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The role of work-integrated learning in preparing students for a corporate entrepreneurial career

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Abstract

Purpose – In the literature there is limited knowledge about how to prepare students for a corporate entrepreneurial career. The purpose is therefore to develop a framework for understanding the role corporate development projects play in corporate entrepreneurship education, and to examine the potential role of the design of the project. The study defines a corporate development project as a project being part of an academic education to provide students with working experiences situated in an experiential learning process.

Design/methodology/approach – Based on work-integrated learning literature, the authors first develop a conceptual framework. Thereafter, they undertake a multiple case study using data from a Master's Program in Corporate Entrepreneurship. Starting from the conceptual framework, the authors employ deductive thematic analysis in order to analyze data and finally to develop an elaborated framework.

Findings – In the framework, the authors identify and label five categories of learning outcomes from the corporate development project. The framework helps understand the interplay between the different learning outcomes in students' learning process and shows how the design of the project shapes the learning process.

Practical implications – The framework can assist educators in designing and integrating the corporate development project as a key module within a corporate entrepreneurship academic program.

Originality/value – Based on the framework, the study develops the knowledge about the design of corporate entrepreneurship education. Future research should test the framework using data from other academic programs in corporate entrepreneurship.

Keywords Corporate entrepreneurship education, Work-integrated learning, Corporate development project, Corporate development project design, Learning outcomes

Paper type Research paper

Introduction

The supply of entrepreneurial education courses and programs has grown tremendously over the last four decades (Kuratko, 2005; Neck and Corbett, 2018). To date, much focus has been on entrepreneurial intention research when examining potential outcomes of entrepreneurship education (Bae *et al.*, 2014; Gedeon and Valliere, 2018; Sherman *et al.*, 2008), while less attention has been devoted to how different learning activities result in entrepreneurial knowledge and actual entrepreneurial behavior. Moreover, entrepreneurship education has, to a great extent, been based on scholarly understanding related to the independent venture creation context (Hägg and Gabrielsson, 2019; Lackéus and Williams Middleton, 2015; Mwasalwiba, 2010), and little attention has been paid to education and

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training for entrepreneurship in established companies, that is, corporate entrepreneurship (Byrne *et al.*, 2016; Heinonen, 2007). This is problematic as we know that the role of corporate entrepreneurship is constantly increasing and is a likely first career step for graduates (Kuratko and Morris, 2018).

Earlier research indicates that corporate entrepreneurs think differently compared with entrepreneurs in independent new ventures (Corbett and Hmieleski, 2007; Douglas and Fitzsimmons, 2013). Douglas and Fitzsimmons (2013) examine antecedents for intention to engage in independent self-employed entrepreneurship compared with intention to engage in corporate entrepreneurship. The findings show that as an antecedent, self-efficacy positively influences both types of intention. However, the findings also reveal differences in antecedents for the two kinds of intention in terms of among others risk-taking propensity and attitude toward independence. Apart from individual differences, we also know from previous research that the organizational context of corporate entrepreneurship and independent (new venture creation) entrepreneurship differs (see for example Garrett and Holland, 2015; Sharma and Chrisman, 1999). In line with this, Sharma and Chrisman (1999, p. 18) argue that a distinguishing characteristic of corporate entrepreneurship is that "... an individual or a group of individuals, in association with an existing organization, create a new organization or instigate renewal or innovation within that organization." Hence, in corporate entrepreneurship, the creation of new opportunities is undertaken in the context of an established organization.

As already mentioned, entrepreneurship education has mainly focused on new venture creation, and in the literature there is limited knowledge about how to design the academic educational process to prepare students for a corporate entrepreneurship career (Heinonen, 2007; Kuratko and Morris, 2018). In this study, we take one step in the development of knowledge about corporate entrepreneurship education by examining learning outcomes from a Master's Program in Corporate Entrepreneurship based on experiential learning pedagogy (Hägg and Kurczewska, 2020; Kolb, 1984). One main learning vehicle in this program is the so-called corporate development project which provides a bridge between theory and practice. With the help of the project, the students are placed in a real-life working situation focused on entrepreneurship in an established company (corporate entrepreneurship), where they learn through an experiential process (Politis, 2005).

Our definition of a corporate development project is built on work-integrated learning and entrepreneurship education literature. Based on the literature, we have derived two dimensions that we consider fundamental for a project to qualify as a corporate development project: (1) the focus of the project, and (2) the students' influence on/ownership of the project and learning process. Based on work-integrated learning, a corporate development project must be part of an academic education and the project focus must be "geared toward making connections between classroom learning and on-the-job experiences" (Kramer and Usher, 2011, p. 2). More specifically, for our definition, the project must hence be explicitly focused on corporate entrepreneurship. Moreover, we build on the guiding assumptions in entrepreneurship education, implying that in order to learn to become entrepreneurial, one needs to experience it hands on to create a bridge between theory and practice as well as being able to handle and cope with uncertainty (Hägg and Kurczewska, 2020; Politis, 2005). In this respect, the corporate development project is seen as a main learning vehicle where the learner assumes ownership of the project as well as the learning process. Hence, to qualify as a corporate development project according to our definition, the students must have the opportunity to influence the specific scope of the project, the working process/methods, as well as the outcomes due to the inherent uncertainty that prevails in entrepreneurship.

The study focuses on students' learning outcomes from undertaking the corporate development project. Given our interest in the role of the corporate development project for the students' learning, which integrates university literature and experiences gained from being in a company context, as previously stated we conceptually base our study in the

literature on work-integrated learning. According to Kramer and Usher (2011, p. 2), work-integrated learning is defined as "types of student employment experiences that are usually organized by their institution, related to their field of study and geared toward making connections between classroom learning and on-the-job experiences." In line with our focus on the role of the corporate development project, one form of work-integrated learning is for students to work on a project for a company or an organization (Scholtz, 2020).

The purpose of the paper is to develop a framework for understanding the role corporate development projects play in corporate entrepreneurship education. Moreover, the purpose is to examine the potential role of the design of the corporate development project in shaping student learning process and outcomes.

The study makes three contributions to the field of entrepreneurship education. Firstly, it describes learning outcomes in the context of corporate entrepreneurship education focusing on the role of work-integrated learning from a corporate development project. Related to this, our study also contributes by developing and suggesting a definition of what qualifies as a corporate development project. Secondly, we develop a framework for understanding the interplay between different learning outcomes in students' learning process when undertaking a corporate development project. Thirdly, the paper examines how the design of the corporate development project potentially shapes the learning outcomes. In terms of design, projects can be divided into two groups: internal and external projects. In internal projects, the students work on solving problems and needs related to improving internal conditions for corporate entrepreneurship in their assigned company, whereas external projects focus on developing and evaluating new business opportunities for the company.

The paper is structured as follows. The next section includes our frame of reference with a foundation in entrepreneurship education literature and research on work-integrated learning. The frame of reference concludes with the development of a conceptual framework, which is then used to categorize and analyze the learning outcomes reported by the students. After the framework, we outline our methodological approach. We then present our data (findings) organized based on the categories identified from the conceptual framework, after which the paper proceeds with an analysis of the role of the design of project for the learning outcomes. Thereafter in our discussion, we present and explain our elaborated framework. Finally, we present the conclusions and discuss implications for theory and practice.

Frame of reference

In the frame of reference, we discuss the literature on entrepreneurship education and integrative learning. In our discussion about integrative learning, we particularly focus on literature about the so-called work-integrated learning. Based on the literature, we conclude our frame of reference by presenting our conceptual framework, which we later use in the analysis to categorize and analyze the data. The conceptual framework is hence an important point of departure for the final elaborated framework that we develop and present in the discussion.

Entrepreneurship education

Over the past four decades, entrepreneurship education has established itself as a discipline, and over time some of the main questions that have been voiced are as follows: What does an education in entrepreneurship provide for students (see for example Martin *et al.*, 2013; Matlay, 2008)? How can the progress of student learning be assessed (see for example, Hytti *et al.*, 2010)? What are the most efficient or preferred forms of teaching, i.e. pedagogical or andragogical methods, (see for example Duval-Couetil, 2013; Fayolle and Gailly, 2008; Moberg, 2014; Scott *et al.*, 2016)? There seems to be fairly good knowledge that various forms

of entrepreneurship education can increase entrepreneurial intention among students (Gedeon and Valliere, 2018; Sherman *et al.*, 2008), but there is less insight on actual behavior (c.f. Rauch and Hulsink, 2015). Currently, the assumption is that entrepreneurship is an experiential process that requires practice, and an experience-based pedagogical approach is needed to learn entrepreneurship (Hägg and Kurczewska, 2020; Jones, 2019; Neck and Corbett, 2018; Rasmussen and Sørheim, 2006). However, entrepreneurship education has, to a great extent, focused on the independent new venture creation context (Hägg and Gabrielsson, 2019; Lackéus and Williams Middleton, 2015; Mwasalwiba, 2010), whereas little attention has been paid to education and training for entrepreneurship in established companies, so-called corporate entrepreneurship (Byrne *et al.*, 2016; Heinonen, 2007).

At the same time, previous research has provided insights showing differences between entrepreneurs and corporate entrepreneurs in their way of acting and how they think when making decisions (Corbett and Hmieleski, 2007; Douglas and Fitzsimmons, 2013; Garrett and Holland, 2015). Sharma and Chrisman (1999, p. 18) explain the difference between corporate entrepreneurship and independent (new venture creation) entrepreneurship, arguing that in corporate entrepreneurship "... an individual or a group of individuals, in association with an existing organization, create a new organization or instigate renewal or innovation within that organization." Hence, in corporate entrepreneurship, the creation of new opportunities is undertaken in the context of an established organization. It seems fair to argue that this contextual difference must be considered in the design of entrepreneurship education (Thomassen *et al.*, 2019). At the same time, there is little knowledge about how corporate entrepreneurship competencies can be nurtured and developed in practice (Byrne *et al.*, 2016), and even fewer clear-cut guidelines for how to design the educational process for a corporate entrepreneurship career (Kuratko and Morris, 2018).

In their study Byrne *et al.* (2016) suggest an action learning approach that could result in learning outcomes closely tied to the corporate entrepreneurship context, such as gaining multidisciplinary knowledge, organizational knowledge, proactive behavior, self-awareness and network connections. The aforementioned study focuses on corporate employees and how a training intervention can foster competencies for entrepreneurship in established businesses. When addressing academic corporate entrepreneurship education, the research discussion is meager. It has been acknowledged that certain knowledge is needed to take on the position as a change agent within mid-size and large corporations (Kuratko and Morris, 2018). Kuratko and Morris (2018) suggest that the skills and knowledge associated with being entrepreneurial in a corporate setting can be developed by having the students working with cases, providing students with tools to analyze companies, as well as students engaging in internships for gaining work experience. Previous research has also addressed the importance of letting students experience how to perform entrepreneurial tasks by means of, for example, role-play tied to corporate entrepreneurship (Heinonen, 2007). A main argument developed by Kuratko and Morris (2018) is that working with cases and developing the skills to perform an entrepreneurial health audit would enhance the students' ability to understand the internal environment of corporations as well as learn how to analyze the entrepreneurial level in a company. Our argument and position in the present study is that like independent new venture creation education, corporate entrepreneurship education needs real life, first-hand experiences interwoven into the educational process due to the experiential nature of being entrepreneurial (Politis, 2005). We rely on literature on work-integrated learning to bridge the gap between practice and theory in corporate entrepreneurship education and extend existing knowledge. We understand work-integrated learning in line with Kramer and Usher (2011, p. 2) as "types of student employment experiences that are usually organized by their institution, related to their field of study and geared toward making connections between classroom learning and on-the-job experiences." In the next section,

we will address the theoretical underpinnings of work-integrated learning and the role of integrative learning as an antecedent.

Integrative learning

The interest in how students learn from and connect (or integrate) different learning activities is the core of the literature on the so-called integrative learning (see, for example, Ferren and Andersson, 2016; Huber and Hutchings, 2004). The connection or integration refers to, for example, integrating learning from two courses at university or across contexts, such as integrating learning from theory with learning and experiences from practice gained from a co-curricular activity in an organization or company (Barber, 2012; Huber and Hutchings, 2004). Due to the focus on connecting and synthesizing learning, integrative learning is aimed at assisting students to "see the entirety of their education as an individual creative endeavor" (Ferren and Andersson, 2016, p. 34). The ambition in integrative learning is to make the student become an intentional learner. Huber and Hutchings (2004, p. 6) state that "the idea of making students more self-aware and purposeful—more intentional—about their studies is a powerful one, and it is key to fostering integrative learning."

Examining the process of how students integrate learning, Barber (2012) concluded that his data could be grouped into three overall categories. The three categories differ in their level of complexity and are labeled as follows: (1) establishing a connection, (2) application across contexts and (3) synthesis of a new whole. The first category refers to the ability to identify connections and similarity between novel and existing knowledge. For example, the student is able to see connections between a new concept and a concept with which she/he is very familiar. The second category refers to the active use and application of an idea or ability in new contexts, for example, the use and application of a concept or model studied at university in a project for a company in a cocurricular assignment outside university. The third category is more abstract and complex compared to the first two and refers to the development of new understanding and skills based on the combination and synthesis of different ideas. To illustrate the difference between application and synthesis, we will use an example. Application refers to how a student demonstrates the application of a concept or model from theory to understand the innovation process in a company, while synthesis of a new whole is the development of a new model based on the theoretical concept or model in conjunction with the student's experientially gained knowledge about the company.

Work-integrated learning

The literature on integrative learning underlines the importance of learning in different contexts such as working on real-world problems in placements in organizations and companies (Huber and Hutchings, 2004), which relates well to the existing assumptions on how entrepreneurial learning within the educational context addresses real-world problems (Hägg and Kurczewska, 2016; Lackéus and Williams Middleton, 2015). The interest in students' learning from experiences gained in workplace arrangements within an educational program is at the center of the literature on the so-called "work-integrated learning." Work-integrated learning is based on the assumption of close integration of university studies and workplace practice in order to promote the use of knowledge from university in work contexts (Smith and Worsfold, 2015). Work-integrated learning enables students to experience their future work context and to develop generic professional skills that positively influence their employability (see, for example, Patrick *et al.*, 2008).

In the literature, work-integrated learning is seen as an umbrella term used for different forms of learning activity that integrate theory with workplace practice (Patrick *et al.*, 2008). Project work for an organization or company is one form of work-integrated learning (Scholtz, 2020). The project work is based on learning outcomes linked to the student's academic

program, while at the same time the student learns from the interactions in the workplace environment (Patrick *et al.*, 2008). In the literature, there are terms such as "work-based learning" and "work experience" that seem to be similar to work-integrated learning. However, the two mentioned above should not be confused with work-integrated learning due to the fact that they "have less to do with the application of academic, disciplinary theory to practice and more to do with practice itself" (Smith and Worsfold, 2015, p. 23).

Besides potential benefits from work-integrated learning, earlier research has also examined likely challenges involved. One main challenge discussed in earlier research is how to include work-integrated learning in the design of academic programs to achieve the intended learning outcomes (Jackson and Meek, 2021). This more specifically relates to challenges in how to design the workplace assignment as well as how to assess it given the learning outcomes of the program (see, for example, Bilgin *et al.*, 2017; McNamara, 2013). Related to the challenge of how to design and include work-integrated learning in academic programs, academic staff and the mentor in the company serving as workplace partner can have different expectations about what constitutes important skills for the student to develop in the work-integrated learning placement in the company (Winterton and Turner, 2019).

Earlier research in work-integrated learning has also underlined that including it in university programs implies that the university needs to ensure resources as work-integrated learning is demanding in terms of time. Jackson and Meek (2021) argue that universities engaging in work-integrated learning need to have a team that continuously interacts and maintains relations with potential partners (companies) for student placements. Universities that have not managed to mobilize the necessary resources can face the challenges discussed by Stanley and Xu (2019), namely, lack of suitable placements for their students and lack of academic staff that are able and willing to engage in work-integrated learning.

Jackson *et al.* (2017) examine challenges workplace partners experience when engaged in work-integrated learning. Among the most cited challenges were finding a suitable project in the company for the student to work on, and identifying suitable students for the project. Again, these findings underline the importance of resources for academic staff to be able to collaborate with workplace partners in terms of scoping projects and matching students with the projects.

Development of a conceptual framework of outcomes from work-integrated learning

As already discussed, work-integrated learning is an umbrella term including different forms of learning activities with the aim of integrating theory and workplace practice (Patrick *et al.*, 2008).

Based on findings from interviews and focus groups, the study by Patrick *et al.* (2008) concludes that the overall motivation for the student to engage in work-integrated learning is to obtain work experience that makes her/him more attractive as a potential employee. This is in line with Smith and Gibson (2016) who stress that work-integrated learning is aimed to result in improved employability. In the same way of reasoning, Smith and Worsfold (2015) argue that students who are work-ready have developed a range of skills and abilities that make them more immediately employable. Hence, employability is made up of different skills and abilities that will be discussed below.

Patrick *et al.* (2008) report that students claim the workplace experience made it possible for them to apply and create meaning from university literature. Hence, by using models and concepts in their workplace, the students developed an understanding of university literature in their field of study. In the same way, Smith and Gibson (2016) conclude that an employable student possesses the skill and ability to combine and integrate theory and practice, which, as already discussed, is one form of the so-called integrative learning (Ferren and Andersson, 2016; Huber and Hutchings, 2004).

The findings presented by Patrick *et al.* (2008) show that workplace experience can also result in the development of non–field-specific individual skills and knowledge. They further argue that generic non-field skills include team skills (see also Smith and Worsfold, 2015), communication skills, problem-solving skills and networking skills. Smith and Gibson (2016) identified the role of team skills, arguing that a student should possess the skill to be able to work with different people from various backgrounds in an effective and fair manner. Moreover, Smith and Gibson (2016) state that the employable student has developed confidence and self-awareness based on the experiences from work-integrated learning. Finally, the study by Patrick *et al.* (2008) also shows that gaining experience from being part of a working environment for some time resulted in an understanding and general knowledge about a workplace, including how an organization or a company operates, as well as the role of organizational and company culture.

Based on the discussion above, we have identified different outcomes in terms of skills and advantages from work-integrated learning which we present in Table 1. This framework of categories of skills and advantages will be used in the presentation and analysis of the data in the upcoming findings section. In the next section, the method will be presented.

Table 1.
Conceptual framework of outcomes from work-integrated learning

1. Creation of meaning and understanding of university literature
2. Generic individual skills (not field of study dependent)
- Team skills
- Communication skills
- Problem-solving skills
- Networking skills
- Confidence
- Self-awareness
3. General knowledge about how a workplace operates

Method

Overall design

As stated in the Introduction, the purpose of the paper is to develop a framework for understanding the role played by corporate development projects in the formation of students' learning outcomes. The purpose is moreover to examine the potential role of the corporate development project design for shaping the learning outcomes. To fulfill the purpose, we undertook a multiple case study based on purposive sampling to examine and analyze potential similarities and differences between internal and external corporate development projects and the learning outcomes derived from them (e.g. Yin, 1994). In the next section, we present the context of the data collected in this study. This is followed by a section in which we discuss in detail the procedure for the purposeful sampling and selection of internal and external projects. We conclude by presenting the data collection and the data analysis method.

Context of the research

The study is based on data from students in the Master's Program in Entrepreneurship and Innovation at Lund University (Sweden). The Master's Program was launched in 2007 and at that time included one track called New Venture Creation. In 2011, the Master's Program was developed to include a second track called Corporate Entrepreneurship and Innovation. It is the latter that is the focus of this study. The Corporate Entrepreneurship and Innovation track is a one-year Master's Program (as is the other track). The program requires an

undergraduate degree (bachelor of science) and hence is open for students with different educational backgrounds such as business, engineering, humanities and natural sciences. In pedagogical terms, the program is based on experiential learning, meaning that the students are involved in learning activities (assignments) giving them various experiences, which create a foundation for an interplay between action, reflection and theory (see e.g. Hägg and Kurczewska, 2020).

The Corporate Entrepreneurship and Innovation track includes four courses in the first term (autumn) and a course in the second term (spring) in which the students work on a corporate development project during a placement in an established company. This study is based on the students' learning from the corporate development project. The aim of the corporate development project is that the students will develop their understanding of and skills in corporate entrepreneurship by integrating university literature and experiences gained from being on-site and working to solve the problems related to the project and fulfill the needs of the company.

The aim and focus of the project is closely related to the pedagogy advocated in the literature on integrative learning and more specifically literature on work-integrated learning. Hence, the focus of the corporate development project is explicitly based on problems and needs related to corporate entrepreneurship. The process of finding and evaluating potential projects starts with a meeting between the Corporate Entrepreneurship and Innovation Program Management and company representative/s interested in engaging students to work on-site in a project for the company. In the initial meeting between the Program Management and company representative/s, questions are asked about the needs and challenges that the company is currently facing. In the following steps, the Program Management seeks to assist the company representative/s to formulate the tentative project aim/s so that it will allow students to apply and use the university literature on corporate entrepreneurship in their project work. Based on the tentative project aim and the needs and challenges outlined by the company, the students use the initial weeks of their placement to question the experienced needs and challenges, based on their understanding from formal and informal discussions in the company. This initial orientation makes it possible for the students to ensure that the project aim and formulation serve to resolve the actual needs and challenges for the company as well making sure that the students have influence on/ownership of the project and process as required per our definition.

Selection of projects

The selection of projects from the Corporate Entrepreneurship and Innovation track is based on all projects undertaken by two cohorts of graduates from 2018 to 2019. In 2018, there were 12 corporate development projects, and in 2019, there were 11 corporate development projects, giving a total of 23 projects.

As we are interested in how the design of the corporate development project potentially shapes the learning outcomes, we employ purposive sampling based on the categorization of internal and external projects. The categorization is based on the aim/s of the corporate development project. Examples of internal projects include those seeking to solve challenges related to how the company works internally with identification and development of ideas for new products or services or how to work with the evaluation of new ideas in the company. On the other hand, externally oriented projects are, for example, related to identifying new applications and markets for a newly developed product.

In selecting internal and external projects out of the 23 projects, we started by excluding projects for which we did not have complete documentation from both students in the student team. Insights from both students are necessary given that we were seeking to understand the development of dynamics in the team. We subsequently selected two projects that

represent an internal project respectively two projects representing an external project, providing us with four projects. We acknowledge that it would have been favorable for the generalization of the findings to have included more than two internal and two external projects. Nevertheless, the four selected projects are mainly used to enrich the original conceptual framework (based on work-integrated learning) in our development of the elaborated framework that is presented in the Discussion section.

We here briefly provide an overall background of the selected internal and external projects and the student team for each project. The aim of the first internal project selected was to give the company recommendations for how to improve the internal conditions for identification and development of new innovations. The students working on this project are females and are 23 and 25 years old, respectively. In the second internal project, the aim was to provide recommendations for how the company can facilitate the generation of radical innovations in the future in addition to incremental innovations. The student team in this project are males and are 25 and 28 years old, respectively.

The aim of the first external project was for the students to identify customer segments and formulate the value proposition for a new solution. The student team is made up of one female and one male and they are 24 and 31 years old, respectively. The aim of the second external project was to give the company recommendations about how the company could establish collaboration with independent entrepreneurs. The students working on this project are females and aged 25 and 26 years old, respectively.

Data collection

Having completed the Corporate Entrepreneurship and Innovation Master's Program track, the Program track director (the first author of this paper) asks the students to hand in a written reflection each year in which they describe in as much detail as possible what they have gained and learned from undertaking the project and from being on-site in the company. The written documentation handed in by the students is one major source of data used in this study. However, as already mentioned, the first author of this paper is the program director of the Corporate Entrepreneurship and Innovation Master's Program track. In this role, the first author was directly involved in the initial meeting with company representative/s discussing and agreeing the tentative focus of all projects examined in this study. Moreover, the first author acts as one of two university academic supervisors in the students' working process with their corporate development project. Moreover, having completed the project, each student group presents their project outcomes at a meeting attended by other student groups, their company mentor, mentors at other companies and the two university supervisors. The knowledge possessed by the first author from the initial screening and evaluation of potential projects to the presentation of completed project is very important for the interpretation and analysis of the data in the form of the written reflection documentation handed in by each student.

Data analysis

The data analysis method is a deductive thematic analysis (Braun and Clarke, 2006). In line with this, we initially used the conceptual framework developed in frame of reference (see Table 1) to categorize the collected data about students' learning outcomes from their corporate development project. We present the outcome of this categorization for internal and external projects separately (under the heading "Findings"). Hence, following a within-case analysis logic (Eisenhardt, 1989), we initially coded and analyzed internal and external projects separately. Thereafter, we compared the data from internal and external projects to analyze if and how the learning outcomes are related to the type of corporate development project undertaken by the student (internal or external project). Our comparative analysis in

the second step is a form of cross-case analysis where we focus on similarities and differences between the cases (see e.g. Eisenhardt, 1989; Yin, 1994). Finally, based on the findings in the cross-case analysis, we develop our elaborated framework (Figure 1), which is presented in the Discussion section.

Findings

In the first subsection, we will present and discuss the learning outcomes reported by the students involved in the two internal projects, and thereafter we present the learning outcomes experienced by the students who engaged in the two external projects.

Internal corporate development projects

The learning outcomes in the two internal projects are presented and organized using the categories presented in Table 1 in the frame of reference derived from the literature on work-integrated learning. Based on these categories, the text is organized under three subheadings discussing creation of meaning and understanding of university literature, generic individual skills and knowledge about how a workplace operates.

Creation of meaning and understanding of university literature. All four students in both internal projects reported learning related to the creation of individual meaning and understanding about the generic literature in their field of study they had obtained from university. For example, student 1 in project 1 explains the learning ". . . to combine academic knowledge with practical issues . . .," and student 2 in the same project states that theory ". . . cannot be applied *per se*, it has to be adapted/tailored to fit the situation." In the same way, student 1 in project 2 comments that seeing ". . . all what we have learnt in reality truly deepened my corporate knowledge." The students in the internal projects report experiences and understanding of internal conditions for corporate entrepreneurship. Student 1 in project 2 explains, "I learnt which different things can hinder innovation and entrepreneurial behavior," and student 2 in the same project states that "I learned a lot about the importance of internal support for change of business models . . .." Moreover, student 2 in project 1 says, "I gained a deep understanding of the evaluation and selection process."

Generic individual skills. When it comes to generic individual skills, all four students stressed that they had developed skills to collaborate with others. In particular, the learning and experiences relate to the collaboration of two different individuals in a team and accepting and embracing diversity in working mode and capabilities. For example, student 2 in project 2 explains this skill as the "ability to successfully cooperate with a partner that has a different mentality and working style." The experience and skills gained from working in a team appear to lead to an increased self-awareness. In line with this, student 1 in project 1 shares that "This made me very reflective towards the other's and my own behavior . . .," and student 1 in project 2 states that "I learnt that which habits of mine can be annoying . . .." The self-awareness is in turn related to the skills reported by the students, such as being able to provide and accept feedback and hence able to coach and be coached by each other. Student 1 in project 1 explains, "I feel that we also learned how to coach each other . . .," whereas student 2 in project 2 states, "I learned a lot from my partner."

Moreover, the experience of working on the corporate development project and developing solutions for the company resulted in the development and improvement of problem-solving skills as explained by student 2 in project 2 who expresses that "I learned that deeply reading literature in a specific topic and more important working with it to create your own solutions." Student 1 in this same project (2) explains that the experience from the project ". . . taught me how to prioritize tasks and solve problems quickly," whereas student 2 in project 1 states that "I know now how to use the literature and adapt it to the real-life

conditions." The data on the experience gained from being able to complete the project for the company and the improved problem-solving skills derived from this experience, in turn, indicate that the student is developing self-confidence. Student 2 in project 1 expressed, "I feel now confident in going in another company and redo such a project . . .." From the data, the self-confidence also seems to be related to the reported improved ability to accept and deal with uncertainty as explained by student 1 in project 1, "I feel more comfortable in a working atmosphere that is unfamiliar to me . . .," and student 2 in project 2 describes learning to handle situations in which no immediate solution can be found, stating that "I learned that it has no benefits to hurry or panic in situations where a possible solution seems far away."

Knowledge about how a workplace operates. Furthermore, the students report that they have developed knowledge and understanding of the working environment and how a workplace operates in an established company. Student 1 in project 2 argues that working on the project on-site in the company "enabled me to understand company structures, processes, rules, procedures, hierarchy and silos," whereas student 2 in the same project explains that "I learned a lot about the Swedish way of working in a corporation . . .." Using the same reasoning, student 2 in project 1 says that "I got a glimpse in the Swedish working environment and how it works there . . .."

External corporate development projects

In the same way as for the internal projects, the presentation and the organization of the findings are based on the framework developed in the frame of reference, and hence the following text is organized under the same subheadings as in the findings on the internal projects.

Creation of meaning and understanding of university literature. Among the students who were engaged in the external projects, the creation of meaning and understanding of the literature is also evident. Student 1 in project 1 argues that the work with the corporate development project offers the ". . . possibility of finding a practical use for the knowledge acquired during the program." In a similar way, student 2 in project 1 reports the development of individual knowledge and meaning in relation to the literature, saying: "I believe that I can truly use the unique knowledge gained . . . and apply it to other industries within my future career endeavors." In project 2, the students also share that, based on their project work, they developed and created meaning and knowledge about the university literature and its potential and limitations. Student 1 says that the experiences from the project ". . . gave proof to the importance of user involvement in order to ensure meeting customer needs with the corresponding offering." Hence, the student underlines that the project experience confirms the role of user involvement that is presented in university course literature. Student 2 also reflects on the experience of using university literature in the project and the importance of thinking out of the box stressed in the entrepreneurship and innovation literature, sharing that: "We learn how important outside-the-box thinking is, however, I experienced that if not combined with somebody more systematic, it can be too unfocused."

Generic individual skills. Furthermore, the students in the external projects discussed different individual generic skills developed from the experience of working with the development project. Both students in external project 2 and one of the students in external project 1 present experiences and learning explicitly related to teamwork and working with another individual who is different from them. Student 1 in external project 2 states that: ". . . in the team of two required adaptive behavior from both sides as we started off with two very different working styles." Student 2 in external project 1 also presents learning from challenges experienced in teamwork, saying: "It will always be challenging to work so closely with one person, however it has taught me that sometimes you must choose when it's a good time to lead or a good time to be the one to take a step back."

The learning reported by the students underlines that the experiences gained from working closely with another individual also result in a matured self-awareness. This self-awareness is, in turn, fostered by the students' improved ability to give and accept feedback. Student 2 in project 2 explains learning related to how to give feedback, stating: "I learned how to give critique in a very plausible and neutral way," while student 1 in the same project 2 expresses that: "I learnt from my team partner how to give certain decisions more time before taking action."

Moreover, the students' responses show that the experience of the project has fostered their skills to explore and solve problems. Student 1 in external project 1 says that the project work for the company "allowed to experience the difficulties associated to the implementation of ideal models in real cases, and the importance of being creative and critical with the models in order to make work." Student 2 in project 1 explains that the learning from applying models from the university in the project improved her/his ability to be aware and more open to opportunities and solutions, saying: "I am now more conscious in the sense of looking for the benefits, or upper hands, that can be taken from future changing business environments . . .." Student 1 in project 2 tells that their work in the project implied that they had to face and deal with uncertainty as seen in the following reasoning ". . . quickly adapt to changing circumstances, mitigate uncertainties, and fill the blank spaces between our current status and the final result."

Both students in external project 1 and one of the students in project 2 explicitly reflect on their learning from interactions and networking. Student 1 in project 2 reflects on the experience gained from the interaction with various external actors in the project, stating: "I am sure that in my future role I will benefit from these social skills." In the same way, student 2 in project 1 underlines that ". . . learning was the importance of creating interpersonal relationships with the people you interact with." Student 1 in project 1 shares that the project ". . . allowed me meet not only the company top managers, but also the heads of the company in the different countries around Europe, their customers and some relevant external partners."

Knowledge about how a workplace operates. Both students in project 1 refer to learning related to how a workplace operates. Student 1 from project 1 tells that ". . . working together with the top management allowed me to get involved with the company, their culture, their mindset . . .," and student 2 from the same project reports that "the business development project taught me so much about how a company works internally." In the external project 2, the students do not explicitly refer to experiences and learning related to the functioning of a workplace.

Based on the presentation of the findings, the next section will analyze them. The focus is on analyzing potential differences in learning due to the type of project (internal vs external corporate development project).

Analysis

As discussed in the frame of reference, the literature on work-integrated learning focuses on students' development of skills that will foster their employability and hence prepare them for their career. In the study by Patrick *et al.* (2008), it is shown that students perceive that their workplace experience fostered their ability to create meaning and understanding about university literature. Using the same reasoning, Smith and Gibson (2016) underline the importance of fostering the students' ability to understand the relationships between theory and practice.

As seen from Table 2, students in both internal and external projects report learning outcomes, confirming the opportunity to apply and use university literature, where the findings demonstrate how students develop an individual meaning and understanding of the

	Internal projects	External projects
Creation of meaning and understanding of university literature	- Students present learnings how to apply and create meaning and understanding of university literature - Many examples of in-depth understanding of internal conditions for corporate entrepreneurship	- Students present learnings how to apply and create meaning and understanding of university literature - Compared to internal project, fewer examples of in-depth understanding of internal conditions. Instead, more in-depth understanding of environment and role of external collaboration for corporate entrepreneurship as compared with internal projects
Generic individual skills	- Problem-solving skills Considered by students to be equally important as by students in external projects - Team work skills Ability to work with individual different than yourself Ability to give and take feedback (to coach and be coached). Somewhat more explicitly discussed by students in internal projects - Self-awareness More explicit among students in internal projects that reflect on own and others' behavior based on providing and accepting feedback - Preparedness and self-confidence to handle uncertain and unfamiliar situations Students in internal projects somewhat more explicitly discuss their preparedness and self-confidence to handle uncertainty and unfamiliar situations - Networking skills Not explicitly discussed among students in internal projects	- Problem-solving skills Considered by students to be equally important as by students in internal projects - Team work skills Ability to work with individual different than yourself Ability to give and take feedback (to coach and be coached). Somewhat less explicitly discussed by students in external projects - Self-awareness Less explicit among students in external projects that they share that they reflect on own and others' behavior - Preparedness and self-confidence to handle uncertain and unfamiliar situations Refer to uncertainty but not as explicit as for students in internal projects referring to self-confidence to handle uncertainty and unfamiliar situations - Networking skills Explicitly discussed by both students in one external project and one student in the other external project
General knowledge about how a workplace operates	- Overall well-developed understanding and knowledge about the working environment in general and more specifically how a company operates	- In comparison with students in internal projects, fewer shared understanding among students in external projects that they have developed knowledge related to how a company and a workplace operates

Table 2.
Analysis between internal and external corporate development projects

literature. However, there are slight differences between the students in the internal and external projects. Students who have undertaken internal projects all present various examples of how they apply university literature to foster individual meaning and knowledge. The examples given refer to the creation of meaning and understanding related to internal conditions for corporate entrepreneurship based on integrating the experience from the company project and knowledge from the literature. On the other hand, the students in the

external projects provide fewer examples of understanding related to internal conditions of the project companies, which seems reasonable given that they undertook an externally focused project. Instead, these students seem to refer to learning and understanding related to the top management perspective (the role of top management and leadership). Hence, the external projects seem to operate on a more aggregate level that creates opportunities for the students to connect university literature to the role of decision-making from a top management perspective. However, the findings from the external projects do not explicitly provide clear insights into whether the corporate entrepreneurship learning experiences are related to other levels of the company apart from top management.

The findings show that the students in both the internal and external projects highlight the problem-solving skills they have developed, thanks to their experiences from the project. Based on the students' responses we see the relationship between the development of problem-solving skills and the creation of meaning and understanding of university literature as discussed in the first category above. In line with this reasoning, the students explain that they learned how to use the understanding of the literature to create and come up with solutions, as presented in the findings. The students also explain the learning from the challenges to implement and use the literature, as well as the need to be creative in order to come up with solutions based on the literature. Our findings, showing the relationship between the students' creation of meaning and understanding of the literature and the development of problem-solving skills, can be interpreted using the three categories and levels of learning discussed by Barber (2012). The first category discussed by Barber (2012) is establishing a connection and is in our findings represented by the students' recognition of connection between what they experience in their project being on-site at the company and the concepts and models in the literature studied at university. The second category in the work by Barber (2012) is the application across contexts which in our findings is manifested in the experiences the students share about making use of and applying models and concepts learned from university in their project. Finally, the third category discussed in Barber (2012) is called synthesis of a new whole and implies that the student has developed a new understanding based on the ability to synthesize different ideas. Our understanding of Barber's (2012) three learning categories is that they represent increased depth of understanding culminating in the third level with the individual student having managed to create her/his individual meaning and understanding of the literature. Our findings indicate that this profound creation of meaning and understanding of the literature and how to use it is linked with the students' ability to solve problems for the company by working creatively with the literature to adapt and modify it. Hence, as interpreted using the work of Barber (2012), the student combines and synthesizes the literature and the experienced needs of the company to create a new whole, which refers to a solution to the problem focused on in the project.

Moreover, in line with work-integrated learning literature (see, for example Patrick *et al.*, 2008; Smith and Worsfold, 2015), our findings show that all students in the internal projects and three of the four students in the external projects explicitly underline the team skills developed from the collaboration between the two students. More specifically, the students in the internal as well as the external projects stated that they learned to work with individuals who have a different background and working style. This finding is in line with the work-integrated literature (see, for example, Smith and Gibson, 2016), which states that the students must accept and understand diversity and be able to work in teams with individuals with backgrounds different from their own. Developing team skills also implies that students must be open to taking in insights from others as well as sharing insights. Hence, team skills include the ability to accept and give feedback. We can also see in our findings the role of accepting and giving feedback among students in both the internal and external projects. However, the students undertaking internal projects more explicitly share learning they have

developed in relation to feedback, and one student refers to the development of the ability to coach another individual and learn how to be coached.

Furthermore, in line with Smith and Gibson (2016), our findings indicate that the work-integrated learning experience based on the company project fostered the students' self-awareness. The students express that the team work experiences made them more reflective about their own way of acting, behaving and thinking. Even though the outcome in terms of developed self-awareness is discussed by students in both types of project, the implications for self-awareness are more explicitly elaborated and discussed among the students in the internal projects. The matured self-awareness seems to be related to the development of ability to give and accept feedback, which, as shown earlier, is more explicitly discussed among students in internal projects as compared to external projects. The students in the internal projects refer to learning "how to coach each other," in order to identify the weaknesses of another individual and how to help her/him with these.

As presented in the findings, the students undertaking external projects explicitly underlined the importance of learning how to interact and network with external and internal actors, which clearly corresponds to the role of networking skills discussed in work-integrated learning (see, for example, Patrick *et al.*, 2008). The development of skills for how to interact and network was not explicitly discussed by students engaged in internal projects. Although speculative, it seems fair to assume that the experience of interacting with a high number of not only internal actors but also external actors can explain why students in external projects do not explicitly stress the awareness of their own and others behavior to the same extent as students in internal projects. The high volume of interactions thus seems to imply that the time for making the awareness explicit is reduced in comparison with students in internal projects, who more explicitly underline the importance of learning from the interaction within the team.

As a final dimension of generic individual skills, the students also share how they have matured and developed in terms of preparedness and confidence to accept and handle uncertainty and unfamiliar situations. Even though the findings do not show major differences between internal and external projects, the students in the internal projects more explicitly refer to now being more comfortable accepting the unknown and the unfamiliar. Although more speculative, but as discussed earlier, students in internal projects more explicitly describe how they matured in terms of awareness of their own and others' behavior. This, in turn, can explain why students in internal projects articulate an explicit awareness about their improved acceptance of and preparedness for uncertain and unfamiliar situations.

Finally, in line with Patrick *et al.* (2008), the findings in this study show that thanks to their participation in the project, the students gained experience and knowledge about the working environment in terms of how established companies operate and what it is like to work in established companies. Although mentioned by all students, this knowledge is more explicitly discussed among the students who undertook the internal projects. Per definition, the students undertaking an internal project are working on a problem and solution related to how the company operates internally, whereas the students in the external projects are working on, for example, project solutions for how to reach new customers and markets. This difference in the scope of the project implies that the students in internal projects have a more internal focus on information collection and meetings, whereas those in external projects have a relatively greater external focus. This, in turn, can explain why students in internal projects more explicitly stress the knowledge of how a workplace operates internally in comparison with students in external projects. Given the analysis and the synthesis seen in Table 2, we will further conceptualize the role of the corporate development project and present an elaborated framework in the following discussion.

Discussion

In this section, we will introduce and explain our elaborated framework. The point of departure was the conceptual framework developed at the end of the frame of reference, and we use the outcomes from the analysis to develop our elaborated framework that is now introduced. The framework shows the students' learning outcomes based on the experiences from working on their corporate development project and being on-site at their company. Our elaborated framework is presented in Figure 1, and, as can be seen, the learning outcomes identified are grouped in the following five categories based on our frame of reference and the analysis: (1) team skills (2) creation of meaning and understanding of university literature (3) self-awareness, (4) problem-solving skills and (5) preparedness and confidence to handle uncertainty.

As will be discussed in more detail later in this section, the findings indicate that the five categories of learning are related in a learning process consisting of three phases. In the first phase, the students start to work in their team (of two students) and learn from the interaction with their partner, thus developing different team skills. The students also start to apply and relate the literature to the experiences in the company, and more specifically to the project. By so doing, the students create meaning and understanding of the university literature. The team skills developed, in turn, foster the students' awareness of their own and others' behavior and consequently self-awareness. Moreover, the creation of meaning and understanding of university literature is in turn, a prerequisite for the development of problem-solving skills. The problem-solving skills improve the students' confidence in handling unfamiliar situations and, together with the developed self-awareness lay the foundation for the students' preparedness and confidence to handle uncertainty. As indicated in Figure 1, even though students in internal and external projects share similar learning outcomes, we also identify nuanced differences as well.

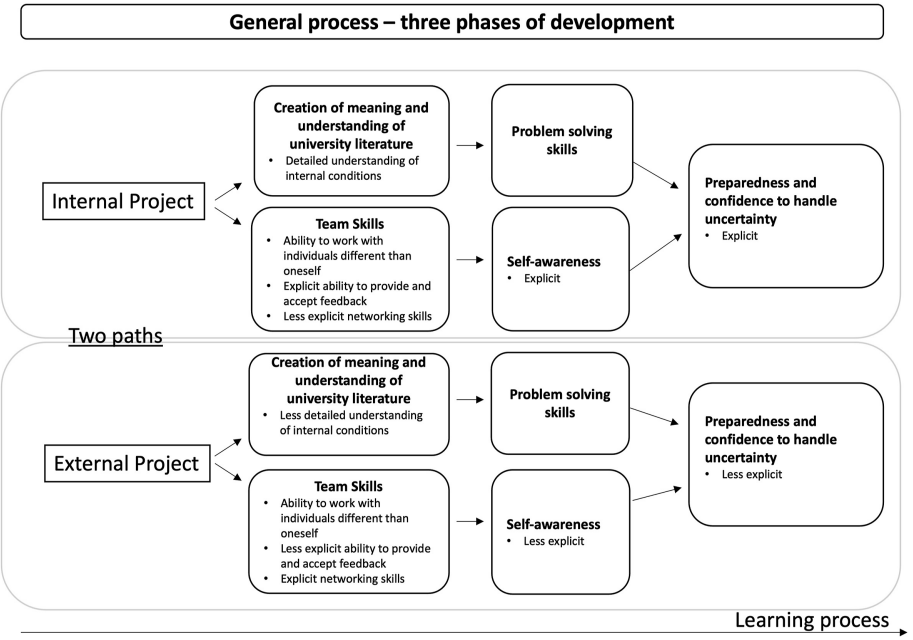

Figure 1. Bridging theory and practice through the corporate development project – A two path model

As mentioned earlier, the students develop *team skills* from the interaction between the two students in the team. Fundamental for the interaction between the two students is the learning and insight that teamwork has to be based on the understanding of diversity as well as the ability to accept and be able to work with people who have a different background and/or working style. Moreover, as illustrated in our findings, the students experience the role of teamwork for providing and accepting feedback to learn and to create conditions for the other student to learn as well. As seen from our findings, this is related to developing an ability to coach and learn to be coached.

Furthermore, as presented in the analysis, students in both types of corporate development projects *created meaning and understanding of the university literature* due to their experiences, which is one important expected outcome according to the work-integrated learning literature (Patrick *et al.*, 2008; Smith and Gibson, 2016). The development of understanding and knowledge about the university literature together with their experiences of being on-site in their company fosters the students' understanding of conditions for and potential barriers to corporate entrepreneurship. Our findings show that the students learned what can hinder corporate entrepreneurship internally as well how the company can engage and collaborate with actors in the environment (for example, potential customers) to identify and develop new offerings, which has been acknowledged in Byrne *et al.* (2016) as well as underlined by Kuratko and Morris (2018). At the same time, the analysis indicates that the students undertaking the internal projects highlight the understanding and meaning created in relation to internal conditions, whereas those in external projects more explicitly share that they have developed understanding and created meaning related to the role of (external) user involvement in order to identify and develop new offerings.

As briefly discussed already, the team skills fostered in the students include an improved ability to providing and accepting feedback, which, in turn, positively influences reflection on their own and others' behavior. As seen in our findings and visualized in Figure 1, the team skills gained from the team work fosters a *self-awareness* in the student. Our findings related to the role of team work dynamics for the development of self-awareness and reflective behavior are in line with those presented by Byrne *et al.* (2016) examining corporate entrepreneurship training of employees. In the same way as in our findings, Byrne *et al.* (2016) find that the maturing self-awareness of strengths and weaknesses was a result of the feedback and interaction with fellow team members.

When it comes to the role of self-awareness, our analysis revealed interesting results when comparing students who undertook internal and external projects. In the analysis, it was shown that the students undertaking internal projects more explicitly refer to the matured awareness of their own and others' behavior, whereas those in the external projects were not as explicit. As presented in the analysis, the students in the internal projects also explained more explicitly the learning related to providing and accepting feedback, which, in turn, could be one reason for the less prominent role of self-awareness for students in external projects. Another explanation could be related to differences between students in internal and external projects in terms of developing networking skills. As seen in the analysis, the students in the external projects much more explicitly stress the learning of social and networking skills from interacting with a large number of both external and internal actors. This focus on interactions with large number of actors can mean that the students in external projects have less time to reflect and explicitly foster awareness of individual improvements.

As previously discussed, by applying and relating the university literature to the project and specific conditions in the company, the student creates meaning and understanding of this literature. Thanks to the elaborated experiences from applying the literature, the students also develop an understanding of the need to adapt the literature to the specific conditions in their company in order to come up with solutions to the problems they seek to solve in their corporate development project. The understanding of how to adapt university

literature to the specific needs of the company project is the key for the student to come up with a solution to the problem to be solved in the project. Using the work by Barber (2012), we can conclude that upon completing the project for their company, the students have developed an ability to create a new solution by synthesizing and integrating university literature and the specific conditions in their company. Hence, the development of mature creation of meaning and understanding of university literature is the foundation for the *problem-solving skills* the students state they have developed.

As seen in Figure 1, the last learning outcome we identify is labeled *preparedness and confidence to handle uncertainty*. The importance of handling uncertainty is key for all entrepreneurial processes and relates to the need to develop reflective and self-regulated learners (see e.g. Harms, 2015; Hägg, 2021; Williams Middleton and Donnellon, 2014) who can engage in self-negotiated action. The corporate development project provides opportunities for the students to take ownership of the learning process, where they are not fully instructed what to do but are guided in terms of how to create a link between theory and practice. As we discussed in the cross-case analysis, the findings indicate a relationship between the students' development of problem-solving skills and their preparedness and confidence to work with new projects characterized by uncertainty in the future. Hence, as visualized in our framework, based on the learning from the corporate development project, the students have developed problem-solving skills that they feel confident about using in the future, which, in turn, seems to positively influence their preparedness to work in unfamiliar and uncertain future environments.

However, as indicated in the cross-case analysis, the students undertaking internal projects more explicitly share learning referring to preparedness and ability to face uncertain and unfamiliar situations, whereas for students undertaking external projects, this is less explicit (even though they mention it). As discussed already, our findings show that students in internal projects more explicitly refer to reflective behavior and self-awareness in comparison with students undertaking external projects. The more explicit mention of improved preparedness to handle uncertain and unfamiliar situations reported by students in internal projects therefore seems to be a result of the greater role of self-awareness. Hence, the more explicit self-awareness fostered in students who have undertaken internal projects means that these students have more specifically reflected on their strengths and weaknesses and what they are capable of doing in the future.

Conclusions

Existing research on the design and outcomes of entrepreneurship education has focused on the context of new venture creation. At the same time, a major proportion of graduates will take on a corporate career working with assignments related to entrepreneurship in established companies or as consultants in corporate entrepreneurship. However, our knowledge about how to design corporate entrepreneurship education is scant.

The framework presented in this paper develops our knowledge about the role of work-integrated learning experiences for fostering corporate entrepreneurship knowledge and skills. More specifically, we have examined how the corporate development project generates learning outcomes and how the type of project influences these learning outcomes. In so doing, we have taken one step toward understanding corporate entrepreneurship education and training from an action learning framework as suggested by Byrne *et al.* (2016). In the paper, we have argued for the key role of the corporate development project for academic educations in corporate entrepreneurship. Based on work-integrated learning and entrepreneurship literature, we provide a definition of what qualifies as a corporate development project based on two dimensions. First of all, a corporate development project is part of an academic education in corporate entrepreneurship, and the project focus must hence be related to corporate entrepreneurship. Second, in order to qualify as a corporate

development project, the project must provide opportunities for the students to take ownership of the project and learning process. Hence, the arrangement of the corporate development project must be based on an agreement with all involved parties (university representative, company/company mentor, and the students) stating that the students can influence the scope of the project as well as the process.

We have in the study examined two types of projects, internal and external, and how the type of project in turn potentially influences the students' learning outcomes. Our developed framework shows that students in both types of projects report learning outcomes that represent the following five categories: (1) team skills, (2) creating meaning of university literature, (3) self-awareness, (4) problem-solving skills and (5) preparedness and confidence to handle uncertainty. As discussed in the previous section and visualized in our framework (Figure 1), the five categories identified are related and influence each other in a three-phase learning process.

Furthermore, even though all five categories of learning are reported by students in both internal and external projects as discussed in the previous section, interesting and nuanced differences were found between students in internal and external projects. Based on the findings, it seems fair to conclude that experiences from internal and external corporate development projects will have implications for the students' future career path. We find that students undertaking internal projects explicitly mention how they have developed a greater understanding of internal conditions and potential barriers to corporate entrepreneurship, thanks to the corporate development project. Hence, the experiences from internal projects give students a profound understanding of the internal conditions for corporate entrepreneurship both from interactions with top management as well as with employees in different positions. These experiences from the perspective of different positions in a company can, in turn, be assumed valuable for a future career within established companies in positions related to working on new business opportunities and offerings or as a manager working to create conditions for corporate entrepreneurship. On the other hand, the findings show that students working in external projects explicitly underline the networking skills gained from their interactions and networking with both external and internal actors. The experience of working with different external actors and the social and networking skills fostered seem to be valuable for a potential future career as a management consultant assisting top managers in different companies in various areas related to corporate entrepreneurship.

Implications for theory and practice

Theory

The framework developed in this paper contributes to the understanding of the role of corporate development projects for the design of academic education programs in corporate entrepreneurship. More specifically, based on the framework, we can understand students' learning outcomes and the interplay between different learning outcomes in the students' learning process when undertaking a corporate development project. Moreover, the framework shows the potential role of the design of the corporate development project for shaping the learning outcomes. Future research should test the framework using data from other academic programs in corporate entrepreneurship that employ the same pedagogical approach (including a corporate development project), and in so doing examine the applicability of the framework using a larger number of corporate development projects. For possible comparison, future research should adopt the same definition of a corporate development project as developed and used in this study.

Besides the implications for entrepreneurship education focused on corporate entrepreneurship, the paper also contributes to the discussion in the work-integrated learning literature. One important challenge discussed in this literature is how to include

work-integrated learning in the design of academic programs (Jackson and Meek, 2021) and how to design and arrange the assignment (project) undertaken for the workplace partner. The study contributes a nuanced understanding about the integration of this kind of learning in academic programs, and more specifically the potential role of the design of the project.

Practice

The framework (Figure 1) has the potential to be valuable for program directors, guiding them how to design and integrate the corporate development project as one module within an academic program in corporate entrepreneurship. Our framework shows how the different learning outcomes are related and how they progress over time. Even though the framework provides several specific implications for how to plan and design a corporate development project, our data and the framework show that the team skills developed in the team work act as an important foundation for the learning that the individual student gains from the project experiences.

Our framework also shows differences in terms of learning outcomes for students undertaking internal as compared to external projects. These differences should be considered by program directors in their work with planning and designing corporate development projects for the students and considering the implications for their future career. Hence, as previously discussed, internal and external corporate development projects seem to prepare students for different career paths. Students undertaking internal projects are exposed to various experiences related to internal conditions and barriers to corporate entrepreneurship, which can be assumed to provide these students with a good starting point for a future career as a corporate entrepreneur working within established companies. The findings show that students with experience from undertaking external projects have improved their networking skills from interacting with a large number of various external actors as well as actors inside the company. The exposure to not only internal but also various external actors and the improved networking skills seem to provide these students with a good starting point for a future career as a management consultant in corporate entrepreneurship in which they will make good use of networking experiences and skills in their future role as a consultant interacting with and meeting top management in different companies.

Hence, program directors are advised to communicate to students in advance the potential nuanced differences in learning they will experience should they decide to work on an internal as opposed to an external corporate development project. It can be assumed that students are interested to know in advance what learning they will face and how it can potentially prepare them for different future career paths in corporate entrepreneurship.

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