risk, not *their* reputation that may be compromised, and not *their* idea that they are putting into life. Thus, direct experience in form of an internship is an important part

of the learning but it is not sufficient in an entrepreneurship education. Students should get exposure to vicarious experiences with aim to include some of the missing aspects from direct experience, such as the emotional aspect of entrepreneurship.

Nils was allocated meaningful work in his internship, but was left with little opportunity to engage in vicarious practice or derive benefits from verbal persuasion as outlined as two of the four ways to enhance self-efficacy by Bandura (1977). He explains how he felt alienated from the business, and consequently lost motivation. He describes that although he was assigned meaningful work, he did not feel like he was getting much value from it. The work he did seemed only to be a small piece of the puzzle, leaving him feeling as though he was an external consultant to the business. Nils' lack of inclusion at work did not let him experience his actions as part of a longer-term goal. He was working from task to task, following strict rules based on theory from education. There was no input from any other team members to guide him so he could understand the other aspects of a start-up company, which left him with little learning other than slightly refining his analytical skills. Although he strengthened his performance accomplishment, the vicarious learning and benefits from verbal persuasion obtained from work was limited and overall Nils felt dissatisfied with the learning outcomes derived from the internship component of Gründerskolen.

Melissa and Mary both had internships that neither gave them work that was *related* to their education, or *included* them in the business. They did not get a chance to practice their skills in their internships, nor did they get insight into the processes and structure of their companies. It is evident that they did not reap any benefits from performance accomplishment, vicarious experience or verbal persuasion which resulted in a poor understanding of entrepreneurship and running of start-up companies. This is illustrated by Melissa's answer when asked about the structure of how the business was set up: "There was no income. I cannot remember if they had investments, but I do not think so. We had no idea of how they got money for the business and what they spent it on."



## 6.4. Inspirational environments trigger learning

The lack of structure and organisational procedures, combined with few employees, makes the key people in a company alone create the company's culture and consequently these individuals directly affect the interns' learning. Bandura (1977) explains that the people with whom one regularly associates define the type of behaviour that one will repeatedly observe and hence learn most thoroughly. This can be illustrated by the contrast between Melissa and Miriam's internships.

In Melissa's internship the only employee was the founder, who was much older than her (70 years of age), and in her opinion was neither productive nor inspirational. He had only started the present company, where he had been working for over seven years without having finalised a working prototype of the product. In addition, Melissa believed he did not have a good understanding of what she expected to achieve from the internship. He did not seem to do anything to help her learn about innovation and entrepreneurship.

In contrast, Miriam worked closely with a founder, who was passionate about teaching her as much as he could. He had started several ventures – some with success and some with failure. Most of the learning in Miriam's internship derived from having conversations with the founder.

Bandura (1977) explains that verbal persuasion and emotional arousal are ways of increasing self-efficacy. Students may be led, through suggestion, into believing they can cope successfully with what they find challenging. This verbal persuasion may be an important part of the internships, but is highly dependent on the people in the company. When working side by side with enthusiastic entrepreneurs who want to motivate and inspire, students may subsequently increase their self-efficacy. However, internships similar to that of Melissa's, where the founder may be uncharismatic and lacks experience, subsequently making it hard for the student to identify with the founder and difficult to reap these benefits.

Miriam and Melissa are examples of two individuals who were in different inspirational environments. Their affective emotional mode of learning therefore effected them differently. Miriam worked in an environment that could trigger positive emotional arousal and inspire her. Heron (1991) proposes four dimensions of learning in his scheme of 'multi-model learning' where each build on the other – emotional, imaginal, conceptual and action. Miriam

and students in environments like Miriam had fun while they were learning. They were spending most of their time in an atmosphere that allowed for, and even encouraged, the development of passion for entrepreneurship. This emotional openness would make it easier to absorb the other dimensions in Heron's upward hierarchy of learning dimensions. The passion could find expression through envisioning and devising possible futures. However, the imaginative aspect of learning most fundamentally could result in an intuitive understanding of sequences, processes and situations as a whole.

Of course, the inspirational environment triggering affective emotional modes of learning was not only based on the internship environment. Many students explain they felt like they lived in a 'bubble' throughout the stay in Houston. By socialising with other students, having fun, engaging in new experiences, the affective learning dimensions could be triggered both at school, work, and in the student's spare time. Although the students are not conscious of the emotional and imaginative learning dimensions, it is apparent that these dimensions are being absorbed at Gründerskolen. Roger for instance illustrates this in following quote: "It was something with the atmosphere at Gründerskolen. It was more appealing to me. I feel equipped to start something of my own after the stay. I can even safely say that I have learned more from the three months in Houston than I learned from one and a half years of studying [studying entrepreneurship] in Norway"

Another example showing the importance of affective learning is that several students explain that they preferred the classes at Rice University over most of the classes in Norway. The main reason for this being identified by the passion seen in teachers and guest lecturers at Rice University who had experienced the phenomena of launching a company of their own. In fact, Souitaris et al. (2007) found in their study that one of the most important aspects of teaching entrepreneurship is to motivate students to want to pursue an entrepreneurial path. They argue that academics should have significant focus on developing the inspirational part of the entrepreneurship program. "Instructors should be trained not only to teach the entrepreneurship curriculum, but also to change hearts and minds" (Souitaris et al., 2007, p.567). Although the entrepreneurs from the internships are not academics, they certainly are capable of influencing and affecting a student's motivation and intention to enter into entrepreneurship.

## 6.5. Informal learning arena

The social aspect of Gründerskolen is one of its unique attributes. Students live together for the duration of the stay and interact through social activities throughout the week with other students. They all work in start-up companies, attend Rice University and go to social events throughout the program. This constant interaction with individuals who are living through the same experience, allows for a unique opportunity for students to share experiences, discuss issues and reflect on what they learn. Although, students are relaxing at home, swimming in the pool, bowling at the local bowling alley, or are taking a weekend trip to another city, other students who possess knowledge and an individual understanding of this knowledge based on their own workday, experiences and observations, surround them. Separated from families and friends from their home country, students are constantly interacting with others who are the perfect candidates for evocative discussions. They are living a life characterised by attributes in a start-up environment and are constantly surrounded by others in the same situation, that they can discuss and share their thoughts with. They can complain, laugh, and share the frustrations and the joys they experience. Thus, the social arena turns into an arena for informal learning. This environment makes it easy for students to engage in Heron's emotional dimensions of learning (Heron, 1991). By nourishing the emotional aspect, learning grows more easily for the remaining three dimensions of the learning hierarchy -the imaginative, the conceptual and the direct learning.

Bandura's social learning theory is also central to the informal learning arena. Bandura (1977) claims that, virtually all learning resulting from direct experiences can occur on a vicarious basis through observation of other people's behaviour and its consequences for them. However, some of the behaviour that is learned observationally obviously cannot be strengthened by overt enhancement by the students, and in these cases Bandura suggests considerable mental rehearsals of modelled activities. People who mentally rehearse or actually perform modelled patterns of behaviour are less likely to forget them than those who neither think nor practice what they have seen. At Gründerskolen, this mental rehearsal may occur on a daily basis through reflection and discussions with other students.

As already mentioned, verbal persuasion and emotional arousal are two of the four ways Bandura (1977) claims help strengthen ones self-efficacy. The informal learning arena at Gründerskolen that occurs during conversations between students at home and at social activities may trigger verbal persuasion for those who need it. By having a forum where

students who experience difficulties can discuss and share these negative experiences with others who are capable of providing valuable input, let's students reap benefits of verbal persuasion and may increase their self-efficacy. When students share and discuss their negative emotional arousal, they are also likely to help enhance their emotional and physical status and subsequently reduce stress levels. Students who are experiencing positive moods can also spread this positivity and passion throughout the group. By discussing and sharing experiences and emotions, students may inspire one another, trigger positive emotional arousal, resulting in feeling more optimistic about the work they do, subsequently allowing for better learning through experimentation. In addition, this informal learning forum allows for another arena for observation. Students can learn by listening to other students' experiences, and this way reap the benefits of vicarious learning in informal arenas not related to work or school as well. This unique attribute of Gründerskolen supplements the internship experience, and would not be possible to the same extent if students were living separately in their home country.

## **6.6. Entrepreneurship students and hosting companies have a conflict of interest**

Cooper (2004) argues that internships is a rich experience for the student and for the company, as learning is a two-way process in work placements. Moreover, (Tovey, 2001) states the importance in identifying what makes the practical experience valuable for the individual student, the supervisor or the faculty member in order for the experience to be successful for all parties. Narayanan et al. (2010) explains that although students and companies has separate wants, needs and expectations from internships, it usually ends up being a mutually beneficial experience. However, the findings in the present thesis indicates that this may be more challenging for entrepreneurship students having internships in start-up companies, compared to traditional internships in larger and more established organisations. There seems to be a conflict of interest with entrepreneurship students as interns and entrepreneurs as the hosting company. On one hand, you have the entrepreneurship student, who evidently learn more from being included in every aspect of the business, and wishes to attend a variety of meetings and would like meaningful work that is related to their education. On the other hand, you have the start-up company who often wants interns so they can free themselves from routine tasks to have time to go to client meetings, investor meetings and

partner meetings. This mismatch of wants and needs can be hard to balance so that both parties gets value from the experience.

However, a few of the participating companies at Gründerskolen explain that they want to include interns more in the daily running of the business, because they realise it can be mutually beneficial. Oscar reports: “Involving interns will allow them to start thinking for themselves and they will solve problems better.” Martin who had been an intern himself made it his mission to include his intern in as much as possible because he personally had experienced the positive effects observation can have on a student. However, several companies seems unaware of this mutually beneficial aspect in the internships. They emphasise the importance of the work and projects the interns performed. Some understand that interaction with the intern is important, but only because they believe it will give the intern structure, and not because they see the benefit of daily interaction with the intern and thereby trying to transfer some of their proficiency, skills and knowledge to the student.

This is illustrated by Stephanie’s explanation of what they wanted help with in her company: “We needed the printer fixed, and things like that”, and by Simon who spent most of his time at work cross-referencing an excel sheet. While some companies, like Susan’s would provide meaningful work, she still describes that she needed the intern to do this work so she herself could leave the office, and consequently the interns could not join: “We got the interns to do most of our due diligence work, so I had time to run around to client meetings.” Bryan also describes: “I now had time [after getting interns] to spend most of my time outside of the office, raising funds for the company, launching initial pilot projects and installations for our customers”.

## **6.7. Experience gives internships that are more valuable**

Kolb’s explains that knowledge results from the combination of grasping and transforming experience (Kolb, 1984). Using an experiential learning approach allows individuals to learn by doing and reflect on actions and is believed to result in deeper and more robust learning outputs (Cooper, 2004). It seems like the companies that were experienced in hosting interns or by other means had obtained good management skills, by going through Kolb’s learning cycle, offered better internships for the students.

However, as individuals with no business backgrounds often run the start-up companies, it is not surprising that many have poor management skills. Several companies were hosting interns for the first time when participating in Gründerskolen, and were inexperienced in delegating and managing other peoples' work.

In addition, as (Nieuwenhuizen et al., 2004) explains entrepreneurs usually prefers active experimentation and direct experience as their means of learning, and this is evident by how most companies had done little preparatory work before hosting the interns. They had a trial and error approach, where some were successful and others were not. However, the companies who had previously hosted interns, had already got the concrete experience and had time to reflect on the results from their approach, built new and improved mental models and were repeating their active experimentation. They therefore created internship structures of better value to both the students and the company.

All companies I interviewed explain they had potential for improvement in their management skills and in the planning and structuring of the internships. Several of them describes that they thought the change in approach would result in internships that are more valuable for not only the students, but also for themselves. Susan for instance states that she realised that she needs to adjust her management approach to every person in the team, and that she has experienced that there is a huge difference between managing a sixty-year-old professional, and a young student with little experience. "When a person does not deliver to my expectations, it is usually not because of the person's intelligence, time or ability to perform. Different people simply need different types of management to perform." This learning is something Susan gained from experience and not something she read in a book. By active experimentation of trying different management approaches, she learned what works and what does not work for her and her company.

Since, Gründerskolen aims to provide students with work placement in companies that are still learning about all aspects of getting a business up and running, they are likely to be part of the entrepreneurs' first concrete experience of hosting interns, and there is a good chance that this trial will not be successful. One way of mitigating this risk is to provide training or mentoring for the companies prior to them hosting interns. By education the start-up companies of how they best can structure internships, they are likely to create more valuable internships.

Of course, the same principals of learning by experience by going through Kolb's learning cycle goes for the facilitator of Gründerskolen. John explains that his first year of hosting the program he felt overwhelmed and struggled to find companies of good quality. The recruitment of companies is highly network based, and most companies had heard about the company through an industry contact or through a friend. Not surprisingly, several years of organising the program has therefore made the recruitment of companies easier, and there is today a bigger pool of companies for students to choose from at the matchmaking-event.

Furthermore, facilitating the program for several years' results in lessons learnt. One example of this is the number of students allocated to each company: "One year we even had five students in one company. Later into the semester, two students were not satisfied with their respective companies and we had to move them. The easiest place to move them was to the company that was already hosting the five interns. We learned that we would never do this again. It is a lot of work for a company to organise a student to do full-time work for three months. Imagine having to do that times seven. It is a fulltime job. We learned that this is something we definitely cannot do again." After this experience, John decided to have an upper limit of four students together per company. However, with the growing demand for the Norwegian students every year, he explains that he prefers to put no more than two interns in each company unless there are special circumstances.

It is apparent that the quality of Gründerskolen increases by having an experienced facilitator. One concern is if the facilitators of the program were to change. There is a risk that the new facilitator would go through the same mistakes as John did the first year, and consequently a loss of quality may occur. By implementing simple procedures for knowledge sharing and guidance for running of the program, this risk can be easily mitigated.

## **6.8. Preparation and reflection results in better learning outcomes**

Many of the interviewed companies express that the students themselves play a central role in shaping their internship experience. George expresses "Although I trained the interns with the basics, it was still up to them if they wanted to make an impact or not ". Martin reports the importance of having interns that can work independently: "I want people who do not need to be supervised, are smart and can think for themselves, and are not just trying to do what they

think I want them to do. I want to have an open dialog if someone was to disagree with me. Because you know, maybe I'm wrong.”

Furthermore, the findings from the interviews shows that initiative taken to maintain open and honest communication between the intern and company is important in increasing the value of the internships. For instance, both Miriam and Mary were not happy with the type of work they were assigned in their internships, but by taking initiative and discuss these issues with their respective companies directly, the internships became more valuable. Melissa on the other hand, who showed no such initiative was left with an internships where she gained little new knowledge or skills.

It is apparent that the companies leave a lot of the responsibility for a successful internship experience in the hands of the students. However, prior research on internships also agrees that students need to help shape their own internship experiences. Liu et al. (2011) argues that students can play an active role in shaping their own internship experiences and learning outcomes by taking initiative and by developing skills in interpersonal interaction. They found that students' emotional expression and social activities at work were significantly related to the learning they obtain and mentoring they received in their internships. Coco (2000) describes that companies value students with leadership potential, motivation, energy and a winning attitude. Due to the uncertainty of what type of internship one will end up with at Gründerskolen, these characteristics are especially important for students in this particular program to achieve successful internships.

Feldman et al. (1990) found in their study of college retail summer interns, that the recruitment process does not play the greatest role in the outcomes of the internship experience. They found that the design of the work that the intern perform in the internship is what matters the most. Since the matching of students and companies at Gründerskolen does not guarantee that either parties end up with their preferred choice, it often occurs that the companies assign work and projects to the interns, other than what was originally planned.

However, several companies describes that this is not necessarily an issue. Even if the interns does not have the preferred education background, they may possess other characteristics that the company values important. Martin explains he wanted people who were “outgoing and seemed genuinely interested in our company”. Susan wanted students who “had guts and was able to dive into new and unknown territory”. These traits characterises individuals who learn



fast, can provide value by offering fresh ideas and who may look at the company's products or services with new eyes. For students to be valuable in many different settings, they must possess the abilities to express their meaning, dare to communicate and take initiative to make changes.

However, a few companies believe that some of the students entered the internships with the wrong mindset and that this made it difficult for the students to adapt quickly and provide value to the companies. In Kolb's learning cycle, reflective observation and abstract conceptualization are central for preparation for active experimentation (Kolb, 1984). Since students have not already engaged in internships in start-up companies, it is not possible to reflect and conceptualize on this experience -at least not at the start of the internships. However, informing students prior to commencing work that they need to prepare mentally to get out of their comfort zone, take initiative, communicate directly, and confront their respective companies with potential issues, may allow them to enter the internships with the right mindset.

This mental preparation can be encouraged with supplementary academic assignments that trigger thinking and reflection prior to undertaking the internships. Clark (2003) also argues the importance of such academic assignments for students to most effectively integrate theory and practice, classroom learning and professional practice.

Students' expectations of the job before they start working is also important for the students' evaluation of the internships (Wanous, 1980, Premack et al., 1985, referenced by Feldman et al., 1990). This indicates that it can be helpful for students to get realistic job expectations through their own research and directly from the company to avoid being disappointed.

Of course, not only the students are responsible for preparing realistic expectations and for the interpersonal interactions that occurs daily between the student and company. It is also important that the hosting companies communicate clearly to the students what they expect and provide feedback on the work the students perform to increase the students' motivation. Several of the interviewed students express insecurity of whether they provided their companies with value, and consequently were robbed of some of the benefits associated with increased performance accomplishment. D'abate et al. (2009) believes that feedback is a job characteristic that influence internship satisfaction. Companies should therefore initiate procedures that allows for formal and informal feedback mechanisms, which occur frequently.

# 7 Summary and recommendations

The present thesis contributes to the existing literature on internships and entrepreneurship education by investigating how an entrepreneurship education program that incorporates internships in start-up companies can enhance the learning experience for students. The theoretical framework was further explored and tested through a phenomenological study on the Norwegian entrepreneurship program Gründerskolen.

The author investigated literature on experiential learning, multi-model learning theory, self-efficacy, deliberate practice and general internship and entrepreneurship education theory. Furthermore, using a phenomenological method, sixteen semi-structured interviews were performed to get depth and richness of data. The present thesis simultaneously considered innovation and entrepreneurship master students, start-up companies and the internship program facilitator to adequately assess the internship experience.

Clark argues that advanced thinking comes when students turn their working experience into a dialogue between theory and practice, classroom learning and professional experience (2003). In the case of Gründerskolen, the class in Norway and the lectures at Rice University forms the theoretical framework, while the internship is the professional experience. A dialogue between these learning components is only possible if they all are of sufficient quality.

The present thesis suggests that students were exceedingly satisfied with the theoretical framework gained at Gründerskolen, but that there were noteworthy differences regarding how students perceived the quality of their internships, consequently leaving a significant span between those who gained a distinctly increased proficiency level in entrepreneurship, and those with a minimal increased proficiency level. It further reveals that the quality of the internships are strongly dependent on the hosting companies' management skills and experience in hosting interns. As start-up companies are in their first stage of operations, with few or no employees, they often lack management skills and experience, thus several internships were not providing sufficient value to the students.

However, students with good communication skills and the ability to raise issues with the hosting companies during the work placement, by taking initiative, in general improved the

quality of their internships. Moreover, the students who had reflected upon what they wanted to learn from the internships prior to commencing work, found it easier to communicate clearly with the company, raise issues, and take initiative, than those students who did not know what they wanted to achieve from the internship.

The internship component in Gründerskolen has the potential to provide students with deep and robust learning outcomes, as students not only apply theory to practice and thereby contributes to performance accomplishment and improves technical skills, but also the program lets the students learn vicariously. In fact, observation was in most cases, more important for students' learning than the actual work performed in the internships.

The thesis further reveals that Gründerskolen allows for yet another dimension of learning. The inspirational atmosphere that was achieved by working alongside entrepreneurs and by living, studying and socialising with other entrepreneurship students triggered affective emotional modes of learning, which was not only activated in the internships and lectures, but also at the informal learning arena outside of work in conversations with fellow students. This emotional openness can make it easier for students to absorb the other learning dimensions. Students can grasp new learning and increase self-efficacy through emotional and imaginal dimensions.

## **7.1. Implications**

It is important to address the key challenges with internships in start-up companies, to maximise the number of students who gets to undertake quality internships as part of their dialog between theory and practice. Good internships allows students to develop advanced thinking and to reap important benefits associated with observation and practical work.

The findings in this thesis suggests that a high quality internship consists of a combination of meaningful work, and opportunities to engage in vicarious experiences, where they get to observe key people in the start-up company in a range of different situations, both directly and indirectly related to work. To achieve such an internship, companies should prepare high quality projects, have good management skills, provide mentoring, and create some structure for the student.

One of the fundamental issues with internships in start-up companies is that the start-up companies often have poor management skills and little experience with hosting interns. I propose that the facilitator provides guidance and training for the start-up companies prior to them hosting interns. The facilitator may offer seminars that inform companies how to create internships that offers increased value to the student and themselves. The facilitator may ask start-up companies that have provided internships in the past to share their experiences and approaches to potential new hosting companies, to reduce the risk of making common mistakes. Alternatively, the facilitator can conduct comprehensive interviews with the start-up companies prior to accepting them as hosting companies, to reveal if they are prepared to offer an internship of sufficient value to the students.

Furthermore, students and companies should be educated on the importance of vicarious learning, to make sure to reap the potential benefits of enhanced cognitive capacity to process new information and integrate it with existing knowledge and skills. These are important benefits in entrepreneurship and for new venture creation.

The affective emotional learning triggered by the inspirational environment at Gründerskolen is unique due to the structure of the program. By allowing students to spend a portion of their education separated from their everyday lives, in order to explore the culture and environment of an entrepreneurship ecosystem in a new country, surrounded by like-minded students, the program triggers enthusiasm and may result in feelings of passion for their field of study. Other entrepreneurship educations should consider implementing a similar educational model as it is likely to increase the overall learning experience for the students.

## **7.2. Limitations**

The author of the present thesis have direct experience with Gründerskolen by previously having participated as a student, and at the time of writing worked side by side with the facilitator of the program. By not being a neutral observant, and being heavily involved with the case, some may argue that this can have caused a bias when performing and analysing interviews. However, the author argues that the involvement with the case created a deeper understanding of the case, and resulted in high quality in-depth interviews.

However, a notable limitation of the present thesis is the methodology limitation, as the results are interpreted solely on semi-structured interviews. The thesis could be stronger by

mixing quantitative methods with qualitative methods, such as survey respondents and case study research. According to Jick (1979) mixing these research methods could aid in triangulation as multiple methods converging on the same propositions strengthen them.

Another possible limitation of the present thesis is that all interviewees completed the program almost one year ago. It can be argued that they may not fully remember their experiences as participants, and that it would be more valuable to interview participants shortly after completing the program. Students may also not remember what proficiency level they were at before participating in the program, and it can therefore be hard to describe learning derived from the program. However, it can also be argued that the mental processing of learning takes time and that by interviewing participants who had sufficient time to reflect on their experiences they were better at explaining their learning outcomes.

Based on the research design of the present thesis, the results cannot be generalised to the population. Only sixteen individuals were interviewed, all of which came from the same entrepreneurship program. However, the in-depth interviews offers a good way to understand the case and can confirm or rejects previous research on similar topics with quantitative research designs.

### **7.3. Further research**

The findings of this thesis may be valuable for future research on internships in entrepreneurship educations. There are a number of avenues to continue researching. One possibility is to look at participants before and after having participated at Gründerskolen and compare mindsets and proficiency levels. This approach will result in more confidence when concluding what the effects of Gründerskolen are on each individual participant.

Another option is to do a study where the researcher looks at participants at Gründerskolen from when it first started in 1999 up to today. It would be interesting to see how many students have entered into entrepreneurship or innovation related jobs, or why some students chose to pursue traditional careers. This approach would reveal the long-term effects of Gründerskolen.

It could also be interesting to do similar studies on comparable entrepreneurship programs to Gründerskolen, to see if the findings are confirmed at different universities in different countries and across different settings.

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