Learning and skill development in business accelerator

A case study of Startup Reykjavik

Júlia Kozáková

Thesis for B.A. degree

International Studies in Education

HÁSKÓLI ÍSLANDS
MENNTAVÍSINDASVIÐ

Learning and skill development in business accelerator

A case study of Startup Reykjavik

Júlia Kozáková

Thesis for B.A. degree in International Studies in Education

Supervisor: Hróbjartur Árnason

School of Education and Diversity
University of Iceland School of Education
February, 2019

Learning and skill development in business accelerator

This thesis satisfies 10 ECTS credits towards a B.A.
in International Studies in Education in School of Education and
Diversity,
University of Iceland School of Education

Reykjavík, 2019

Abstract

Business accelerator, a startup assistance program, has seen growing popularity among entrepreneurs and organizations which seek to encourage and support entrepreneurship worldwide. While accelerators are often praised for offering great learning opportunities, the area of learning and skill development in these programs has been little researched. The aim of the study is to explore approaches to learning at an awarded accelerator program in Iceland. Through interviews with program facilitators and literature review, the study brings more light on the program's structure, choice of methods, as well as theories and assumptions behind them. Furthermore, the study applies the theory of communities of practice to identify and evaluate the accelerator as a social learning environment. The results reveal the diversity of methods used in the program. Learning and skill development facilitation is to a large extent based on the previous experience and knowledge in the community. Despite the limited conscious application of any learning theories or specific models, the strategies used to facilitate learning at the accelerator were shown to be very comparable to those on cultivating communities of practice. The findings could benefit those in charge of similar training programs, or those interested in adult-, entrepreneurship- or leadership education.

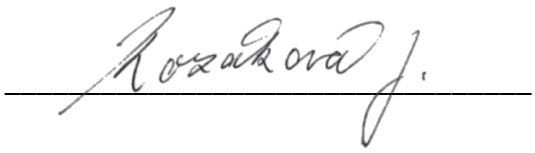
Table of Contents

Preface

Numerous conversations and interactions with Startup Reykjavik program alumni insipired the topic of this thesis. I would like to express my thanks to the whole community around the accelerator for their willingness to talk about their experiences. Special thanks go to the project manager Edda Konráðsdóttir for her dedication to help with the project and assistance with contacting people in the community. Sincere thanks belong to my project advisor Hróbjartur Árnason for his useful recommendations and guidance throughout the process.

This thesis was written solely by me, the undersigned. I have read and understood the university code of conduct (November 7, 2003, http://www.hi.is/is/skolinn/sidareglur) and have followed them to the best of my knowledge. I have correctly cited to all other works or previous work of my own, including, but not limited to, written works, figures, data or tables. I thank all who have worked with me and take full responsibility for any mistakes contained in this work. Signed:

Reykjavík, 14. January 2019



1 Introduction

For a long time, learning, broadly understood as a process of acquiring knowledge and skills, has been primarily associated with schools and other formal education settings. The concept of lifelong learning has, however, opened the doors to new perceptions on the process of learning throughout one's lifetime. It is recognized today that learning takes place in various settings and situations, either as a result of a conscious and direct activity or it happens accidentally (Reischmann, 1986). Such understanding of learning enables us to explore the different areas, situations, and contexts in which it takes place, as well as the approaches and methods used to facilitate the learning process. In this thesis, I direct my interest towards looking into learning which takes place in an intensive training program, a business accelerator in Iceland.

Entrepreneurship, the act of starting a new business, has been widely recognized not only as an essential contributor to the economy but also as a source of innovation which could lead to the alleviation of poverty, reduction of unemployment or increased self-sufficiency. In order to help startup companies get through the challenging early stages of development, governments and private entities alike have established various startup assistance programs and organizations worldwide. A business accelerator program is one of the latest and most popular forms of helping entrepreneurs to develop their new companies. Since 2005 when the first accelerator was founded (Miller & Bound, 2011), there has been a growing number of studies focusing on the effectiveness of such programs, as well as their contributions to the economy. Yet, little has been researched on their internal processes.

Startup Reykjavik was recently awarded best business accelerator program in Iceland (Nordic Startup Awards, official website, 2017). The program lasts 10 weeks and has been run annually since 2012. Each spring, a program's commission selects several mostly tech-focused business ideas from teams of entrepreneurs to undergo intensive training. The purpose is to help them with the first crucial steps from the ideas towards successful sustainable companies. Alike other accelerator programs, Startup Reykjavik grants the selected participants certain financial support, shared office and meeting spaces, and other forms of assistance, including mentoring around business basics such as marketing, accounting or networking.

The program's description does not directly mention learning or skill acquirement as benefits gained from participating in the accelerator program, yet, both are inevitably

part of the process. The applicants often come from different educational backgrounds and with different levels of skills. If their company is to grow, they themselves need to learn much, amass a great amount of new knowledge and develop their skills. The aim of this thesis is to bring more light on the so far little-explored area of learning in business accelerator programs.

I approach this project with the following questions: How is learning and skill development approached at a business accelerator program in Iceland? What methods are used to facilitate learning? What are the assumptions on participant's learning? How do the program's structure and organization relate to the theory on communities of practice?

The project is an exploratory case study. The research methods used involve both literature review and interviews. Project managers, facilitators, and an investor participated in semi-structured interviews which were taken both online and in person. The collected data was analyzed with regards to the research questions and interpreted in the light of theories on informal education, primarily the communities of practice. The findings can benefit those in charge of similar intensive development programs, educators or those interested in adult-, entrepreneurship- or leadership education.

1.1 Research structure

The study is divided into four main chapters, introduction, and a conclusion. The second chapter, Literature review, explores current research and theories on entrepreneurship and startup assistance, as well as relevant learning theories. Furthermore, it introduces Startup Reykjavik as a business accelerator. The chapter on research methods describes the research procedure, interviews, and interviewees. The fourth chapter, Findings, is divided into several parts. Four key results from the interviews are explored in more detail. In addition, approaches to learning at the accelerator are compared to the strategies on cultivating communities of practice. The discussion part reflects on the findings and their connection to the theories.

2 Literature review

2.1 Entrepreneurship and startup assistance

Entrepreneurship can be described as capacity and willingness to create, organize and manage a business venture in order to generate profit (Business dictionary online). While such activity usually carries a certain amount of risk, the value of entrepreneurship has been growingly recognized worldwide. This interest can be attributed to the fact that entrepreneurial activity has proven to be a positive contribution to a country's economy. In the United States, for instance, almost 70% of the economic growth can be accredited to entrepreneurial activity (Reynolds et al., 2000). On the global scale, entrepreneurship has been responsible for the differences in economic growth rates between industrialized countries over the past two decades (National Commission on Entrepreneurship, 2002). Furthermore, it is believed that besides the economic growth, entrepreneurship has also resulted in various innovations which contributed to the improvements in quality of life, reduced unemployment, increased self-sufficiency, and have a positive impact on poverty alleviation (ibid).

These convictions led governments across the world to invest in entrepreneurial support through various means. Besides creating public policy which encourages and supports entrepreneurship, many assisting programs and support centres have been established in order to help new companies become successful. Such assistance can be seen as vital, given the adverse statistics on the startup success rate. In addition, the cost of running the startup support systems can be high, considering the resources spent, as well as the time and commitments of the participating entrepreneurs, service providers, and sponsors. It is, therefore, crucial to establish effective support structures which would be efficient and useful to the startup companies.

Currently, the two most common types of startup assistance organizations are a business incubator and a business accelerator. These two terms are sometimes used interchangeably, however, they refer to different concepts. The term 'business incubator' has been in use since 1959 when the first one, called Batavia Industrial Center opened in New York, with the goal of assisting new ventures and helping them grow and succeed (Barrehag et al., 2012). Business or startup accelerator also referred to as 'seed accelerator' appeared nearly fifty years later when Y Combinator was launched in Cambridge, Massachusetts in 2005 (Christiansen, 2009; Miller & Bound, 2011). It is

difficult to get a precise number of currently operating accelerator programs, but it is estimated to range between 300 to 2000 worldwide (Cohen, 2014).

Accelerators differ from incubators in several areas. Perhaps the most relevant factor is their duration. While incubators are available to new ventures for 1-5 years, accelerator programs only for 3-6 months. Incubators tend to be open to all types of participants, regardless of their level of experience or focus of their venture. They often serve primarily the local community and are publicly owned. Accelerators, on the other hand, tend to be privately owned and are more selective in the application process. While the focus on the technology-related ventures is dominant among accelerators, some programs choose to support energy, health or education related startups, a specific university, company or a community.

Another key difference is in the incentives. Incubators usually do not have funds to invest directly in the ventures and also do not take an equity stake in the participating ventures, while accelerators generally invest between $18000 and $25000 and take equity of typically 4% to 8% (Ceausu et al., 2017 & Cohen et al., 2014). Both incubators and accelerators provide their participants with working space which is usually shared with other companies in a form of an open coworking office area. However, accelerators in addition to space also offer extensive mentoring services, business education, and networking opportunities, which are the primary reasons the accelerators are more popular amongst nascent entrepreneurs (Yusuf, 2010). Popularity and the intensive nature of accelerators are primary reasons for choosing one for this study as opposed to focusing on incubators.

2.1.1 Business accelerator in research

The recent growth of accelerators has been reflected in their appearance in the academic literature. Although the research is still limited, there are several studies aiming at defining the concept (Caley and Kula, 2013, Miller and Bound, 2011), comparing accelerators to incubators (Isabelle, 2013) or evaluating the effectiveness of the model (Hallen, Bingham and Cohen, 2013 & Winston-Smith and Hannigan, 2013).

Questions have been raised regarding the impact of the accelerators on the entrepreneurial activity. A recent study conducted by Global Accelerator Learning Initiative (2018) indicates a great variation between different accelerator programs in terms of their effectiveness in helping their startups grow. Such results can be a reflection of the differences between the individual programs. Those include size, sector of the founder cohorts, amount of provided seed money, length of the program, and offered learning opportunities (Ortmans, 2016). Other studies looked at the differences in success

rates of startups that participated in an accelerator program compared to those which did not. While some research reported more advantages and better outcomes for the accelerated companies (Roberts et al., 2016), in other cases the differences were not significant (Cusolito at al., 2018 & Hallen et al., 2014). Yet, further findings of both empirical qualitative and quantitative research are needed to determine the factors responsible for the success of startup assistance organizations in general (Ceausu at al., 2017).

A unifying definition of a business accelerator would be a helpful contribution to future research in this area. Cohen (2014) suggests the following definition:

> A fixed-term, cohort-based program, including mentorship and educational components, that culminates in a public pitch event or demo-day.

While Cohen's definition above mentions the educational components as key, from the perspective of education, little research has been done on the area of learning in the startup assistance programs. One of the few studies also conducted by Cohen (2013) looks at the purpose and effectiveness of accelerators in regard to learning. Her findings suggest that mentor's interference, the expertise of director experts, team's division, and interactions with other peer ventures in the program are all responsible for accelerated learning. Such learning is described as organizational learning which happens at a faster rate than it would under typical conditions (ibid).

In general, organizational learning theory does not favour time-compressed or accelerated learning as it can lead to inferior solutions (Levitt & March, 1988). However, later empirical research on product development, technology commercialization, and decision-making shows that acceleration, on the contrary, leads to improved performance. Speed can give companies first-mover advantages and place them steps ahead of their competitors (Hawk et al., 2012). Time pressure can also improve internal communication and stabilize the company's goals (Lynn et al., 1999). Due to their time constraints, business accelerators can serve as ideal settings for getting insights into accelerated learning and its facilitation and outcomes.

2.1.2 Startup Reykjavik as a business accelerator

Located in Iceland's capital, Startup Reykjavik is the oldest and most established business accelerator in Iceland. The program was launched in 2012 and has been running annually ever since. It is one of several projects managed by Icelandic Startups, a non-governmental organization with the aim of helping startups grow their business, both

within and out of Iceland. Besides Startup Reykjavik, it also runs other accelerators, such as Startup Tourism, Startup Energy, or Gulleggið. While privately owned, the organization presents itself as community driven, providing free consultancy services and other support to entrepreneurs. Such services seem to be in demand, as every year, Icelandic Startups receive around 500-600 business ideas and application to the programs.

Startup Reykjavik is not the only startup assistance organization in Iceland. There are several business incubators and at least one other currently running accelerator. However, Startup Reykjavik has a dominant position in this field. In 2017, the program was awarded by the Nordic Startup Awards (official website, 2017). The project founders also pride themselves in the number of startups which so far went through the program: 60, out of which 39 are still active. This year, a record number of around 270 startups applied to take part in the accelerator, which shows growing popularity.

The accelerator program consists of ten weeks of intensive training and preparation for the final pitch event, here called 'Investor night'. Ten, primarily tech-focused business ideas are selected to take part. In addition to working space and training, the participating companies receive financial support of 22,000 USD in seed investment, in exchange for the equity of 6%. There are no age or nationality restrictions for participating in the program. The fact that a large part of the program is in English encourages entrepreneurs from other countries to apply and creates a more diverse learning environment.

2.2 Defining learning

There are many reasons for exploring and conceptualizing learning. Knowledge changes individuals and societies and the better we understand how learning happens, the more effectively we can encourage and facilitate it. Over the past decades, the area of learning has been looked at and described from different perspectives, including those of behaviourists, cognitivists, humanists, constructivists, or social learning theorists. For the purposes of this study, the following definition of learning is considered:

> Learning is any process than in living organisms leads to permanent capacity change and which is not solely due to biological maturation or ageing (Illeris, 2007, p. 3).

One of the ways to classify the multiple definitions is based on whether they view learning more as a process or a product (Smith, 2018). The focus of learning as a product is on the outcomes of learning, which might be represented by an increase in knowledge, mental and physical skills, values, or more broadly any identifiable change in individual's

knowledge or behaviour as a result of experience. It is this viewpoint that has probably influenced the curricula of today's formal education the most. Learning as a *process* looks at a larger picture – on how people engage with their experiences, reflect upon them, frame, and act or do not act on them. This perspective also sees learning as inherently social, where experiences and processes are interconnected with feelings and ideas originating in interactions with others (Smith, 2018). The study of learning processes attracts educators who want to understand them in order to better support learners in their learning. For the aims of this research, both viewpoints are interesting, this thesis will, therefore, involve both the concept of learning as a process (through social interactions in a community), as well as learning as a product (e.g. skill development).

Skill development could be described as "the acquisition of practical competencies, know-how and attitudes necessary to perform a trade or occupation in the labour market" (EU Commission, 2012, p. 12). Compared to the rather abstract notion of learning, skill development is a very tangible term. Descriptions of skills and competencies are usually concrete and relatively easy to measure which makes these terms more prevalent in descriptions of learning outcomes in school curriculums, international student assessments, as well as in adult education and vocational education and training. Therefore, talking about skill development in the context of a business accelerator can be more useful for the conversation on learning of the program participants.

2.2.1 Informal learning

Three main modalities of learning which describe its different contexts have been receiving a wider recognition in current research and literature on learning. The concepts of formal, informal, and non-formal education were suggested by Coombs et al. (1973) and later expanded on by a number of researchers. Non-formal and informal learning are the most relevant for the context of learning at an accelerator program.

The terms 'informal learning' and 'informal education' broadly refer to learning activities that are often unorganized, unintentional, unconscious, and tend to happen outside dedicated learning spaces (Smith, 2014). However, the definitions differ and can be problematic (ibid). In general, informal learning is primarily a result of social interactions, for instance, conversations or discussions. It highlights the role of implicit (unaware, intuitive) learning which often results in people acquiring so-called tacit knowledge – knowledge or skills we have but cannot explain (Polanyi, 1967). The acknowledgment of such type of learning shifts the focus on the social, situational, and contextual aspects of knowledge gaining.

Non-formal education describes learning situations which are more structured, explicit, and involve the element of intention. It includes selected types of learning to specific groups of learners. Non-formal education activities contain a learning framework, an organized learning event, the presence of a teacher or trainer, and external specification of learning outcomes (Eraut, 2000). Learning in such a context is rather conscious and the curriculum is often a result of a negotiation between the learners and facilitators (Smith, 2014). Informal learning consists of all learning activities which fall outside the formal and non-formal education practices.

Learning activities reaching beyond formal education and where learners are adults is usually referred to as 'adult education', 'continuing education', or 'lifelong learning'. As the popularity of various programs for adult learners has been rising, there is a growing interest in establishing and researching this field. A substantial area of this interest involves a workplace and organizational learning.

2.2.2 Organizational learning

The idea of learning in organizations, or organizational learning, had been part of the literature on management for decades, however, it has been gaining more popularity only since around 1990 (Easterby-Smith et al., 1999). Theorists in this field have devoted themselves to identifying templates, or ideal forms which organizations could emulate. In general, these writers would view learning in an organization as either a technical or a social process. The technical view is looking at how to effectively process, interpret, and respond to information inside and outside the organization, while the social view places emphasis on people's experiences at work and the ways they make sense of them (ibid). The theories on situated learning and communities of practice applied in this thesis take on the social perspective.

As today's global economy is becoming substantially knowledge-based, the leaders in the business industry have started to recognize the value of encouraging learning within companies. Besides organizing structured and formalized educational courses for employees, many leaders are discovering the benefits of less formal learning activities at workplaces. As the research of Dale and Bell (1999) suggests, informal learning can help develop skills and knowledge of the employees, enhance their employability and self-confidence, as well as it helps them apply what they have learned in practice. Furthermore, it can improve the relationships between colleagues and with managers. A possible downside of relying on informal learning alone can include a too narrow focus which results in learning only a part of the whole task (ibid). Also, informal learning is often unconscious and unrecognized which leads to problems with its accreditation.

2.2.3 Social learning

In order to better understand and analyze the area of learning and skill development at a business accelerator, this research works primarily with concepts related to social learning theories. The choice of this perspective is based on the fact that it identifies and describes learning in less formal and social settings, which can include companies and organizations such as Startup Reykjavik.

Social learning theories go against the notion that acquired knowledge is purely a possession of individuals which can be somehow found inside their heads (Murphy, 1999). Rather, it is in the relationships between people and in the conditions that bring them together, and where a point of contact allows particular information to become of relevance (ibid.). Lave and Wenger (1991) also argue that learning is primarily rooted in social relationships. Instead of focusing on the cognitive processes and conceptual structures, they see value in examining the types of social engagements which create the right context for the learning to happen. Learning is seen as situated in a social situation, the nature of which has a direct impact on the process of learning.

2.2.4 Communities of practice

A community of practice (CoP) is a known concept in the realm of social learning. The term was suggested for the first time by Jean Lave, a cognitive anthropologist, and Etienne Wenger, a learning theorist, in 1991 (Lave & Wenger, 1991) and was later expanded on by Wenger in 1998 in his book Communities of Practice. They both argue that such communities have already existed in our society since its very beginning. As described today, they refer to “groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly” (Wenger-Trayner, 2015, What are communities of practice? section). Such groups differ from teams or other communities. Their members engage in collective learning which often happens unintentionally, as an outcome of their interactions in the community (ibid). An ancient tribe striving to survive, a group of nurses meeting at lunchtime or a team of engineers dealing with similar problems could all be examples of a CoP.

Three main characteristics describe a CoP:

- Domain: refers to the interest or a learning need the members share, a set of issues; membership means a commitment to the domain
- Community: member’s engagement in joint activities and information sharing, they build relationships and trust which enables learning

- Practice: members are practitioners who share a repertoire of resources such as experiences, tools, stories and ways of addressing problems; it is developed over time and through interactions (ibid)

All three elements need to be present and interact with each other for the community to constitute a CoP.

Members engage with the community through two distinct channels:

- Reification: renegotiating the meaning of the past products - policies, statistics, plans, contracts, institutionally defined authority, etc.
- Participation: renegotiating identities - influence, trust, charisma, discrimination, personal authority, ambition, etc.

These processes are complementary and constantly interact with each other which is essential for a community's development. A CoP could, therefore, be also defined as shared histories of learning, where history is a combination of participation and reification that intertwined over time (ibid).

Perhaps the biggest value of CoPs lies in the learning opportunities they offer and the knowledge they gather. Furthermore, being part of a community around a specific domain provides individuals with a sense of belonging, as well as it helps them with forming identities and constructing meaning. On organizational level, communities can serve as a valuable source of knowledge and tools which were constructed, gathered, and reinvented over time.

Despite the CoPs being widespread, the term is still unfamiliar to many. In companies and organizations, such communities are often labelled with different names, for instance, a thematic group, a learning network or a tech club. Another reason might be the CoP's diversity. Their sizes can vary from tens to thousands and each of them has its own distinct characteristics. While some may last only a few months, others can survive across centuries. Communities of practice might be worth examining simply for the fact that most of us belong to more than one such community at any given time.

There has been a growing interest in utilizing the knowledge on CoPs for organizational learning. In Cultivating Communities of Practice (2002) Wenger aims at organization leaders to recognize already existing learning communities, sustain them and help them grow, which will result in better knowledge stewarding in the company. He calls this process 'cultivation', which refers to the encouragement, protection, and creation of the right environment, as opposed to directing, planning, and over-

management. The Wenger's guidelines for organization leaders are described in more detail in the chapter on findings.

3 Research method

The aim of this research was to analyze business accelerator Startup Reykjavik with regards to learning and to answer the following questions:

- How is learning and skill development approached at a business accelerator program in Iceland?
- What methods are used to facilitate learning?
- What are the assumptions on participant's learning?
- How do the program's structure and organization relate to the theory on communities of practice?

Two main approaches were used to address this inquiry. The analysis of the accelerator is partially based on information gathered from the company's website and other available sources. Personal observations also contributed to the description of the environment and the overall understanding of the program's structure. The most valuable source of information were interviews with project managers and coordinators at Startup Reykjavik.

3.1 Analysing the accelerator

The official websites of Icelandic Startups and Startup Reykjavik provided general information about the program. The initial knowledge on the accelerator was later expanded in the interviews. As the research on Icelandic startup assistance programs is still fairly limited, in addition to looking at available sources in English, research from other countries was also considered in describing and evaluating the accelerator. One of the objectives of this project was to recognize a business accelerator as a learning environment. For that reason, the findings on Startup Reykjavik were analyzed with regards to learning theories. The concepts of communities of practice and situated learning were selected as relevant due to their social perspective and relevance for adult and organizational learning.

3.2 Interviews

Semi-structured interviews were conducted between April and October 2018. The aim was to get insights from those directly involved in creating and facilitating the accelerator program. The focus of the questions was on identifying the interviewees' perspectives on the program, its methods, structure, as well as their views on learning and skill

development of the participants. While most questions were prepared beforehand, they differed slightly depending on the interviewee and their role in the program. Also, new questions emerged as the research went on. The list of questions is available in the Appendix. All interviews were individual in order to get independent and individual perspectives on the matter. Most of them took place online and one was conducted in person. They were recorded in all cases.

The selection of the interviewees was based on their role in the program. The selected group included three project managers - two current and one from the previous years, and one investor who is also a member of the advisory board and a mentor to the participants. They all had the first-hand experience with leading and shaping the program for at least one term. While the sample might seem limited, the accelerator program is usually run by a relatively small group of people - in the case of Startup Reykjavik, there is one project manager and a few assistant managers. Therefore, only a few people are directly involved in creating, structuring and facilitating the program. Also, many of the team members stay in the project for more than a year. Since this is only the seventh year of the program, the number of those who were in charge of it is not large. This research could be viewed as a small-scale case study. Instead of looking at a number of accelerators, the goal was to focus only on one of them in order to get more in-depth knowledge.

4 Findings

The following chapter presents the results of the research. Four key areas were recognized as relevant for the purpose of the thesis and research questions. Each area is described in more detail with supporting quotes from the interviewees. Further, Startup Reykjavik as a learning environment is compared to the theory of communities of practice. Followingly, the methods and approaches used in the program are analyzed in light of the guidelines on cultivating CoPs in organizations.

4.1 Learning facilitation and methods

The interview questions were directed towards answering the research question of the learning facilitation in the accelerator. The following findings refer primarily to the question on the program facilitators' assumptions on the learning of the participants.

When asking the question 'How do you think the program participants learn?', the interviewees associated learning primarily with methods used in the program. They referred to mentoring, a strategically prepared training plan, and more traditional lectures and workshop as ways of encouraging learning in the program. They provided some in-depth information on the specific methods and training plan they use. They are explored here below.

The ten-week summer program is intensive entrepreneurial training. Due to the high level of intensity and work demands, it was also referred to as a 'boot camp'. Each week in the program has its theme and focuses on a different area of business knowledge or a skill set. The program starts with three weeks of building the team and the brand. Later comes marketing and branding, which are followed by planning weeks and in the end, there is a preparation for the final presentations to investors.

> We try to give [participants] tools, also mental tools, for being able to be leaders and good entrepreneurs, that's what we do. We help building sustainable companies, at least we try to. (Einar)

The methods used in the program are very similar across the program's time span. Each week, there are 2-3 lectures with local experts or invited foreign guests. They mostly take on a form of a workshop, where participants can ask questions or discuss topics concerning their businesses. Attendance, similar to other parts of the program, is not

mandatory. Some of these lectures are open to public and some are organized only for the program facilitators.

Personal reporting is another key aspect of the training. Regular weekly meetings with the program managers and participating teams are set up for several reasons. Firstly, they provide information on the team's progress, current challenges and plans for the next weeks. Secondly, they allow teams to ask for advice or leave feedback. As one of the interviewees pointed out, they had to increase the number of these meetings over years, as they realized the value they have for the participants:

> In the beginning, we wanted these meetings to be about 'why are you doing this?' but it ended up just being really good for people to get a chance to vent and talk to someone they can trust and know it doesn't go any further… This is something that we found helps people a lot, a personal connection. (Haraldur)

Throughout the program, participants develop their skills in many areas. The interviewees were asked what skills they consider crucial for the participants to obtain. They identified several key skills which included the ability to listen, ability to learn, effective communication, being able to use and ask for help, going from over-planning to execution faster, building a network, and confidence about one's work. In addition, perseverance and stamina were pointed out as a prerequisite for success in entrepreneurship. Teams were also advised and encouraged to take advice from those who are more experienced as part of their learning process.

The facilitators noticed a change in recent years in the type of participants joining the program. While almost anyone with a business idea can apply, mostly older and more experienced entrepreneurs joined the accelerator in the past two years. One of the managers described this group as less likely to fail, as older participants tend to be more thorough in their work and decisions. However, this fact has not had an influence on the program's content and training methods, as "they all go through similar process of building a company" (Einar). For instance, all teams are given a checklist containing steps most companies need to take in order to build themselves and succeed at the market, no matter how much experience in entrepreneurship they already have. Yet, other parts of the program are adjusted to the needs of each team. If a team needs expert knowledge on a certain subject, facilitators try to find and contact a person who has the relevant knowledge and invite them to meet the team. If they are not able to do that, they themselves search the information or use their network.

Two years ago, the team of managers introduced some changes to the accelerator program. Based on their previous experience in the program and literature on lean startups, they have introduced more reflection and critical questioning exercises. From the moment of entering the program, the participating teams are frequently asked to question and rethink their ideas and next steps they take. They should consider alternative options if there are any. Furthermore, they are asked to question everything they have learned before entering the program. Failing early in the process is also encouraged as it provides a valuable learning lesson. It allows the companies to adjust faster.

> Learning and adjusting is the same thing. (Ingi)

4.2 Guidelines and theories

One of the aims of this research was to explore the theoretical foundation behind the selection of approaches and methods for facilitating the training of the participants at a business accelerator. The interviewees' answers brought more light on the facilitators' background knowledge and inspiration for designing the structure and content of the ten-week program.

Startup Reykjavik is part of a network of accelerators called GAN. The organization strives to bring together accelerators from around the world and align them around the best practices, with the goal of creating a standardised model for success (GAN official website). Today, there are around 80 accelerators in the GAN community. The organization provides support to its members which includes access to documents such as 'the GAN manifesto', which describes best practices in accelerator programs and provides useful tips on how to run them. The content of these guiding documents is exclusive with only GAN members being granted the access. As they cannot be shared externally, the documents were not used for analysis in this paper.

There was some inconsistency amongst the interviewees' perspective on the role of GAN in designing the accelerator program in Iceland. While most project managers saw the GAN's guidelines as a helpful contribution to the program, one manager described the sources to be very limited, with little impact on the program's content and structure. However, Startup Reykjavik has been a full member of the network since its beginning and the GAN's instructions are reviewed annually as part of the preparation of the next year's program.

Another source was mentioned as providing valuable information and inspiration for the accelerator. The Four Steps to the Epiphany: Successful Strategies for Startups That

Win (2005), a book by Steve Blank on what makes startups successful was named very influential by one of the current program managers. The topics in the book revolve around general business areas, such as organizing sales, marketing, and business development. Blank presents four practical steps on how to prevent and correct flows in business plans and products early in the process. The book is also characterised as a key source on the Lean Startup approach for new ventures.

Lean Startup methodology was mentioned as influential by several project managers. The methodology's focus is on experimentation and iterative learning while rejecting long-term planning (Mansoori, 2017). While Startup Reykjavik takes inspiration from the Lean Startup approach, it does not qualify as a 'prescriptive accelerator', an accelerator program focusing strictly on lean startup methodology (ibid). A large portion of the training design can also be attributed to previous experience and adjusting to the needs of the community.

> [The program] follows the lean startup methodology: testing early, testing often, and trying to build up hypothesis and test them before you build your product. (Haraldur)

A key factor affecting the program's design are the participants themselves. The Startup Reykjavik facilitators ask for feedback both during and after the program. There are several ways of getting to know the entrepreneurs' opinions. Firstly, weekly personal meetings with the startup teams are arranged in order to not only be informed about the current status of their work but also to get their opinions on the training program itself. Suggestions on improvements are welcome and addressed where possible. Secondly, each year after completing the program, participants are asked to answer a survey focusing on their experience with the accelerator. The feedback is reviewed by the management team. All interviewees consider this step very important in designing the next year's program. Over the years, the comments of the participants have helped to shape the program to its current form.

Lean Startup methodology, GAN's materials on accelerators, personal experience of the program managers, participant's feedback and experience from the previous years of the program were the main sources of knowledge for designing the entrepreneurial training at Startup Reykjavik. Furthermore, the facilitators also get inspiration from looking at other, similar programs and the ways in which they are conducted, however, such observations are limited by the small number of accelerators in Iceland. The facilitators to a large degree rely on the knowledge they have gained through their

personal experience with entrepreneurship, either by being an entrepreneur or an observer. Two managers also mentioned studying the topic independently, mostly outside formal education. No specific research or theories on learning or entrepreneurial training were mentioned as directly involved in the process of designing the program.

> Unfortunately, maybe that is a big minus, there is nothing concrete or academic that [the program] is built on...You take what is best around you and you adapt and try it. (Haraldur)

4.3 Mentorship

A method which was identified as the most fundamental for the entrepreneurial training was mentoring. All interviewees agreed that a great amount of learning in the accelerator happens through regular meetings with experienced mentors. Like many other accelerators, Startup Reykjavik has spent time and other resources on providing quality mentorship to the participants since the beginning of the program.

Mentorship or mentoring could be broadly characterised as a training system where a more experienced individual is assigned to act as an advisor to a trainee (Business Dictionary online). In the context of the accelerator, the role of a mentor is to help with identifying opportunities by giving feedback on the existing business idea and by providing access to private knowledge to further develop the idea or redirect it into a more suitable business model (Mejia & Gopal, 2015).

The program facilitators at Startup Reykjavik search and invite experienced entrepreneurs or other professionals to volunteer as mentors during and sometimes also after the ten-week program. They are expected to attend personal meetings with assigned teams, answer their questions and offer advice based on their knowledge and experience from the field. Each year, around 80 mentors participate in the program and around 430 mentor meetings took place this year.

> The program is really focused on mentors…The mentors are really valuable for the program and we are really lucky to have all these great mentors…It is good to be in Iceland because everyone is connected so it is very easy to reach high-level people here. (Edda)

The mentor's selection is based on the participating business ideas and the needs of the teams behind them. The facilitators rely primarily on their social network and local contacts. As many of them have previously worked in the corporate environment, they utilize the connections they have made. So far, they have had a positive experience with

getting experts into the program, despite it being an unpaid and sometimes time-consuming role. The majority of mentors are entrepreneurs themselves, leading small or large companies in Iceland or abroad. Others are investors or financial analysts and consultants. Most mentors are locally based; however, the organizers strive to bring foreign guests as well as some teams aim for the international market. Program participants can ask to bring someone in as a mentor and the team of organizers will try to contact the person and convince them to take part.

> The startups can also request if they know someone they really want to get connected with then we, of course, just bring them in and add them to our mentor list. (Edda)

While mentors are considered experts in their field, most of them might be new to the mentorship role and lack any professional background or training for such responsibility. In order to prepare them for their role, mentors are invited to take part in a dinner meeting which is organized before the official summer program starts. The purpose of the meeting is multifold. It is a space for networking where mentors have a chance to get to know the accelerator and its managers, as well as to learn about the selected business ideas. Furthermore, it introduces the idea, benefits, and challenges of mentorship. The organizers go over the '10 golden rules of mentoring', a material provided by the GAN network. The document is available only to GAN members.

> What we have learned what we had to focus a little bit more on was preparing mentors for the meetings...We have a team from the previous batch to come in and talk to mentors about how they liked to be mentored and what they liked to know. (Haraldur)

Program participants also receive brief instructions on how to approach mentor meetings. While they are encouraged to listen carefully to the given advice and learn from those with experience, they should as well maintain a critical mindset. What mentors say can generally apply to most startups, however, it might be the most suitable solution for their company. The participants are advised to select the information which they believe is the best for the context and current status of their company.

> Mentors have some kind of background, some kind of experience but also their business setting is different than yours. You can learn from them but always...talk to a lot of people and then do what you feel is best based on all that input. (Haraldur)

To ensure the quality of mentorship in the program, the facilitators ask for participant's feedback and review the list of mentors annually. Startup teams are asked to rate the mentors they have had interactions with and select the top five they found most helpful and had a positive experience with. This method allows the managers to make a better decision on who to invite to the next year's program. One of the concerns around mentorship expressed by an interviewee was the fact that in some cases, mentors could feel obliged to answer all questions they get, even though they might not always have a good answer due to a lack of expertise in the particular area. Yet, the participant's feedback and preparation before the program proved to be useful in preventing such situations.

> What I believe is the most important for the mentors to know is what they do not know and be humble about it. (Haraldur)

4.4 Informal and social learning

Not all learning happens through organised training activities. One of the objectives of the research was to explore other, less conscious ways the entrepreneurs can benefit from participating in the accelerator. Startup Reykjavik is an environment rich on social interactions. However, do the program facilitators see it as a place where learning can happen in less structured ways? Are they aware of any informal learning taking place?

When asked about learning in the accelerator, the interviewees mentioned methods used in the program, such as mentoring, workshops or lectures and paid notably less attention to the aspects of informal learning. Yet, once the questions were directed towards the social area, they could relatively easily describe various social situations which they perceived as very valuable for the entrepreneur's experience in the program.

For instance, all interviewees mentioned a specific method used in the program - weekly reporting meetings with each team. Besides strictly informing the facilitators on the progress of the company, it also creates a space where participants can talk to the facilitators about anything of their concern. On the other hand, it allows facilitators to get to know the teams and adjust the program to their needs. Furthermore, these interactions are seen as a way of strengthening the trust between the entrepreneurs and facilitators. Inspired by the positive experience of sharing in the personal meetings, the management team decided to implement bi-weekly group meetings as well. They had a form of Friday social lunch and were attended by all participating companies.

A part of each lunch gathering is a group sharing, where each team is given a space to briefly present their progress. They are encouraged to ask for something that would help

their company with the next steps. It might be feedback on their latest idea, a technical help, or any other practical advice. In most cases, teams are able to find someone from the group with the knowledge or information they are seeking. Seeing the success of such sharing and aware that each person in the program has a great amount of prior experience from different areas which can be a valuable source of information for the rest of the group, the managers made knowledge sharing part of their strategy. Participants are from the beginning of the program encouraged to use the group resources by asking questions or directly asking for help.

> We encourage them to seek knowledge from each other because most of the companies have excellent individuals. (Ingi)

> These kinds of interactions are much more valuable than what they are getting out of the program. (Ingi)

To be proactive in asking questions or talking about the product to anyone else at Startup Reykjavik is relatively easy due to the rather informal atmosphere in the group. The conversations about the business ideas take place on daily basis. The facilitators noticed there was a need to always have one person from the management 'on the floor' who will be present at the venue and available to the entrepreneurs at any point. To a certain degree, this person fulfils a similar role as a mentor. They participate in small talk, walk from one team to another and ask what the team is currently working on or perhaps struggling with. Sometimes they get questions which participants would not ask the mentors. Over the years, this role went from being an additional task for one of the program managers to a full-time position, as its benefits become more evident.

> The first summer I felt like I get no work done because I was being constantly interrupted, having chats. When it happened again next summer I realised - this actually matters. (Haraldur)

A program manager who used to be in this position admits he might not have been able to provide the same service as the mentors do, however, he has always strived to find the answer or a solution for the team who approached him.

> Participants need someone to bounce their ideas to. We might not be the experts like the mentors but we can tell them what we know others have done, point them in the right direction. (Haraldur)

The types of social activities where participants have a chance to learn from the rest of the team are not restricted to personal reporting, chatting with a program manager or Friday lunchtimes. During each year's program, the managers witness plenty of small talks and engaged discussions taking place between the participants. While they perceive it as a positive phenomenon, they are also aware that recent changes to the program made it more intense and work demanding, leaving less time for such social interactions to happen. To create more space for socializing, they organize one-day team building events outside the program venue. The events help to build stronger connections and trust within the team. Over the years, the facilitators observed that many participants stay in touch after leaving the program.

> A lot of the time, the most valuable connections you get...are the people in the program with you. They are ambitious and smart, they are really good at what they do, they all tackle the same problems at similar time. (Haraldur)

4.5 Startup Reykjavik as a Community of Practice

The focus of the following chapter is on exploring Startup Reykjavik as a learning community. In the first part, the accelerator program is recognised as a community of practice. The second part compares the guidelines on cultivating communities of practice in organizations with the approaches and strategies adopted at Startup Reykjavik.

As mentioned in the findings on social and informal learning, not all learning happens as a result of structured and directed training. Communities of practice (CoP) is a theory describing informal and social learning which often takes place in a workplace or an organizational setting. In its essence, Startup Reykjavik could also be identified as such a community. Three main characteristics of a CoP as previously described in the literature review became evident in the facilitators' explanations. They are reviewed below:

A domain of knowledge: In case of Startup Reykjavik, the domain is entrepreneurship, development of a business idea into a sustainably successful company. It is the concern of all participating teams. At the point of joining the program, the companies are at a very similar stage of development. They often face the same issues and challenges in the process, which can involve budgeting, building a desirable brand, finding and attracting customers, finding future sponsors, etc. The common interest strengthens the sense of a shared identity and inspires participation.

A community of people: The participants go through the same training, attend same lectures and workshops, they take part in organized social events. For ten weeks, they share the same office space. Whether consciously or not, they form a community. The many conversations and information sharing (not strictly about work) create relationships and trust in the group. What also fosters a community is caring for the domain. A business accelerator attracts highly motivated and ambitious individuals who tend to be highly engaged in their work. These traits make them naturally interested in the domain and involved in the program.

A shared practice: At Startup Reykjavik, practice as a repertoire of resources has to a large degree evolved over years. Since the beginning of the program, the managers committed themselves to find the best practice for a successful business accelerator in Iceland. Each year, they pass on the tools and resources to the newcomers. Such practice transfer is done through sharing ideas and stories from the previous years, recommending written guidelines and other literature, and generally through the way the training is conducted. The practice is not a passive knowledge. New participants bring new ideas and expertise to the program and the facilitators work diligently on collecting feedback which will later shape the future of the accelerator.

As described above, the community of practice at Startup Reykjavik refers to a group consisting of participating entrepreneurs, the program management team, and partially also mentors. They all have a high level of involvement in the program and are engaged in regular social interactions. Yet, we could probably find a CoP also solely amongst the participants. Certain characteristics of such a learning community would, however, be missing. For instance, there would be no prior history as the participants usually meet for the first time at the start of the program. They would need to develop their own practice which can be challenging under the circumstances of intense training. Furthermore, no continuity would be ensured once the training is completed. The team of the program facilitators could also be seen as a community with a common domain, meeting regularly to learn from each other. However, this CoP is neither of focus in this research, yet its existence should be mentioned. In the interviews, the facilitators reported that their regular meetings help them learn together how to facilitate learning better.

Based on a Wenger's description of a CoP (2002), the community of practice formed at the business accelerator is of medium size (less than 200 members), it is partially short-lived (participants change each year,) as well as long-lived (practice remains present over

years). It is collocated (located in the same area) and heterogeneous when it comes to background of the members. Furthermore, it is both intentional (participants join to learn about business) and spontaneous (social interactions taking place during "off work" time).

4.6 Cultivating a learning community

Startup Reykjavik meets the core criteria to be identified as a community of practice. It is an environment where people are united by shared interests and concerns, and through regular social interactions, they learn together and from each other how to address raising issues. Practice, the knowledge that has developed in the program over time and which is being constantly renegotiated, supports the learning process in the community. By describing the accelerator as a community of practice, we can better understand it as a social learning environment.

Despite the fact that CoPs are voluntary and organic and too much structure could harm them (Wenger, 2002), there are still ways in which organizations can support learning in such communities. Below is a comparison of recommendations for an effective learning community design with the methods and strategies adopted by the Startup Reykjavik (SR) facilitators. The underlined guidelines are derived from Wenger's book *Cultivating Communities of Practice* (2002).

Design for evolution: building on existing personal structures, supporting the dynamics by allowing new members with new interests, adjusting to the current stage of the community;

SR: The accelerator is undoubtedly a dynamic environment. New members with diverse prior experience join the team each year. The facilitators adjust the elements of the program (selection of mentors and lecturers) based on the needs of current participants and their business ideas.

Opening a dialogue between inside and outside: the need for information from insiders but also welcoming outside perspectives to see the new possibilities;

SR: Participants are encouraged to seek knowledge from others in the team, as well as share their own skills and knowledge. Experts outside the program are invited to give lectures and mentor the entrepreneurs.

Inviting different levels of participation: different levels of interest in the community amongst members: a core, active, and peripheral group forms, delegating roles and responsibilities to members to encourage participation;

SR: It is difficult to evaluate the formation of groups based on their involvement in the program from the interviews, however, the facilitators encourage interest by regularly asking for feedback on the program and by organizing personal reporting meetings. A delegation of roles was not mentioned.

Developing public and private community spaces: events and activities organized include those open to public and private conversations, they have a ritualistic and substantive purpose, good relationships make better events and well-organized events foster personal conversations;

SR: The program is rich and diverse, consisting of both open public events with guests and multiple personal meetings with the facilitators as well as mentors.

Focusing on value: recognizing the benefits a learning community brings to the company, the value emerges from activities, events, and relationships in the group;

SR: Participants are recognized as valuable sources of knowledge and encouraged to contribute to the learning experience of the whole team. Their experience and feedback are stored and inform the future of the program.

Combining familiarity and excitement: familiarity invites comfort which enables frank discussions and idea sharing, divergent thinking and activities are essential for the growth;

SR: There is some degree of consistency and routine in the program which should create familiarity during its short duration. The relaxed and informal atmosphere in the team can foster good conversations where different opinions and perspectives are welcome.

Creating a rhythm for the community: activities and relationships create a sense of movement and liveliness, if the rhythm is too fast, members get overwhelmed, if it is too slow, they feel inactive; the rhythm can be broken by a milestone event; there is no right beat for all communities;

SR: The accelerator program is highly intense, and the facilitators admitted the participants might feel overwhelmed at times. They, however, do not intend to change the tempo, as they want the entrepreneurs to get the most out of the training. Milestones were not mentioned but their occurrence is less likely due to the program's short duration.

5 Discussion

The primary purpose of a business accelerator is to assist entrepreneurs with the initial stage of defining and developing their products, identifying customers, and securing resources (Cohen, 2013). Promotional descriptions of accelerator programs usually do not highlight learning and skill development as key benefits of participation. However, new knowledge and better skills are often necessary to progress in the business field. In Startup Reykjavik, the program managers, whether consciously or not, do facilitate learning in the program by applying a variety of methods and approaches which construct an entrepreneurial training. One of the aims of this study was to explore the business accelerator as a learning environment. This chapter discusses the findings of the study in relation to the research questions and literature.

5.1 Approaches to learning

Learning at Startup Reykjavik could fall somewhere between adult education, vocational education and training, and entrepreneurship education. When it comes to the context of learning, all three types: formal, non-formal, and informal are involved. The aspects of formal education are reflected in the lectures organised as part of the program. However, these lectures often take on a form of workshops or open discussions with an informal atmosphere which resembles non-formal learning. Informal learning takes place during lunch breaks, social activities such as regular reflection meetings, or through random encounters in the office area.

As mentioned above, learning can be viewed as both process and product. Both perspectives could be recognized in the entrepreneurial training at the accelerator. In their answers, the interviewees talked about learning as a process when describing activities which involve reflection, discussions or other interactions in the team. Learning as a product is present in the program when the focus is on the skills and qualities the participants need to develop for succeeding with their companies. All interviewees seemed to have an idea of what skills and qualities these should be; however, their answers were not unanimous.

From the perspective of organizational learning, the strategy adopted by Startup Reykjavik contains aspects of both the technical and social approach. People's experiences are considered and even have an impact on the structure of the program (social view). The facilitators also aim to build each year's program on the established

practice from the previous years (technical view). The diversity of methods, tools, and approaches to entrepreneurial training at the accelerator could perhaps seem inconsistent or unestablished. However, as earlier mentioned research of Dale and Bell (1999) points out, relying only on a single method, in this case, informal learning, could limit the overall learning experience.

The selection of methods and strategies at Startup Reykjavik is influenced by several sources which including personal experience, lean startup methodology, feedback on the program, as well as the guidelines from GAN. Little attention is paid to academic research on accelerators, although one interviewee mentioned his personal involvement in keeping up with the current literature on accelerators and entrepreneurial training. Yet, another participant in the study expressed some degree of disappointment with little attention given to such sources in the program design. All interviewees agreed the time they can dedicate to this project is limited as they work on other accelerators as well throughout the year. They do, however, review the guidelines from GAN and feedback from the participants annually. It appears that their 'learn as you go' or 'learning by doing' approach to the program design has worked well so far, which is reflected in the accelerator's popularity and dominant position in Iceland.

It is difficult to tell whether a more formal approach of entrepreneurship education and theory-informed decisions on the training of the participants at Startup Reykjavik would result in better outcomes of the program. The popularity of entrepreneurship education is evident with over 5000 courses on entrepreneurship being taught by colleges and universities across U.S. (Kauffman Foundation report, 2013), however, a reliable proof that completing this education will result in entrepreneurial success is still lacking. The relatively small number of studies comparing performance of those who have received such education with those who have not showed mixed results (Ortmans, 2016).

5.2 Learning environment

When compared to business incubators, accelerators have several advantages in terms of their learning environment. As accelerators tend to last for a considerably shorter time, their program is highly intense which requires a lot of focus. The final event – investor night is likely to motivate the participating teams to get as much as possible from the program to perform their best at its end in order to get sponsored. Furthermore, learning is enhanced by intense mentoring throughout the program, a factor which Cohen (2013) mentions as key for learning at accelerators. Incubators generally pay less attention to providing quality mentoring, if they provide it at all. Both accelerators and incubators can contribute to learning through social interactions if they choose to provide shared open

office areas. Such environments naturally encourage more socializing which can lead to new knowledge. Startup Reykjavik chose this option over individual office spaces.

Accelerated learning as described by Cohen (2013) is present at Startup Reykjavik, as most of the factors – mentor's interference, division into teams, as well as interactions with peer companies, are all involved. However, as discussed earlier, the intensity of accelerated learning can in some cases be a hindrance to learning. Interviews with program participants could determine whether the program's schedule is beneficial or perhaps overwhelming at times.

The previous chapter looked at Startup Reykjavik as a community of practice as defined by Wenger (2002) and compared the program facilitation to his guidelines on cultivating learning communities within organizations. Almost all of the seven design steps were already implemented in the program, either completely or at least partially. Yet, the facilitators were not familiar with this particular theory. After they were briefly introduced to the theories on informal and social learning, the interviewees immediately recognized situations where social learning takes place in the program. In addition, they referred to social interactions as very beneficial to the learning of the participants. They suggested that such interactions might even be of more value to them than the rest of the program. The fact that these situations were not mentioned in the first place confirms the assumption that social learning is often tacit, less conscious and noticeable. Without being consciously aware of the need of such learning in the program, the facilitators saw the benefits the social exchanges and knowledge sharing bring and took steps to support such activities in the program.

There is a need to further explore entrepreneurial education and training whether it is in terms of its procedures, impact or effectiveness. Business accelerators might provide useful insights on this topic, as their intense 'hands-on' training is an attractive place for starting entrepreneurs to progress during the most crucial part of company development. The strong presence of informal social learning at the accelerator suggests that when exploring entrepreneurial learning, we might need to go beyond looking only at training methods leading to skill development and also consider the impact of the environment and community.

6 Conclusion

The purpose of this study was to explore Startup Reykjavik, a business accelerator program, as a learning environment and to get insights into entrepreneurial learning from the perspective of the program organizers. The research questions aimed at exploring their attitudes to learning, as well as the choice of methods used in the program to facilitate learning of the participating entrepreneurs. Furthermore, the study compared learning in the organization to the Wenger's theory of communities of practice.

The findings from the interviews revealed a diversity of methods used at the accelerator. The dominant methods and activities are mentoring, networking, creating sharing spaces, as well as more traditional lectures and workshops. Learning and skill development facilitation is to a large extent based on the knowledge and previous experience in the community. Program facilitators' assumptions on learning and choice of methods are influenced primarily by their past experience with the program and feedback from program's alumni. There is little knowledge of learning theories or concepts such as communities of practice. Yet, the adopted strategies and program's structure are in many ways similar to the guidelines on how to cultivate such communities effectively. As the business accelerator programs are rather new, there is a need for more research on their internal processes and effectiveness in general.

References

Barrehag, L., Fornell, A., Larsson, G., Mardstrom, V., Westergard, V., & Wrackefeldt, S. (2012). *Accelerating Success: A Study of Seed Accelerators and Their Defining Characteristics*. Gothenburg: Chalmers University of Technology (Bachelor's thesis at Department of Technology Management and Economics)

Blank, S. (2005). *The Four Steps to the Epiphany: Successful Strategies for Products That Win*. K & S Ranch Consulting, Incorporated.

Caley, E., & Kula, H. (2013). *Seeding Success: Canadian Startup Accelerators*. Retrieved from https://www.marsdd.com/mars-library/seeding-success-canadian-startup-accelerators/

Ceaușu, I., Marquardt, K., Irmer, S., & Gotesman, E. (2017). Factors influencing performance within startup assistance organizations. Proceedings of the International Conference on Business Excellence, 11(1), 264-275. doi:10.1515/picbe-2017-0028

Christiansen, J. D. (2009) Copying Y Combinator: A Framework for developing Seed Accelerator Programmes. Cambridge: University of Cambridge. (MBA Dissertation at Judge Business School and Jesus College)

Cohen, S. L., & Bingham, C. B. (2013). How to Accelerate Learning: Entrepreneurial Ventures Participating in Accelerator Programs. Academy of Management Proceedings, 2013(1), 14803. doi: 10.5465/ambpp.2013.14803abstract

Cohen, S., & Hochberg, Y. V. (2014). Accelerating Startups: The Seed Accelerator Phenomenon. SSRN Electronic Journal. doi:10.2139/ssrn.2418000

(Coombs, P. H., Prosser, R. C., Ahmed, M., & Israel, B. B. (1973). *New paths to learning for rural children and youth*. New York: International Council for Educational Development.)

Cusolito, A. P., Dautovic, E., & Mckenzie, D. (2018). Can Government Intervention Make Firms More Investment-Ready? A Randomized Experiment in the Western Balkans. *Policy Research Working Papers*. doi:10.1596/1813-9450-8541

Dale, M., & Bell, J. (1999). *Informal learning in the workplace*. London: Dept. for Education and Employment.

Easterby-Smith, M., Araujo, L., & Burgoyne, J. (1999). *Organizational learning and the learning organization: Developments in theory and practice, edited by*. London: Sage publications.

Entrepreneurship. BusinessDictionary.com. Retrieved January 5, 2019, from BusinessDictionary.com website: http://www.businessdictionary.com/definition/entrepreneurship.html

Eraut, M. (2000). Non-formal learning and tacit knowledge in professional work. *British Journal of Educational Psychology,70*(1), 113-136. doi:10.1348/000709900158001

European Commission. (2012). *TVET and Skills Development in EU Development Cooperation*. Luxembourg: Office for Official Publications of the European Communities.

GAN Our Story. (n.d.). Retrieved October 28, 2018, from https://www.gan.co/who/our-story/

Hallen, B. L., Bingham, C. B., & Cohen, S. (2014). Do Accelerators Accelerate? A Study of Venture Accelerators as a Path to Success? *Academy of Management Proceedings, 2014*(1), 12955. doi:10.5465/ambpp.2014.185

Hawk, A., Pacheco-De-Almeida, G., & Yeung, B. (2012). Fast-mover advantages: Speed capabilities and entry into the emerging submarket of atlantic basin LNG. *Strategic Management Journal, 34*(13), 1531-1550. doi:10.1002/smj.2085

Illeris, K. (2007). *How we learn: Learning and non-learning in school and beyond*(1st ed.). London: Routledge, Taylor & Francis Group.

Isabelle, D. A. (2013). Key Factors Affecting a Technology Entrepreneurs Choice of Incubator or Accelerator. *Technology Innovation Management Review, 3*(2), 16-22. doi:10.22215/timreview656

Kauffman Foundation. (2013). *Entrepreneurship education comes of age on campus*. (Rep.) Kansas City, MO: Aulet, B., Blum, L., Burke, B., D'Ambrosio, T., Santos, K., Easley, C., … Zurbuchen, T.

Lave, J., & Wenger, E. (1991). *Situated learning. Legitimate peripheral participation*. Cambridge: Cambridge University Press.

Levitt, B., & March, J. G. (1988). Organizational Learning. *Annual Review of Sociology, 14*(1), 319-340. doi: 10.1146/annurev.soc.14.1.319

Lynn, G. (1999). Practices that support team learning and their impact on speed to market and new product success. *Journal of Product Innovation Management, 16*(5), 439-454. doi:10.1016/s0737-6782(98)00071-x

Mansoori, Y. (2017). Enacting the lean startup methodology. *International Journal of Entrepreneurial Behavior & Research,23*(5), 812-838. doi:10.1108/ijebr-06-2016-0195

Mejia, J., & Gopal, A. (2015). Now and Later? Mentorship, Investor Ties and New Venture Performance in Entrepreneurial Seed-Accelerators.

Mentoring. BusinessDictionary.com. Retrieved October 28, 2018, from BusinessDictionary.com website: http://www.businessdictionary.com/definition/mentoring.html

Miller, P., & Bound, K. (2011.). *The Startup Factories: The rise of accelerator programmes to support new technology ventures*. Retrieved from https://www.nesta.org.uk/report/the-startup-factories/

Murphy, P. (1999). *Learners, learning and assessment*. London: Paul Chapman.

National Commission on Entrepreneurship. (2002). *Entrepreneurship: A Candidate's Guide*. Washington DC: National Commision on Entrepreneurship.

National Winners 2017. (n.d.). Retrieved January 5, 2019, from http://nordicstartupawards.com/national-winners-2017

Ortmans, J. (2016, October 04). A hard look at accelerators. Retrieved from https://www.kauffman.org/currents/2016/04/a-hard-look-at-accelerators

Polanyi, M. (1967). *The tacit dimension*. London: Routledge & Kegan Paul.

Reischmann, J. (1986). Learning "en passant": The Forgotten Dimension. In *Proceedings of the Conference of the American Association of Adult and Continuing Education*, Miami, FL. (October 1986).

Reynolds, P. D. (2000). National panel study of U.S. business startups: Background and methodology. *Databases for the Study of Entrepreneurship Advances in Entrepreneurship, Firm Emergence and Growth, 4*, 153-227. doi:10.1016/s1074-7540(00)04006-x

Roberts, P. W., Davidson, A., Edens, G., & Lall, S. (n.d.). *Accelerating the Flow of Funds into Early-Stage Ventures: An Initial Look at Program Differences and Design Choices* (Rep.)

Roberts, P. W., Lall, S., Baird, R., Eastman, E., Davidson, A., & Jacobson, A. (2016, March). *What's Working in Startup Acceleration Insights from Fifteen Village Capital Programs*. (Rep.)

Smith, M. K. (2014, July 09). Informal learning: Theory, practice and experience. Retrieved October 24, 2018, from http://infed.org/mobi/informal-learning-theory-practice-and-experience/

Smith, M. K. (2018, August 16). What is learning? Exploring theory, product and process. Retrieved October 20, 2018, from http://infed.org/mobi/learning-theory-models-product-and-process/

Smith, S. W., Hannigan, T., & Gasiorowski, L. L. (2013). Accelerators and Crowd-Funding: Complementarity, Competition, or Convergence in the Earliest Stages of Financing New Ventures? *SSRN Electronic Journal*. doi:10.2139/ssrn.2298875

Wenger, E. (1998). *Communities of practice: Learning, Meaning, and Identity*. New York, NY: Cambridge Univ. Press.

Wenger, E., McDermott, R., & Snyder, W. M. (2002). *Cultivating communities of practice: A guide to managing knowledge*. Boston (Mass.): Harvard Business School.

Wenger-Trayner, E., & Wenger-Trayner, B. (2015). Introduction to communities of practice. Retrieved from http://wenger-trayner.com/introduction-to-communities-of-practice/

Yusuf, J. (2010). Meeting entrepreneurs support needs: Are assistance programs effective? *Journal of Small Business and Enterprise Development, 17*(2), 294-307. doi:10.1108/14626001011041283

Appendix: Interview questions

Can you describe your role at Icelandic Startups/Startup Reykjavik? How long have you been involved with the organization for?

Who is in charge of planning the training program for the participants?

Have you been involved in planning of the program for the participants? How?

Do you use any guidelines (curriculum) for planning the program?

What methods and tools are used to help the program participants develop their companies?

What is the role of mentorship in the program?

What structures do you have? / What do you do to support participant's learning?

How is this learning facilitated?

What do you think are the core skills participants gain going through the program?

What is the interaction like between the program facilitators and the participants?

Have you tried to measure the impact of the program on the learning of the participants?

Is there any variation in the methods you use each year?

Are the participants involved in the planning process? If yes, how?

At what stage are you now with this year's Startup Reykjavik program?