Learning Entrepreneurship

How Capabilities Shape Learning from Experience, Reflection, and Action

Viebig, Christoph

Document Version
Final published version

DOI:
10.22439/phd.07.2023

Publication date:
2023

License
Unspecified

Citation for published version (APA):
Viebig, C. (2023). *Learning Entrepreneurship: How Capabilities Shape Learning from Experience, Reflection, and Action*. Copenhagen Business School [Phd]. PhD Series No. 07.2023 https://doi.org/10.22439/phd.07.2023

COPENHAGEN BUSINESS SCHOOL
SOLBJERG PLADS 3
DK-2000 FREDERIKSBERG
DANMARK

WWW.CBS.DK

ISSN 0906-6934

Print ISBN: **978-87-7568-157-0**
Online ISBN: **978-87-7568-158-7**

DOI: https://doi.org/10.22439/phd.07.2023

LEARNING ENTREPRENEURSHIP – HOW CAPABILITIES SHAPE LEARNING FROM EXPERIENCE, REFLECTION, AND ACTION

PhD Series 07.2023

Christoph Viebig

LEARNING ENTREPRENEURSHIP

HOW CAPABILITIES SHAPE LEARNING FROM EXPERIENCE, REFLECTION, AND ACTION

CBS PhD School Department of Business Humanities & Law

PhD Series 07.2023

CBS COPENHAGEN BUSINESS SCHOOL
HANDELSHØJSKOLEN

Learning Entrepreneurship:

How capabilities shape learning

from experience, reflection, and action

Christoph Viebig

Supervisors:

Professor, Christina Lubinski, Copenhagen Business School

Professor (mso), Annemette Kjærgaard, Copenhagen Business School

CBS PhD School

Copenhagen Business School

Christoph Viebig
Learning Entrepreneurship
How capabilities shape learning from experience, reflection, and action

First edition 2023
Ph.D. Series 07.2023

ISSN 0906-6934

Print ISBN: 978-87-7568-157-0
Online ISBN: 978-87-7568-158-7

DOI: https://doi.org/10.22439/phd.07.2023

FOREWORD & ACKNOWLEDGEMENTS

It was in the fall of 2016 when I wrote the email that to me marks the start of this project. I had just moved to Copenhagen and started my master's in Organizational Innovation and Entrepreneurship at Copenhagen Business School (CBS) and wrote to the Line Coordinator of my master's program, Christina Lubinski, to express my interest in potentially doing a PhD wherefore I would like to work as a student assistant to find out whether the academic world was really something for me. While I received an immediate rejection for my unsolicited application, I eventually got a student assistant job at the Centre for Business History in December 2016. Over the next two years, I recognized that doing research and conducting a PhD could indeed be something that suits my interests, and I decided to carry on with this idea. Today exactly six years after I entered academia as a student assistant, I fulfilled my dream and submitted my PhD dissertation. I am extremely thankful to everyone who supported me throughout this process.

Christina Lubinski, thank you for being the best supervisor I could have imagined. I am grateful for your unconditional support and the time and energy you put into my project. Thank you for always taking the time to read, comment and discuss my work, as well as coming up with great ideas and innovative suggestions for improvement. Your input over the years has substantially shaped my thinking and development as a scholar. I am extremely thankful for your careful guidance throughout this project, your trust in my abilities, and your efforts to introduce me to the academic world. I will forever be thankful for what you have done for me. You are awesome!

Annemette Kjærgaard, I count myself very lucky and privileged for having you on my supervision team. Thank you so much for making this PhD possible through

the Research in Blended Learning Project and helping me find my way around CBS. I am grateful for your support, for your reading and commenting of many of my texts, and for your careful suggestions on how to advance them. Thank you for always being there for me when I needed you.

The Centre of Business History has been an academic home to me. I am extremely thankful to all my colleagues at the Centre for creating an environment where I could flourish and develop intellectually despite not being the most historical researcher. For this, I am grateful to all of you. I want to say a special thanks to Daniel R. Wadhwani, with whom I had the privilege to co-write one of my articles. Thank you, Dan for teaching me so many things about doing historical research and writing academically. You are an outstanding academic and a great colleague. Alfred Reckendrees, thank you for helping me with so many little things throughout the time of my PhD. It is often the little things that matter the most. Thank you, Alfred. Morten Tinning, thank you so much for your company throughout the years. It is great to have fellow PhDs with whom to go through this together and who understand your struggles. Thanks for always listening to mine. Andrew Popp, thank you for many insightful comments on my work. Most importantly, those at my first Work-in-Progress seminar, which were extremely helpful in writing my first paper. Per Hansen, thank you very much for your encouraging words during times when I was doubting myself. It is great to feel this support and encouragement from someone like you. Thank you, Per. Michael Bennedsen Hansen and Stefanie Steinbeck, thank you for traveling with me on this PhD journey and creating a lively and positive atmosphere. Thanks for keeping up the good spirit, Michael and Stefanie. Hannah Knox Tucker, thank you for thinking, teaching, laughing, and struggling with me. I am grateful for having colleagues like you, Hannah. I would like to thank two recent guest scholars at our Centre namely Christian Stutz and Stephen Cummings for their insightful

comments on my dissertation, especially on my methodological choices and their help in giving it a title. Thank you for visiting us, for me this has really made an impact. I am also thankful to the three student assistants who have helped me with the transcription of the group reflections. Thank you, Irem Dönmez, Stanislas Salavert and Ilona Zavalnaya Andersen for the countless hours you spent on this.

I would like to thank all my other colleagues at the Department of Management, Politics, and Philosophy, now called the Department of Business Humanities and Law. Despite its size, this department has always felt quite personal to me, and I really hope this will continue under the new name. I am especially grateful to Lena Olaison for her trust in my abilities and her support, especially during the last year of my PhD. Thank you very much for all your mental support, for discussing my work during my second Work-in-Progress Seminar, and for commenting on some of the chapters of this dissertation. I look forward to working with you in my new role. Henrik Hermansen, Anja Vega Frederiksen, Karina Ravn Nielsen, Lucie Alexanian, Tina Stokholm Andersen, and Anje Schmidt, thank you for helping me along and never losing patience with me over the years with teaching organization, equipment purchases, contractual issues, and so many other things. You rock! Charlotte Cator, thank you so much for your invaluable input on bringing this PhD dissertation together. You are a great colleague and an even better friend. Finally, I would like to thank Mitchell Dean for always having an open ear to discuss the issues of the PhDs at the department, for who I served as their representative, and for recognizing and listening to us even in the most turbulent times.

Thank you to my colleagues from the Research in Blended Learning Group, who co-financed this PhD project. I am especially grateful to Annemette Kjærgaard and Anoush Margaryan for their feedback on my work during our research seminars and to all my colleagues for inspiring presentations. I would also like to thank

Mads Kogut for the many conversations we had about theories of teaching and learning. Thank you, Mads, for your valuable insights!

I also thank colleagues at the University of Southern California, Marshall School of Business, for hosting me for a research stay. I am especially thankful to Noam Wasserman and Michael Riviera for letting me visit Founder's Central. I would also like to thank Jill Kickul for helping me find a place to live in Los Angeles. Moreover, I am grateful to Nicola Breugst for inviting me to the Entrepreneurship Research Institute at Technical University Munich. A special thanks to the institute's community of young scholars who warmly welcomed me and helped me get around in Munich, especially Alexandra Mittermaier, Julia Kirsch, Carolin Feldmeier, and Carmen Baur. I would also like to thank the two external commentators at my first and second work-in-progress seminars, Isabell Stamm and Luke Pittaway. Thank you very much for your insightful comments on my work and your guidance for the project. In addition, I would like to thank Inge Birkbak Larsen for collaborating with me on the USASBE doctoral consortium. Finally, I would like to thank my new colleagues at the Copenhagen School of Entrepreneurship (CSE) for welcoming me so warmly to their team as a researcher in residence in the final semester of this dissertation project. Especially, I thank Ashlea Wallington and Stephanie Clemente for their support and understanding in the busy last months and weeks of this dissertation and for some important comments on the practical implications of this PhD dissertation. I am very much looking forward to working with you two and the entire team at CSE.

To my friends in Copenhagen, Frankfurt, Nuremberg, and the many other places you live right now. Thank you for all the fun moments, deep conversations, and great memories. You are an invaluable part of my life and always will be. I am especially grateful to Vico Adjedje and Maximilian Zwicker. Thank you for being

in my life, listening to my struggles and sharing yours, and being there for me in the difficult and joyful times of life. I am honored to call you two my friends.

Bontu, you mean the world to me. A project like this would never be possible without you. Thank you for loving me, challenging me, inspiring me, believing in me, and being there with me in the most joyful and challenging moments of my life. I am grateful for having you as my partner and always will be. I love you.

Lastly, I would like to thank my family for all they have done for me throughout my life. Thank you, Mama, Papa, and Oma, for always believing in me and supporting me in everything I did. It is your unconditional love that made me who I am today. Thank you so much now and forever.

Christoph Viebig

Copenhagen 31.12.2022

ABSTRACT

This paper-based PhD dissertation examines the learning process in experience-based entrepreneurship education. This learning process is characterized by continuous iterations of three components: experience, reflection, and action. Each of the three papers challenges one taken-for-granted assumption about one of the components of this learning process. Those assumptions are that learning experiences occur in face-to-face settings, that reflection is an individual activity taking place in isolation, and that entrepreneurial action can be transferred seamlessly between different contexts and value systems.

Paper 1, "*Blended Learning in Entrepreneurship Education: A Systematic Literature Review,*" challenges the assumption that learning experiences are 'hands on' and take place in a face-to-face setting. The systematic literature review identifies 75 peer-reviewed academic articles that use blended learning, defined as a mode of delivery that combines online and offline teaching, in entrepreneurship education. The findings show the why, who, what, how, and for whom, as well as the measured results of blended learning in entrepreneurship education. The study contributes to the literature by suggesting that blended learning is an independent and unique mode of delivery and by identifying four archetypes of blends, two of which show that experiences can take place in the digital sphere.

Paper 2, "*Group Reflections in Entrepreneurship Education: Exploring Students' Learning Process and Outcomes,*" challenges the assumption that reflection is an inward-oriented, individual activity. The video ethnography examines 36 group reflections from two entrepreneurship courses using video-interaction analysis and qualitative coding techniques. The study develops a process model for group reflections showing its phases, necessary reflection capabilities, and the process of

how students co-construct but also co-obstruct learning through reflection. The study contributes to the literature by outlining the conditions for learning in group reflections, clarifying its relationship to instrumental and transformational learning, and reconfiguring reflection capabilities for entrepreneurship education.

Paper 3, "*Social Imaginaries of Entrepreneurship Education: The United States and Germany, 1800 – 2020*" (co-authored with Professor R. Daniel Wadhwani), develops a comparative and analytically structured history of entrepreneurship education using archival sources. The paper shows how changing social imaginaries linked to evolving justifications of entrepreneurial autonomy and the 'common good' shape the legitimacy of entrepreneurship education and its organizational forms, practices, and aims. The study suggests that, due to its internal dynamic of rise and decline, the future of entrepreneurship education lies in its ability to continuously articulate morally compelling social imaginaries at the societal level. The study further reveals that, in contrast to earlier forms of entrepreneurship education, its contemporary versions assume that actions travel seamlessly between different social and economic contexts and value systems. Finally, the paper provides a new perspective on the relationship between entrepreneurship as a research field and the research-based university, suggesting the field's character as an 'undisciplined discipline' is not necessarily a problem to be overcome but an opportunity to free the university from its disciplinary conventions.

Taken together, this PhD dissertation contributes to a better understanding of how entrepreneurship can be learned from experience, reflection, and action. It shows that the learning process is shaped by three factors, namely (a) students' reflection capabilities, (b) their frames of reference, and (c) the context in which learning is situated, all of which are insufficiently addressed by current scholarship. One way to address those deficiencies and arguably increase the quality of learning entrepreneurship from experiences is to reintegrate the humanities into experience-based entrepreneurship education. Developing a definition of the business humanities for entrepreneurship education, this PhD dissertation suggests that the business humanities allow for (i) training students' capabilities in framing and analyzing experiences, (ii) developing their value and belief systems as part of their frames of reference, and (iii) strengthening their contextual awareness. Building on these suggestions, this PhD dissertation contributes to practice by developing a proposal for a master's program in *Transformational Entrepreneurship*.

DANSK RESUME

Denne artikelbaserede afhandling undersøger læreprocesser inden for erfaringsbaseret iværksætteruddannelse. Læring i erfaringsbaseret iværksætteruddannelse er karakteriseret ved kontinuerlige gentagelser af tre komponenter: erfaring, refleksion og handling. Hver af afhandlingens tre artikler udfordrer en almen antagelse inden for én af disse komponenter i læreprocessen: 1) at erfaringsbaseret læring finder sted i et ansigt-til-ansigt baseret læringsmiljø, 2) at refleksion er en individuel og isoleret aktivitet og 3) at en iværksætters handlinger problemfrit kan overføres mellem forskellige kontekster og værdisystemer.

Artikel 1, "Blended Learning in Entrepreneurship Education: A Systematic Literature Review", udfordrer antagelsen om, at læringserfaringer er praktiske (hands on) og finder sted i et fysisk ansigt-til-ansigt undervisningsmiljø. En systematisk litteraturgennemgang identificerer 75 fagfællebedømte artikler, der relaterer til blended learning, defineret som en undervisningsform, som kombinerer online undervisning og tilstedeværelsesundervisning undervisning i iværksætteri. Undersøgelsen bidrager til litteraturen ved at tydeliggøre, at blended learning er en uafhængig og unik undervisningsform samt ved at identificere fire arketypiske formater (blends), hvoraf to viser, at erfaringer kan tilegnes online.

Artikel 2, "Group Reflections in Entrepreneurship Education: Exploring Students' Learning Process and Outcomes", udfordrer antagelsen om, at refleksion er en indadskuende, individuel aktivitet. Artiklens video-etnografi undersøger 36 grupperefleksioner fra to iværksætterkurser ved hjælp af video-interaktionsanalyse og kvalitative kodningsteknikker. Undersøgelsen udvikler en procesmodel for grupperefleksioner. Modellen viser forskellige faser, nødvendige refleksionsevner samt, hvordan studerende samskaber men også kollektivt obstruerer læring gennem refleksion. Undersøgelsen bidrager til litteraturen ved at skitsere betingelserne for læring i gupperefleksion, relatere dette til instrumentel og transformativ læring og gentænke refleksion som en vigtig evne i iværksætteruddannelse.

Artikel 3, "Social Imaginaries of Entrepreneurship Education: The United States and Germany, 1800 – 2020" (medforfatter Professor R. Daniel Wadhwani), præsenterer en komparativ og analytisk struktureret historisk fremstilling af iværksætteruddannelse baseret på historiske arkivalier. Artiklen viser, hvordan skiftende sociale forestillinger, knyttet til skiftende begrundelser for iværksætter-autonomi og 'det fælles bedste' har formet legitimiteten af iværksætteruddannelse samt dens organisatoriske former, praksisser og mål. Artiklen viser, at denne interne dynamik har ført til store udsving i iværksætteruddannelse historisk set og foreslår derfor, at fremtiden for iværksætteruddannelse ligger i evnen til kontinuerligt at formulere moralsk overbevisende sociale forestillinger, som er relevante på et overordnet samfundsniveau. Undersøgelsen viser endvidere, at nutidige former for iværksætteruddannelse, i modsætning til tidligere former, antager, at iværksætterens handlinger bevæger sig problemfrit mellem forskellige værdisystemer, samt sociale og økonomiske kontekster. Endeligt præsenterer artiklen et nyt perspektiv på forholdet mellem iværksætteri som forskningsfelt og universitetet som forskningsbaseret institution ved at foreslå, at forskningsfeltets status som en 'udisciplineret disciplin' ikke nødvendigvis er et problem, der skal overvindes, men en potentiel mulighed for at frigøre universitetet fra eksisterende disciplinære konventioner.

Afhandlingen bidrager samlet set til en dybere forståelse af, hvordan iværksætteri kan læres gennem erfaringsbaseret undervisning. Afhandlingens primære budskab er, at sådanne læreprocesser er betinget af tre faktorer, nemlig (a) de studerendes refleksionsevner, (b) deres referencerammer og (c) den kontekst, hvori læringen finder sted. Alle disse faktorer er underbelyst i den nuværende forskningslitteratur. En måde hvorpå manglerne kan adresseres er ved at reintegrere humaniora i erfaringsbaseret iværksætteruddannelse, hvilket afhandlingen argumenterer vil øge kvaliteten af læring. Afhandlingen udvikler således en definition af erhvervshumaniora (*Business Humanities*) for iværksætteruddannelse og argumenterer for, at integrationen af erhvervshumaniora øger muligheden for (i) at træne de studerendes evner til at rammesætte og analysere erfaringer, (ii) udvikle deres værdier og overbevisninger som en del af deres referenceramme, og (iii) styrke deres kontekstuelle bevidsthed. Med udgangspunkt i disse forslag bidrager afhandlingen til en ny undervisningspraksis gennem et forslag til en kandidatuddannelse i ”forandringsfunderet iværksætteri” (*Transformational Entrepreneurship*).

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I: INTRODUCTION

Entrepreneurship education is ubiquitous at universities. Recent decades have seen extensive growth and widespread proliferation of entrepreneurship courses and programs within most areas of higher education (Kuratko & Morris, 2018; Morris & Liguori, 2016). Alongside this development, one could witness the emergence of a research field focused on entrepreneurship education (Durán-Sánchez, Del Río-Rama, Álvarez-García, & García-Vélez, 2019; Fayolle, Verzat, & Wapshott, 2016; Neck & Corbett, 2018). Researchers have studied the outcomes and effects of entrepreneurship education (Duval-Couetil, 2013; Nabi, Liñán, Fayolle, Krueger, & Walmsley, 2017; Pittaway & Cope, 2007a), examined its status and development as a scholarly field (Béchard & Grégoire, 2005; Hägg & Kurczewska, 2021; Landström, Gabrielsson, Politis, Sørheim, & Djupdal, 2022), investigated its theoretical foundations and its relationship to both entrepreneurship and education research (Kyrö, 2015; Loi, Castriotta, & Di Guardo, 2016), and explored methods of teaching and learning entrepreneurship (Hägg & Gabrielsson, 2020). Pertinent to the research field is an action-oriented research agenda (Hägg & Gabrielsson, 2020) and an emerging consensus that entrepreneurship is most effectively taught and learned in highly interactive and action-oriented learning environments (Neck & Corbett, 2018; Rasmussen & Sørheim, 2006). Mirroring the learning process of real-world entrepreneurs (Cope, 2005; Cope & Watts, 2000) and rooted in experience-based learning theories (Dewey, 1933; Kolb, 2015; Mezirow, 1991; Schön, 1983), scholars suggested that the learning process in experience-based entrepreneurship education consists in essence of continuous iterations of three process components: experience, reflection, and action (Kassean, Vanevenhoven, Liguori, & Winkel, 2015; Neck & Greene, 2011). Through their own actions, students generate entrepreneurial experiences from which they create meaning and develop new knowledge through reflection, which then informs future actions (Hägg & Kurczewska, 2016). While alternative, explanation-based forms of entrepreneurship education exist in practice and are discussed as complementing experience-based formats (Bell & Bell, 2020; Hägg & Kurczewska, 2020a), they are often vilified in the academic debate on teaching and learning entrepreneurship (Neck & Corbett, 2018), which focuses predominantly on experience-based formats (Hägg & Gabrielsson, 2020). Leading scholars in the field argue that the focus on learning from entrepreneurial experiences is core to the identity of the scholarly community (Jones, 2019; Kyrö, 2015; Neck & Corbett, 2018), which by now has developed specialized journals and conferences and is jockeying for academic legitimacy (Landström et al., 2022).

However, the relevance and academic legitimacy of entrepreneurship education as a research field are still contested. Scholars have pointed out that research in entrepreneurship education has not advanced at the same pace as general entrepreneurship research (Liguori, Winkler, Neck, & Terjesen, 2019; Neck & Corbett, 2018) and that the rapid implementation of courses and programs has "outpaced our understanding of what should be taught by entrepreneurship educators, how it should be taught, and how outcomes should be assessed" (Morris & Liguori, 2016: xv–xvi). Even though voices challenging the notion that entrepreneurship can be taught and learned at all almost completely disappeared over the last decades (Fiet, 2001; Henry, Hill, & Leitch, 2005; Jack & Anderson, 1999), there is an ongoing debate about the significance of outcomes and effects of entrepreneurship education and how it links to realized entrepreneurial activity (Nabi et al., 2017; Rideout & Gray, 2013). One frequently articulated critique is that the theoretical foundations of the methods and processes for teaching and learning entrepreneurship are underdeveloped (Fayolle, 2013; Fayolle et al., 2016; Loi et al., 2022). This critique has predominantly focused on experience-based entrepreneurship education and its underlying epistemic stance toward entrepreneurial knowledge as being created through an iterative process of experience, reflection, and action. This perspective stands in sharp contrast to traditional explanation-based university education and an epistemic stance of entrepreneurial knowledge that is scientifically produced and transmitted to students through instructive teaching formats (Bhatia & Levina, 2020; Neck & Greene, 2011). Specifically, scholars have questioned the theoretical foundation of the experience-based learning process (Rideout & Gray, 2013) and lamented that there are too many taken-for-granted assumptions underlying the processes of teaching and learning (Fayolle, 2013; Loi et al., 2022).

The three articles comprising the main part of this PhD dissertation reveal three taken-for-granted assumptions concerning the learning process in experience-based entrepreneurship education. The first concerns the experience component. I demonstrate that most of the existing scholarship takes for granted that experiences are physically situated in the real world. Second, concerning the reflection component, I challenge the notion that reflection is an individual activity taking place in isolation. Third, I address the action component and argue that action is shaped by context and moral judgment, which so far is underexplored in entrepreneurship education. Building upon the individual contributions of the three papers, I extend the theoretical foundation of the learning process in experience-based entrepreneurship education by suggesting that there are three factors that shape learning. Those factors are (a) students' reflection capabilities, (b) their frames of reference, and (c) the contexts in which they learn. I demonstrate how each of these factors influences students learning and discuss the limitations of contemporary experience-based entrepreneurship education in preparing students to learn through experience, reflection, and action. Specifically, I show that entrepreneurship educators can strengthen students learning in experience-based entrepreneurship education by (i) training students' capabilities in framing and analyzing experiences, (ii) developing their value and belief systems as part of their frames of reference, and (iii) strengthening their contextual awareness. I argue that one way to achieve this is to learn from the here-developed history of entrepreneurship education and think of its future as one where the humanities are reintegrated into entrepreneurship education. Building on this argument, I develop a definition of the business humanities in entrepreneurship education, which I define as a form of education that focuses on *"human-centered forms of reasoning rooted in history, philosophy, art, or literature that aim at developing individuals' reflection capabilities, their value and belief systems, and their contextual awareness, thereby strengthening students' ability to learn from entrepreneurial experiences and leading them to become reflective and entrepreneurial individuals".* Overall, this dissertation addresses three taken-for-granted assumptions about the learning process in experience-based entrepreneurship education, shows that there are three influencing factors underlying it, and suggests that educators can enhance students' learning in experience-based entrepreneurship education by integrating the business humanities.

Structure of the Dissertation

The dissertation is organized into six chapters. In this first chapter, I introduced the theme of this PhD dissertation and briefly outlined its contributions. In chapter II, I provide an overview of the literature on teaching and learning entrepreneurship. I demonstrate that there are two broad approaches to teaching and learning entrepreneurship, called the explanation-based and experience-based approaches. Showing that the academic debate focuses on experience-based entrepreneurship education, I discuss some of the trends and development within this stream of research. Finally, I discuss the three taken-for-granted assumptions underlying the learning process in experience-based entrepreneurship education and describe how the three articles address them.

In chapter III, I present my methodological approach and research process. The chapter begins by outlining my philosophical stances linked to a social-constructivist ontology and an interpretivist epistemology. I discuss my philosophical views considering current conceptualizations of the learning process and knowledge production in entrepreneurship education, which are influenced by pragmatist philosophy. I then reflect on my methodological choices and display what kind of knowledge this PhD dissertation produces. The second part of this chapter outlines my research process, which provides a descriptive account of my (Pre-)PhD journey while revealing some aspects of my own frame of reference through which I, as an interpretivist researcher, conducted this research project.

The next three chapters IV to VI entail the three articles of this dissertation. The first of these chapters shows the article "Blended Learning in Entrepreneurship Education: A Systematic Literature Review," published in *Education + Training (Viebig, 2022).* Chapter V presents the article "Group Reflections in Entrepreneurship Education: Exploring Students' Learning Process and Outcomes", submitted to *International Journal of Entrepreneurial Behavior and Research.* Chapter VI displays the article "Social Imaginaries in Entrepreneurship Education: The United States and Germany 1800 – 2020", which I co-authored with Professor R. Daniel Wadhwani and which is published in *Academy of Management Learning and Education* (Wadhwani & Viebig, 2021).

Chapter VII discusses the three papers. The central claim of this section is that the learning process in experience-based entrepreneurship education is influenced by three factors: students' individual reflection capabilities, their personal frames of reference, and the social context. I show some of the limitations of experience-based entrepreneurship education in preparing students for learning through experience, reflection, and action and suggest that one way to remedy those deficiencies is to reintegrate the humanities into experience-based entrepreneurship education. To that end, define the term business humanities for entrepreneurship education. I end this section with practical implications delivered through a proposal for an entrepreneurship master's program that integrates the business humanities and builds on the ideas developed in this PhD dissertation.

Chapter VIII concludes this PhD dissertation and highlights some of its theoretical and practical implications and avenues for future research.

CHAPTER II: TEACHING AND LEARNING IN ENTREPRENEURSHIP EDUCATION

This chapter provides a review of the literature on teaching and learning in entrepreneurship education. The purpose of this chapter is to outline the overall academic debates that I seek to contribute to with this PhD dissertation, define key terminology, and lay out the groundwork for the discussion section. The chapter begins with an introduction to two broad approaches to entrepreneurship education, which are called the explanation-based and experience-based approaches. I used this distinction in one of my articles (Viebig, 2022), yet expand upon it here, showing how the two approaches tie into the types of entrepreneurial knowledge discussed in my article co-authored with Professor R. Daniel Wadhwani (2021) and how they link to established concepts and frameworks of the entrepreneurship education literature. In addition to the above, the chapter includes a section that outlines debates on experience-based entrepreneurship education, which is where most of the discussions in entrepreneurship education research take place. This section shows the strong trend away from explanation-based toward experience-based entrepreneurship education. It highlights two controversial debates about learners' autonomy in steering their learning process and about the purpose(s) of experience-based entrepreneurship education. Concurring with some of the scholarly critiques on experience-based entrepreneurship education, I outline three taken-for-granted assumptions in the learning process. Finally, I show how the three articles of this dissertation depart from or challenge those taken-for-granted assumptions and what implications and consequences this has for teaching and learning entrepreneurship.

Two Approaches to Teaching and Learning Entrepreneurship

There are two broad approaches to entrepreneurship education. First, there is a teacher-centered approach where educators explain entrepreneurship to their students. Second, there is a student-centered approach where students act and learn from their entrepreneurial experiences. While the differences between those two approaches are clear in theory and well-reflected in the literature, which uses a variety of terms to account for these differences (Piperopoulos & Dimov, 2015; Ramsgaard & Christensen, 2018; Scott, Penaluna, & Thompson, 2016), it is important to note that many classes, courses, and programs include elements of both approaches. Nevertheless, the distinction between the two is important for understanding current debates within the literature on entrepreneurship education and provides a useful conceptual ground upon which I will situate and discuss the overarching contributions of this PhD dissertation.

The Explanation-Based Approach

The explanation-based approach rests on an analytical-functional notion of entrepreneurial knowledge and stands in the tradition of management education. Adhering to norms of objectivity in social sciences, researchers examine entrepreneurial phenomena from a third-person ontological perspective (Dimov & Pistrui, 2022). This position allows them to generate abstract, disembodied, and seemingly value-free knowledge that theoretically explains entrepreneurship and contributes to eclectic research conversations about entrepreneurship phenomena (Landström & Harirchi, 2018). While this knowledge base about entrepreneurship is interdisciplinary and occurs within various social science disciplines, conversations seem to increasingly gravitate toward a core emerging field of entrepreneurship research (Landström, Harirchi, & Åström, 2012). The so-produced entrepreneurial knowledge also has a second purpose: it is considered valuable to practitioners for founding and managing their entrepreneurial ventures. Typically taking a functional view of entrepreneurs as managers of small firms or a process view on entrepreneurship, educators consider some of this knowledge helpful for managing the entrepreneurial process from firm creation to a potential exit (Neck & Greene, 2011).

Explanation-based forms of entrepreneurship education are closely linked to the concept of pedagogy. In scholarly debates on entrepreneurship education, the term pedagogy is not used as in common language to describe various teaching approaches but defines a teacher-based, information-centered, and transmission-focused approach to education (Hägg & Kurczewska, 2019; Jones, Penaluna, & Penaluna, 2019; Neck & Corbett, 2018). The term is borrowed from research on adult education, where it has been associated with education for children and traditional university teaching, and used for describing educational settings in which independent, knowledgeable, and skilled educators transfer information to what seems to be dependent, passive, and unknowing students (Knowles, Holton, & Swanson, 2015). This approach to teaching is central to explanation-based entrepreneurship education, where educators use a combination of lectures and assigned readings as a "core pedagogical methodology" (Neck & Corbett, 2018: 15). However, explanation-based entrepreneurship education can also take slightly more learner-centered approaches, such as case-based teaching, where students practice critical thinking and, through that, arrive at theoretical insights about entrepreneurship or aspects of the entrepreneurial process. Following an explanation-based approach, teachers use analytical language within the classroom and "emphasize theoretical reason, in which entrepreneurs are objects" (Dimov & Pistrui, 2022: 50). The dominant perspectives on learning rest within behaviorism, where the learning process consists of repeated stimuli and responses through which students, for example, learn how an entrepreneur should react when facing a particular problem, and cognitivism, where students engage in an internal process of critical thinking and reasoning to arrive at predefined insights for example on how to resolve conflict in entrepreneurial teams (Bell, 2021). The explanation-based approach gives a lot of authority to the teacher. At the same time, students have little autonomy about what and how they learn and are typically extrinsically motivated and disciplined through knowledge-reproducing examination formats (Neck & Corbett, 2018).

Examining content and purpose further allows distinguishing between two types of explanation-based entrepreneurship education. First, there is a type that aims at producing the ‘entrepreneurial manager’. Subscribing to a narrow purpose of entrepreneurship education as training for business venturing, educators select analytical-functional knowledge from the pool of entrepreneurship research they consider useful for creating a business. Educators often focus on “business basics” such as “market analysis,” “pricing,” or “financial statements” (Kuratko & Morris, 2018: 16), which are adjusted to the entrepreneurial process. As Bhatia and Levina (2020: 325) argue, this form of entrepreneurship education is closely linked to a “managerial mindset” that focuses on predicting, planning, and controlling the entrepreneurial process (Neck & Greene, 2011). This approach follows an inherent logic that an entrepreneur operating in uncertainty is the precursor of the manager dealing with risks. When equipped with analytical-functional knowledge, entrepreneurs can grow out of a world of uncertainty into a world of risk and thereby become entrepreneurial managers. Second, there is a type of explanation-based entrepreneurship education that aims at educating the ‘entrepreneurship intellectual’. This form of education about entrepreneurship naturally assumes a broad range of definitions of entrepreneurship, not only those concerned with business formation, because those “definitions of entrepreneurship” as well as the “types of entrepreneurs” or “the nature of opportunity" are core components of the curriculum (Kuratko & Morris, 2018: 16). Most commonly, this approach can be found in doctoral entrepreneurship education or research-oriented master programs where the aim is to qualify individuals for navigating and eventually contributing to entrepreneurship research (Brush et al., 2003).

The Experience-Based Approach

The experience-based approach to teaching and learning entrepreneurship is linked to a pragmatic-experiential notion of entrepreneurial knowledge. Instead of researchers looking at entrepreneurship from the outside-in (third-person ontology) and developing analytical-functional knowledge about entrepreneurship, individual entrepreneurs develop pragmatic-experiential knowledge from the inside-out (first-person ontology), which is shaped by their individual knowledge, experiences, values, and beliefs. This form of knowledge is subjective, embodied, and inherently value-based and thereby inextricably bound to the individual who generated it from their personal experience (Dimov & Pistrui, 2022: 50). Accordingly, one aim of experience-based entrepreneurship education is to facilitate students' experiences and to help them develop their own pragmatic-experiential knowledge (Pittaway & Cope, 2007b). While it is possible to share this form of knowledge with others through communication, what those others will learn through the sharing experience will become their own pragmatic-experiential knowledge that does not exactly represent what has been shared with them (Dimov & Pistrui, 2022: 50). Like explanation-based entrepreneurship education, the experience-based approach is also research-based. However, it is not the entrepreneurial knowledge that is produced through research, like in the explanation-based approach, but the process of learning from experiences as such, that resembles theories about how entrepreneurs learn from practice (Cope, 2005;

Politis, 2005). This explains why experience-based entrepreneurship education also has a second aim, which is to teach students the “entrepreneurship method” of how to learn from real-world entrepreneurial experiences (Neck & Greene, 2011: 68).

The teaching approach in experience-based entrepreneurship education is linked to the concepts of andragogy and heutagogy. In the entrepreneurship education literature, the term andragogy describes an approach to education where students are self-directed learners and have greater autonomy and responsibility over the learning process, while teachers act as coaches guiding students toward meaningful entrepreneurial experiences (Jones et al., 2019; Neck & Corbett, 2018). While the term is taken from the learning literature and describes adult education more broadly (Knowles et al., 2015), the scholarship in entrepreneurship education links the concept to experience-based learning (Hägg & Kurczewska, 2019). While andragogy assumes a shared responsibility between teacher and learner for the learning process, heutagogy is an extension of andragogy, characterized by an even greater autonomy of the students who are self-determined learners and teachers who act as facilitators of the learning process (Neck & Corbett, 2018). While the two approaches differ regarding students' autonomy, entrepreneurship education scholars assume that they share important features concerning the learning process (Jones et al., 2019). Taking a social-constructivist epistemological stance, scholars suggested that students learn through an iterative process of experience, reflection, and action (Hägg & Kurczewska, 2016; Löbler, 2006). Following this learning process, educators provide students with entrepreneurial experiences, defined as interactions between the students’ selves and the environment (Rodgers, 2002: 846), for example, through facilitating entrepreneurial projects, exercises, or serious games. Students then reflect upon those experiences, which means that they engage in a process of inquiry and meaning-making that results in the development of pragmatic-experiential knowledge (Bell & Bell, 2020; Hägg & Kurczewska, 2020b). This knowledge informs students' future actions, which then become new entrepreneurial experiences (Hägg & Kurczewska, 2016; Neck & Greene, 2011). The language in experience-based entrepreneurship education is one of "practical reason [and] in which entrepreneurs are subjects" (Dimov & Pistrui, 2022: 50). Experience-based entrepreneurship education demands varying degrees of autonomy from both educators and students, who collaboratively make decisions about the directions of the learning processes and take shared responsibility for the learning outcomes. This requires intrinsically motivated learners and examination formats that reflect upon the subjective and personal nature of practical-experiential knowledge that students develop (Neck & Corbett, 2018).

Examining its purpose allows distinguishing between two types of experience-based entrepreneurship education. First, there is a type that aims at developing 'practical entrepreneurs'. Educators following this approach typically depart from a narrow understanding of entrepreneurship education as training for business formation linked to the economic impact of entrepreneurship (O'Connor, 2013). Educators provide students with various entrepreneurial experiences ranging from simulations over serious games to venture projects or small-scale exercises for pitching or difficult startup conversations (Neck, Greene, & Brush, 2014; Wasserman, 2012). The content largely overlaps with the approach of educating 'entrepreneurial managers'. However, the 'practical entrepreneur' approach is action-oriented, and students should experience entrepreneurship instead of learning about entrepreneurship (Neck & Greene, 2011). Second, there is a type of experience-based entrepreneurship education aiming to educate the 'entrepreneurial practitioner'. This approach is closely linked to an educational ideal of humanism, where the focus is not just on the individual but on the individuals’ relations with their social environment (Bell, 2021). Departing from a broader understanding of entrepreneurship, educators aim at developing students’ entrepreneurial competencies applicable in various societal settings and focus on value creation for others not necessarily accomplished by business venturing (Lackéus, Lundqvist, & Middleton, 2016). This approach highlights that entrepreneurship is both an economic and social phenomenon (Korsgaard & Anderson, 2011) and that entrepreneurship education should consider both of these roles and also be critical about the relationships between entrepreneurship and society, capitalism or neoliberalism (Lackéus, 2017; Wadhwani, 2012). Broader in scope and often more experimental, teaching methods focus on emancipation, provocation, and generating room for new ways of experiencing and understanding (Berglund, Hytti, & Verduijn, 2021; Dodd et al., 2022; Hjorth, 2011). Both types of experience-based entrepreneurship education focus on developing students’ “entrepreneurial mindsets,” enabling them to cope with ambiguity and decision-making under uncertainty in situations of venture creation or society more broadly (Bhatia & Levina, 2020: 325). **Table 1** depicts the major differences between the explanation- and experience-based approaches to teaching and learning entrepreneurship.

Table 1:

Experience- and Explanation-Based Approaches to Entrepreneurship Education

	Explanation-Based	Experience-Based
Narrow Focus on Business Creation	Entrepreneurial Manager	Practical Entrepreneur
Broad Focus on Value Creation	Entrepreneurial Intellectual	Entrepreneurial Practitioner

Developments and Trends in the Literature on Teaching and Learning in Entrepreneurship Education

Even though both approaches to entrepreneurship education prevail in educational practice, the recent scholarly debates focus almost exclusively on experience-based entrepreneurship education. Personal experience and theoretical explanation as sources of learning can be traced throughout the history of entrepreneurship education and played an important role since the beginnings of contemporary entrepreneurship education practice after World War II (Wadhwani & Viebig, 2021). It is more the scholarly debate about entrepreneurship education that underwent major shifts from focusing on explanation-based entrepreneurship education in the 1970s and 1980s toward an almost exclusive focus on experience-based entrepreneurship education since the 2000s (Hägg & Gabrielsson, 2020). Foundational to this shift has been the argument that explanation-based entrepreneurship education and the transmission of functional-analytical knowledge are inadequate for navigating the ambiguous and uncertain world of entrepreneurs (Neck & Greene, 2011; Plaschka & Welsch, 1990). In addition, scholars suggested that an effective way of learning entrepreneurship may be imitating the processes of how entrepreneurs learn in real-world settings (Cope & Watts, 2000; Pittaway & Cope, 2007b). The experiential turn in the debate about entrepreneurship education also parallels the rise of entrepreneurship education as an increasingly independent field of research with its own infrastructure and social communities (Landström et al., 2022). The strong action orientation and focus on experience-based learning have become part of the identity of the field (Jones, 2019; Kyrö, 2015; Neck & Corbett, 2018), which is reflected in the continuous calls for a stronger theoretical and practical focus on action and experience (Kassean et al., 2015; Nabi et al., 2017; Robinson, Neergaard, Tanggaard, & Krueger, 2016). Some scholars even suggest that explanation-based entrepreneurship education linked to pedagogy is "old school" and an educator following this approach "is not truly engaging in entrepreneurship education, and progression [toward experience-based formats] is required" (Neck & Corbett, 2018: 31).

A controversial debate within the scholarship on experience-based entrepreneurship education concerns the degree of students' autonomy in the learning process linked to the concepts of andragogy and heutagogy. Neck and Corbett (2018) suggest an evolutionary approach where entrepreneurship educators have largely already left the "old school" stage of pedagogy, entered the transitional stage of andragogy, and now aim at an ideal of heutagogy, where students do not just self-*direct* their learning and act entrepreneurially but self-determine their learning and truly become entrepreneurs. The evolutionary approach received critique from scholars who argued that students substantially differ from entrepreneurs in the ability to learn from experiences and need more guidance throughout their learning process (Hägg & Kurczewska, 2020a). This scholarship proposed a combined or staged approach of andragogy and heutagogy

(Martínez & Muñoz, 2021) or even a full integration across the entire pedagogy-andragogy-heutagogy continuum (PAH), based on the idea that entrepreneurship students, often at the beginning of their professional careers, are not yet mature enough and too inexperienced to self-determine their learning process and effectively learn through experience, reflection, and action (Bell & Bell, 2020; Hägg & Kurczewska, 2019; Jones et al., 2019). A central question in this debate is "who are the entrepreneurship students" (Hägg & Kurczewska, 2019), concerning their "proficiency and knowledge in entrepreneurship [and their] natural tendency to explore and experience" to which teaching approaches need to be tailored (Hägg & Kurczewska, 2020a: 771).

Another controversial debate within the scholarship on experience-based entrepreneurship education concerns the question of purpose and educational aim. The dominant view is that experience-based entrepreneurship education prepares students for business venturing ('practical entrepreneur'), and that developing broader entrepreneurial competencies not linked to business formation may be a side effect of entrepreneurship education (Neck & Corbett, 2018: 10). This 'mainstream' view on experience-based entrepreneurship education receives strong political support for its presumed contribution to economic growth and prosperity and sets the context of business formation as the unique characteristic demarcating entrepreneurship education from other subjects (Kuratko & Morris, 2018; Neck & Corbett, 2018). An alternative view takes a more critical position toward entrepreneurship, focusing on its role in society and suggests that the aim of experience-based entrepreneurship education is to educate the 'entrepreneurial practitioner,' that is, enable students to "cope with uncertainty and ambiguity, make sense out of chaos, initiate, build and achieve, in the process not just coping with change but anticipating and initiating it" (Kirby, 2007: 23). Proponents of this view understand entrepreneurship education as an education for social change makers and criticize the purely business formation-oriented view as being detached and unaware of the societal context and unreflective toward its role in reproducing social and economic injustices, which are considered grand societal challenges (Berglund, Hytti, & Verduijn, 2020; Berglund & Verduijn, 2018; Jack & Anderson, 1999). Central to this debate is how experience-based entrepreneurship education relates to different contexts and what role context plays in this form of education.

Notwithstanding the debates about students' autonomy in the learning process and the aims of experience-based entrepreneurship education, there is an emerging consensus about the social constructivist nature of learning entrepreneurship through experience, reflection, and action (Hägg & Gabrielsson, 2020). This learning process has received more scholarly attention over the last decades (Bell & Bell, 2020; Hägg, 2017; Hägg & Kurczewska, 2016, 2020b; Kyrö, 2015; Neergaard, Robinson, & Jones, 2020; Pepin, 2012), focusing especially on its theoretical foundation linking it to established theories of experience-based education (Dewey, 1933; Kolb, 2015; Mezirow, 1991; Schön, 1983). Yet, several scholars have lamented that experience-based entrepreneurship education rests on several taken-for-granted assumptions that prevent advancing the scholarly field (Berglund et al., 2020; Klapper, Feather, Refai, Thompson, & Fayolle, 2015; Loi et al., 2022; Rideout & Gray, 2013; Scott et al., 2016). This PhD dissertation tackles three of these taken-for-granted assumptions concerning the learning process in experience-based entrepreneurship education. Each of the three articles sheds light on one taken-for-granted assumption about experience, reflection, and action. While each article makes its own contributions to the entrepreneurship education literature, I show that taking them together allows for developing a new perspective about the factors that shape learning through experience, reflection, and action in entrepreneurship education. Unraveling those factors challenges the current primacy of experience-based entrepreneurship education as the single most effective way of teaching and learning entrepreneurship. More specifically, it provides a new perspective on the debate on andragogy and heutagogy and the notion of learners' maturity while also shedding some light on the debates about the role of purpose and context in experience-based entrepreneurship education.

Three Taken-For-Granted Assumptions in Experience-Based Entrepreneurship Education

This PhD dissertation challenges three taken-for-granted assumptions concerning the learning process in experience-based entrepreneurship education. In their combination, the three articles in this dissertation demonstrate that most of the existing scholarship assumes that (1) experiences are physically situated in the real world, (2) reflection is an individual activity taking place in isolation, and (3) action is seamlessly transferable between different contexts and value systems. I briefly outline below how each paper critically reviews and challenges one of these taken-for-granted assumptions and highlight implications for teaching and learning entrepreneurship.

In my first article, "*Blended Learning in Entrepreneurship Education: A Systematic Literature Review*" (2022), I criticize the existing literature for silently assuming that students have experiences in a face-to-face setting. I show that this assumption has prevented scholarship from systematically engaging with alternative modes of delivery, such as online or blended learning, where experiences may take place in the digital sphere. Pointing to other fields of higher education, where blended learning is considered the "new normal", I conducted a systematic literature review on blended learning in entrepreneurship education.

Building on the review's findings, I suggest a clear definition of blended learning as “a mode of delivery that seeks out optimal combinations of online and offline teaching methods to foster students’ learning of entrepreneurship” and develop four archetypes of blends (Viebig, 2022: 536). The archetypes illustrate that understanding experiences as taking place in both face-to-face and online settings, as well as across the two spheres, not only expands the variety of experiences educators can facilitate but also extends the potential contexts in which experience-based entrepreneurship education can be offered.

In my second article, “*Group Reflections in Entrepreneurship Education: Exploring Students’ Learning Process and Outcomes*”, I take on the assumption, widely held in the existing literature, that reflection is primarily an individual activity. My article shows that this understanding of reflection directly undermines attempts for a stronger theoretical basis for the learning process in entrepreneurship education because it contradicts experience-based learning theories and insights from the literature on entrepreneurial learning, which highlights the importance of relational reflection formats. My results derive from empirically examining the group reflection process of 36 student groups (a total of 109 students) reflecting upon a shared entrepreneurial experience using video interaction analysis. The analysis reveals that taking a relational stance on reflection extends our knowledge about the process of group reflections in entrepreneurship education. Moreover, the study explores the conditions for successful (and unsuccessful) group reflection, the relationship between group reflections and instrumental and transformational learning, and the competencies required for reflecting in entrepreneurship education. Hence, overcoming the taken-for-granted assumption that reflection is an individual activity and allowing for relational reflection formats not only resolves theoretical contradictions but also enables advancing theory about the learning process in experience-based entrepreneurship education.

The third article "*Social Imaginaries of Entrepreneurship Education: The United States and Germany, 1800 – 2020*" (co-authored with R. Daniel Wadhwani 2021) challenges the unarticulated assumption that action is context-independent and requires no moral judgment. Most contemporary forms of entrepreneurship education take a questionable moral-free stance on entrepreneurial knowledge and lack any systematic integration of subjects preparing students for evaluating the moral grounds of their entrepreneurial actions. Conducting an analytically structured history of entrepreneurship education in Germany and the United States, we show that entrepreneurship education has for long included developing students' moral reasoning, which itself evolves in specific socio-economic contexts. Building on a notion of entrepreneurial freedom that links individual entrepreneurial action to a mutually beneficial context-dependent common good, we argue that entrepreneurial action fundamentally requires judgment about the moral grounds that justify its ends. We argue that one way of overcoming the taken-for-granted assumption that action is context-independent and free of moral judgment is to strengthen students' capacity for moral reasoning.

CHAPTER III: METHODOLOGICAL APPROACH & RESEARCH PROCESS

In this chapter, I present my methodological approach and provide an overview of my research process. While the specific method and data collection approaches are discussed in each of the three papers, this part focuses on my overall research approach. I depart from an understanding of reality as socially constructed and employ interpretivist methods for knowledge creation. Thereafter, I will discuss my philosophical stance in relation to current ideas about the learning process in experience-based entrepreneurship education, which also influenced by pragmatism. This is important because it allows me to show how pragmatist thinking affects not only the understanding of learning in experience-based entrepreneurship education but also research in the field. I argue that the prevalence of pragmatist ideas in entrepreneurship education can be linked to a lack of studies on context and a bias toward individual students' actions and experiences. Moreover, it may also explain the strong emphasis on practical and instrumental knowledge in entrepreneurship education research. Being critical of these developments in the field of entrepreneurship education research, I reflect upon my methodological choices and show what kind of knowledge this PhD dissertation produced. The second part of this chapter outlines my research process. This section is not only a descriptive account of events, choices, and actions but also intended to reveal some aspects of my own frame of reference through which I, as an interpretivist researcher, try to understand social phenomena. I show aspects of this 'lens' through which I conducted my research by providing insights into my pre-PhD journey and my PhD process.

Methodological Approach

This study is situated within a social-constructivist ontology and subscribes to an interpretivist epistemology. A social-constructivist ontology suggests that reality is not externally given and existent independent of an 'observer' (Berger & Luckmann, 1967). Instead, individuals socially construct their realities through action and interaction with other actors. This process of meaning-making is not just influenced by others but also by individuals' personal frames of reference (that is, their knowledge, experiences, values, and beliefs). In line with such a worldview is an epistemological perspective that focuses on interpreting the subjective worldviews of individuals. An interpretivist epistemology aims at understanding social phenomena by examining how individuals make sense of their worlds and puts close attention to the social and historical context the individuals are in. The knowledge produced through such an approach allows a holistic understanding of social phenomena and aims at being interesting for individuals that deal with those phenomena. Due to its interpretive character, the so-produced knowledge is inevitably shaped by the researchers' frames of reference and, therefore, in itself highly dependent on the context of its production (Schwandt, 1994).

This philosophical position resonates with the scholarship of experience-based entrepreneurship education, which rests on a social constructivist ontology and an interpretivist epistemology yet is strongly influenced by pragmatism. Evident in the conceptualization of the learning process, scholars subscribe to a constructivist paradigm, under which students generate knowledge through reflective thinking based on their personal experiences (Bell & Bell, 2020; Löbler, 2006). However, the so-produced knowledge is not just meaningful and interesting for the individual student but informative and influential for students' future actions (Neck & Greene, 2011). It is this relationship between knowledge and action for which entrepreneurship education scholars have turned to pragmatism (Kyrö, 2015). The fundamental idea of pragmatism is that "knowing the world is inseparable from agency within it" (Legg & Hookway, 2021: 1). This suggests that "knowledge is born and evaluated through and for action [and] what guides the action and evaluation is meanings and subjective interests" (Kyrö, 2015: 612). The turn toward pragmatism allows scholars to justify and argue for a strong action orientation in entrepreneurship education, which rests not only on theoretical insights about how entrepreneurs learn in practice (Cope & Watts, 2000; Politis, 2005) but also on a philosophical perspective on the intersection of action and knowledge (Hägg & Kurczewska, 2016; Kyrö, 2015).

The notion that entrepreneurial knowledge is created through and directed at action derived from pragmatist thinking has two important consequences for experience-based entrepreneurship education. First, it provides the theoretical basis for the concept of learners' autonomy linked to students' ability to direct (andragogy) or determine (heutagogy) the learning process based on their personal interests (Neck & Corbett, 2018). This suggests that autonomy is at the core of entrepreneurship education not only because entrepreneurship as an activity is closely linked to autonomy and personal freedom (van Gelderen, 2010) but also because the learning process as such requires students to be autonomous (Kyrö, 2015). Second, the symbiotic relationship between knowledge and action derived from pragmatist thinking provides ground for axiological arguments in favor of knowledge that is only valuable if it directly influences students' future actions. This instrumental notion of entrepreneurial knowledge is immanent in the field of entrepreneurship education, especially among those scholars that aim at educating for business venturing ('practical entrepreneur') (Neck & Corbett, 2018: 10). A consequence of this view is the strong focus on outcome-related research on entrepreneurship education, especially concerned with identifying how developing students' entrepreneurial capabilities and their entrepreneurial mindsets are linked to realized or intended entrepreneurial actions (Nabi et al., 2017; Rideout & Gray, 2013).

However, the intellectual influences of pragmatism and the strong action orientation in entrepreneurship education can also be linked to some of the limitations and insufficiencies of entrepreneurship education research. Even though pragmatism acknowledges that acting and knowing are relational and depend on context (Kyrö, 2015), it largely focuses on how individuals act in practice (Egholm, 2014). Those influences from pragmatism may explain the lack of studies focusing on the context in which entrepreneurship education takes place (Thomassen, Williams Middleton, Ramsgaard, Neergaard, & Warren, 2019). Despite recent calls for more research on the topic (Neergaard & Christensen, 2017) and a growing interest in context among entrepreneurship scholars (Wadhwani, Kirsch, Welter, Gartner, & Jones, 2020; Welter, Baker, & Wirsching, 2019), the context of entrepreneurship education is still an underexplored and undertheorized aspect of entrepreneurship education research (Fayolle, 2018; Loi & Fayolle, 2022). Influences from pragmatist thinking that focus on individuals' actions becomes also evident in the research on the learning process in entrepreneurship education, for which we can witness an overemphasis on the action components (action & experience) over their meaning-making complement (reflection) (Hägg, 2017, 2018). The few studies that focus on reflection in entrepreneurship education put an enormous focus on the individual and exclusively examine individual and predominantly written reflection formats (Hägg, 2021; Neergaard et al., 2020; Pittaway & Cope, 2007b). In this, the scholarship follows the entrepreneurship literature and subscribes to an individualized understanding of entrepreneurial learning from experiences (Minniti & Bygrave, 2001; Politis, 2005; Thompson & Illes, 2021). Hence, it is the focus on individuals and their actions, which can be linked to the pragmatist influences in entrepreneurship education, that creates some limitations within entrepreneurship education research.

Moreover, the traditions within the scholarship of entrepreneurship education are also leaning toward the production of instrumental knowledge. The axiological position that knowledge should be valuable for action not only shapes the understanding of learning in the field of entrepreneurship education but also influences the research process and what knowledge is perceived as valuable. Many scholars have pointed out that the scholarship on entrepreneurship education "has not advanced at the same level of scholarship when compared to general entrepreneurship research" (Liguori et al., 2019: 4; Neck & Corbett, 2018). While there has been theoretical and methodological progress in the field of entrepreneurship education research over the last decades (Loi & Fayolle, 2022; Ratten & Usmanij, 2021), there is still a strong tendency to generate knowledge that is directed at being instrumentally useful and instructive for entrepreneurship educators rather than being primarily aimed at offering theoretical contributions (Klapper et al., 2015; Neck & Corbett, 2018). Questions about whether entrepreneurship can be taught and learned largely disappeared from the conversation (Fiet, 2001; Henry et al., 2005; Jack & Anderson, 1999) and made room for a new focus on how entrepreneurship can and should be taught (Hägg & Kurczewska, 2021; Neck & Greene, 2011). This led to normative and practice-oriented research, whereas theory development and critical research that challenges some of the taken-for-granted assumptions held by scholars and practitioners alike is scarce (Fayolle, 2013; Fayolle et al., 2016; Loi et al., 2022). In other words, entrepreneurship education is one of those fields where "action and intervention [have] raced far ahead of the theory, pedagogy, and research needed to justify and explain it" (Rideout & Gray, 2013: 346).

The purpose of this PhD dissertation is to produce knowledge for the community of entrepreneurship education scholars. In so doing, I take a critical stance on some of the taken-for-granted assumptions about the learning process in experience-based entrepreneurship education. My methodological choices are strongly influenced by my above-outlined philosophical stance and challenge some of the pragmatist influences in entrepreneurship education scholarship. While each paper has a different methodological approach, outlined in detail in those manuscripts, they all take an interpretivist perspective. In the systematic literature review on blended learning in entrepreneurship education, I interpret the academic literature on that topic and synthesize a definition and framework for blended learning in entrepreneurship education. In the article on group reflections in entrepreneurship education, I interpret students' meaning construction in their group reflection processes and theorize the results in a process model for group reflections in entrepreneurship education. In the article on social imaginaries of entrepreneurship education, Professor R. Daniel Wadhwani and I interpret historical archival sources through the lens of social imaginaries and use historical narrative to understand the rise and decline of entrepreneurship education over time.

My methodological choices also reflect my critical stance on the lack of research about the context of entrepreneurship education and the limited knowledge about relational forms of learning, especially during reflection. The literature review and the historical paper pay special attention to the relationship between context and entrepreneurship education, yet in different ways. While the review paper explores how educators co-create pedagogical-technological contexts in which entrepreneurship education takes place, the historical article examines the relationship between changing cultural and social contexts and entrepreneurship education over time. The study on group reflections takes a relational stance on learning and demonstrates how students influence one another when reflecting together and what factors influence learning in group reflections. Hence, this PhD dissertation takes a slightly critical position on the lack of contextualization and focus on individualized understanding of the learning process and especially reflection in entrepreneurship education that can be linked to pragmatist thinking. This is also reflected in the epistemological aim of this PhD dissertation, which is to challenge and change our understanding of the influencing factors and capabilities shaping the learning process in experience-based entrepreneurship education. While this may have consequences for how we teach entrepreneurship, developing instrumental knowledge that informs educational practice has not been the starting point for this research project but one of its consequences.

Research Process

This section outlines the research process of my PhD project. The purpose of this section is twofold. On the one hand, it serves as a descriptive account of the academic work and research I have done during the 3 years and 10 months I worked on my dissertation. On the other hand, it gives an impression of 'my lens' through which I interpreted the phenomena under study in this research project. Departing from a social-constructivist perspective on reality suggests that interpretations about the world are always contextual and influenced by who the researcher is and how they construct their own identity (McKenna, 2007). Neither is there one universal truth about social phenomena nor can researchers take a neutral ground from which to observe reality (Berger & Luckmann, 1967). Hence, research following a social-constructivist interpretivist approach is subjective (Schwandt, 1994).

To make their research findings trustworthy and understandable, scholars subscribing to this approach try to make their research process and analytical strategies and choices transparent (Pratt, Kaplan, & Whittington, 2020). Adhering to standards of transparency for interpretive social science research (Schwartz-Shea & Yanow, 2012), each of my papers entails a section that describes the research process and justifies the analytical strategy. Nevertheless, due to length restrictions and conventions in the targeted journals, those papers do neither include a section about my own frame of reference, which influenced not only the direction of this research project and its process but also my interpretations and the conclusions I arrived at, nor do they provide a full account of the broader process of conducting a PhD. Hence this section extends the papers and outlines some events, choices, and actions, which I consider important for developing an understanding of the research process for the entire dissertation project and provides some insights into my frame of reference through which I conducted this interpretive research project.

This section is inspired by valuable feedback from colleagues at my second Work-in-Progress Seminar and the work of entrepreneurship education scholar Paul Hannon (2018), who suggested a similar approach of providing some biographical notes about oneself as an entrepreneurship educator. He suggests that educators' identities shape their approaches to teaching, similar to how the literature on interpretive social science research emphasizes the roles of researchers' identities and their personal frames of reference in directing their research processes and shaping their interpretations (Schwartz-Shea & Yanow, 2012). Following this reasoning, which is linked to an evolving notion of the reflexive interpretive researcher (Hibbert, 2021), I decided to write a short section about what I find important to know about myself and the frame of reference through which I conducted this research project. This section is in itself an interpretive act, it is consciously and unconsciously filtered, inevitably selective, partly analytical, and partly descriptive, yet, I hope, useful in developing an understanding of my being and becoming in relation to this research project and how that has shaped it.

Pre-PhD Journey

In the fall of 2002, I became a student at Melanchthon Gymnasium (high school) in my hometown Nuremberg. The gymnasium, founded in 1526, is one of the oldest high schools in Europe and a school in which Georg Friedrich Hegel had been rector for some years. The school offered a humanistic education, which included not only subjects like Latin and Ancient Greek but also an integrative curriculum in which history, philosophy, and rhetoric were integrated across subjects. Already during this time, I discovered my interest in entrepreneurship, which I first expressed by selecting an optional class where students founded a company and later, in 2009, a few days after my 18th birthday, by co-founding a company organizing concerts and student parties. Apart from business and economics, I had a strong interest in history, in which I wrote my very first 'scientific work' on the escape story of my grandfather's family at the end of World War II. Majoring in history and mathematics, I finished high school in 2011.

The same year I started an undergraduate program in Management, Philosophy, and Economics at Frankfurt School of Finance and Management. I chose this program because it was one of the few study programs in Germany that offered a management education with a broader perspective, in which discussions on economics and management were linked to questions about their moral and societal impact. Studying just business economics (Betriebswirtschaftslehre) with its isolated functional understanding of business did not seem as appealing to me. In 2012, I spent a semester at La Trobe University in Melbourne, where I broadened my perspectives even further and took courses on politics. The time in Frankfurt was formative for my perspectives on business education. While I enjoyed most of the philosophy classes, which were interactive and discussion-based, many management classes followed an explanation-based and pedagogy-oriented approach with knowledge-reproducing exam formats. This showed me that effective education needs to engage learners and build on their intrinsic motivation and curiosity, rather than filling their heads with knowledge and motivating them extrinsically through exams and grades. In 2015, I finished my undergraduate with a bachelor's thesis about gender-related differences in selecting business education at private universities in Germany.

After taking a gap year, in which I worked at an innovation department of a car manufacturer and in a same-day-delivery startup, I started a master's in Organizational Innovation and Entrepreneurship (OIE) at Copenhagen Business School (CBS). The experiences of my gap year reignited my interest in entrepreneurship and innovation, which motivated the choice of the program. In my time at CBS, I experienced all forms of entrepreneurship education described in this dissertation and especially enjoyed case-based cognition-oriented classes as well as both forms of experience-based entrepreneurship education. At this time, I widened my understanding of entrepreneurship, which I previously considered being closely linked to business venturing, to a broader activity directed at social change-making. Due to the wide diversity of courses and different approaches to entrepreneurship, I realized that entrepreneurship as well as entrepreneurship education is an intellectually interesting phenomenon. In the second semester of my studies, I started a student assistant job at the Centre for Business History, aiming to figure out whether conducting a PhD in such an environment would suit me. During this time, I collaborated with Professor Christina Lubinski, who was the line coordinator of the OIE program, and intensively discussed new ideas and concepts for entrepreneurship education with her. Toward the end of my master's program, I decided to further explore how entrepreneurship can be taught and learned. In 2018, I graduated from the OIE program with a master's thesis in which I developed an entrepreneurship education teaching tool for platform businesses (2018).

PhD Journey

After being employed as a research and teaching assistant, I officially started my PhD journey on 1st of March 2019. However, physically I was not at CBS during that time as I was doing a 'predoc' at the *Lloyd Greif Center for Entrepreneurial Studies* at the *University of Southern California* (USC). Thanks to my primary supervisor Professor Christina Lubinski who was at USC at the time, I was employed as a visiting scholar at the *Founder Central Initiative*, a research and educational project founded and led by Professor Noam Wasserman. My time at USC provided the opportunity to observe entrepreneurship courses within a completely different environment than the one I had been part of as a student at CBS. The courses I observed had a strong business focus, and students were far less critical of their teachers but also more engaged and motivated. Most interesting in terms of teaching has been to observe Noam Wasserman's teaching style in which he combines his own research with case-based teaching and experience-based components. I found this combination powerful in stimulating students' thinking about people problems in startups while letting them experience some of those dilemmas. One thing I found particularly interesting was his idea of developing students' 'reflection muscles' (as he often said during class) through case discussions. Together with Professor Christina Lubinski, I co-wrote a teaching case on business model challenges of the first electric car manufacturers in early 20th century New York (Lubinski & Viebig, 2020a) and collected some experiences on case-based teaching at the undergraduate and MBA levels. In March 2019, I participated in a paper development workshop for *Academy of Management Learning and Education* (AMLE) at the *Business History Conference* (BHC) in Cartagena, where I presented a paper idea about integrating platform business into entrepreneurship education. Those were two substantially different writing experiences. While writing parts of the historical case felt relatively straightforward within a context where I could observe world-class case teachers almost every day, the writing process of my first article (proposal) was slow and strenuous. Evaluating different directions and ideas for my PhD dissertation over the summer, I settled on a first paper idea after a discussion with Professor R. Daniel Wadhwani in the fall of 2019, where we agreed on examining the history of entrepreneurship education. This research project was an ideal opportunity for me to develop capabilities in historical research while developing a new perspective on the phenomenon of entrepreneurship education and its historical evolution across different contexts.

During the first months of 2020, I visited three German archives to identify traces of entrepreneurship education in Germany. While writing the first version of our paper, which was accepted at the BHC 2020 in Charlotte, the Covid-19 pandemic started and not only made it impossible to present our work at the conference but also required me to make some major changes in my PhD project. The time during the first lockdown was particularly difficult for me. It felt like I had just gotten a slightly better idea of what I wanted to do with my PhD project, oriented myself in the literature, and signed up for a couple of PhD courses (which all got canceled). Before Covid-19 hit us, I had intended to conduct a large empirical study on blended learning in entrepreneurship education in addition to the historical paper with Professor R. Daniel Wadhwani. However, this became impossible under Covid-19 restrictions. I decided to write a literature review on the topic instead and conduct a study on group reflections in a blended setting, which could, however, also work fully online. My choice to focus on reflection was primarily motivated by my student experiences in entrepreneurship education, where I observed that the lack of my own and others' ability to reflect has been a strong blocker to learning. After presenting a first draft of the history paper and my project outline at the first mandatory work-in-progress seminar in May 2020, Professor R. Daniel Wadhwni and I submitted the first version of our paper to AMLE. Thereafter, and still in lockdown, I started working on the literature review on blended learning and, in parallel, on the research design for the study on group reflections. During the fall of 2020, I taught a full undergraduate platform business course, which I had taught in 2019, even though this time online. To me, teaching online was an interesting yet challenging experience as it revealed some of the strengths of this mode of delivery in terms of flexibility and providing students with content information but also some of its weaknesses, especially around student engagement and interactions. One of my takeaways was that there is a strong potential in blending online and offline teaching and learning, especially in entrepreneurship education. During the fall of 2020, I also generated data on group reflections in two entrepreneurship courses at CBS. Practicing my academic writing, I moreover wrote a book review for *Business History* and a book chapter on IP Management in Startups (together with Professor Christina Lubinski in German, later translated into English) (Lubinski & Viebig, 2020b, 2022; Viebig, 2020).

In January 2021, I presented an early version of the group reflection paper at the *United States Association of Small Business and Entrepreneurship* (USASBE) online conference and took part in the six-month-long online doctoral consortium, in which I worked on a conceptual paper on reflection in entrepreneurship education with PhD fellow Inge Larsen from Aarhus University. The experience at USASBE was quite formative for my understanding of the field of entrepreneurship education research. Influenced by my experiences with the Business History Conference, to which I went two times before, I was surprised at how important practice was at USASBE and how much value was given to the development of teaching exercises, teaching cases, and course development, whereas research presentations and discussions appeared to be subsidiary. Inspired by my research on reflection, Professor Christina Lubinski and I applied for a strategic initiative on *Transformational Capabilities @ CBS*. Funded with 1.3 million DKK by the Dean's office, we conducted research on transformational capabilities and developed materials for educators and a complementary online course for CBS' summer school program (ISUP) about different transformational capabilities such as reflection, abstraction, and thinking by analogy and how they shaped students' learning (at CBS). Using some insights from my group reflection study, we also wrote a new role-play-based case on equity splits and designed a subsequent reflection and debrief session. The transformational capability project sparked my interest in business education more broadly and raised interesting questions about how we develop different students' cognitive capabilities necessary for reflection. During this time, I became more critical of the pertinent notion in the field of entrepreneurship education that teaching and learning formats should become ever more experience-based. Reading some of the management education and experiential learning literature, I found perspectives that highlighted a combination of experience-based and explanation-based forms of teaching and learning. During spring and summer, I submitted the manuscript on blended learning to *Education + Training* (E+T) and Professor R. Daniel Wadhwani and I revised the final version of our article, which got published at AMLE in the fall of 2021 (Wadhwani & Viebig, 2021). In the fall, I co-taught the platform course with Assistant Professor Hannah Tucker and, for the first time, used my own research on reflection and a reflection diary I developed as part of the strategic initiative in an experience-based entrepreneurship education course on Business Models and Prototypes that I co-taught with Associate Professor Lena Olaison and Professor Daniel Hjorth. In this course, I tried out some of my ideas about developing students' reflection capabilities before we ask them to use them for reflecting on their entrepreneurial experiences.

In spring 2022, I presented a paper on the curricula of Germany's higher trade schools online at the BHC in Mexico City. In the manuscript, I used some of the archival sources I had gathered and eventually not used for the paper on the history of entrepreneurship education. At about the same time, I finalized the review paper on blended learning, which got published at E+T in April (Viebig, 2022). However, most of my time went into the data analysis of the group reflection paper, which I presented on 8th of June at my second WIP seminar. Based on the insightful comments I received at the seminar, I revised the manuscript and submitted it to the *International Journal of Entrepreneurial Behavior and Research* (IJEBR) in December 2022. Right after my second WIP seminar, I spent a month at the *Entrepreneurship Research Institute* (ERI) at *Technical University Munich* (TUM). At the ERI, I had the opportunity to participate in research seminars and dive into an international research community of entrepreneurship scholars, which widened my perspective and sparked my interest, especially in entrepreneurial teams and how they facilitate group and individual learning. I spent most of my time in the fall of 2022 preparing the manuscript on group reflections for submission and writing this PhD dissertation. Since the fall semester of 2022, I am a researcher in residence at CBS' incubator *Copenhagen School of Entrepreneurship* (CSE), where I help students interning in their own startups to bridge the gap between theory and practice and support them in crafting their academic internship papers. Through my work at CSE, it became clear to me that many student entrepreneurs, especially those that have not gotten in touch with experience-based learning formats, have problems conducting this self-determined learning project. They keep asking for tools and concrete knowledge they can 'apply' and find the idea of exploring tools and theories themselves and developing their own learning journey daunting, if not frightening. To me, this shows that not all students are equally prepared for experience-based and self-determined forms of learning. I also found that university incubators are an interesting context in which teaching and learning entrepreneurship takes place and something I look forward to examining during my postdoc.

CHAPTER IV: BLENDED LEARNING IN ENTREPRENEURSHIP EDUCATION: A SYSTEMATIC LITERATURE REVIEW

Christoph Viebig

Copenhagen Business School

In Education + Training, 2022, Vol. 64, No.4, 533- 558

Abstract

Purpose – Current research lacks a clear definition of blended learning in entrepreneurship education, a comprehensive overview of the recent research, and a conceptualization of different types of blends with their respective challenges and advantages. In response to that, the author systematically reviewed the literature on blended learning in entrepreneurship education and developed four archetypes of blends for entrepreneurship educators.

Design/methodology/approach – The author conducted a systematic literature review and identified 75 relevant peer-reviewed articles published between 2004 and 2021.

Findings – The findings suggest that blended learning is a common yet underexplored and undertheorized phenomenon in entrepreneurship education. The findings display the rationale and motives, educator characteristics, content, teaching methods, student characteristics, and results of blended learning in entrepreneurship education.

Originality/value – The paper is original because it posits blended learning as an independent and unique mode of delivery in entrepreneurship education. In addition, the author suggests four archetypes of blends in entrepreneurship education: the *traditional blend*, the *for-action blend*, the *in-action blend,* and the *experiential blend*. For each of these blends, the author identified specific advantages and challenges and discussed under which circumstances educators may employ them.

Keywords Entrepreneurship Education, Blended Learning, Mode of delivery, SLR

Paper type Literature Review

Introduction

Entrepreneurship education (EE) courses and programs are an established part of curricula in the global higher education system. Contemporary EE originated in the United States in the 1970s as a response to a lack of employment and corporate stagnation (Wadhwani & Viebig, 2021). Since its emergence, EE aims to develop students' entrepreneurial knowledge, skills, and attitudes while often directly preparing them for business venturing (Fayolle & Gailly, 2008). The promise of EE to create new jobs, foster innovation, and consequentially contribute to economic prosperity has mobilized policymakers and educators around the globe and contributed to massive and ongoing global growth in entrepreneurship courses and programs, especially within higher education (Kuratko & Morris, 2018).

There is consensus among EE scholars that entrepreneurship is best taught and learned through action and experience (Jones et al., 2019; Neck & Corbett, 2018). While EE comes in many different forms (Olokundun et al., 2018), EE scholars highlight the importance of entrepreneurial action (Kassean et al., 2015) and emphasize the oscillation of experience and reflection as its central mechanism of learning (Hägg & Kurczewska, 2016). The paradigm of experience-based learning (Gabrielsson, Hägg, Landström, & Politis, 2020; Hägg & Gabrielsson, 2020) led EE scholars and practitioners alike to prioritize physical face-to-face teaching over online or blended formats (Liguori & Winkler, 2020).

The prevalence of face-to-face teaching in EE has prevented scholars from systematically exploring alternative modes of delivery, especially blended learning. Current scholarship on teaching and learning entrepreneurship is a stronghold of debates about different teaching methods, such as team-based projects or venture simulations. For the longest time, EE scholars took for granted that the default mode of delivery, which is the medium with which teaching is delivered, is the physical face-to-face mode (Gabrielsson et al., 2020). Due to the push towards online education during the Covid-19 crisis, scholars began to engage more with purely online delivered forms of EE (Ratten & Jones, 2020; Secundo et al., 2021). However, blended learning, broadly understood as a holistic combination and integration of online and offline teaching elements (Dziuban, Graham, Moskal, Norberg, & Sicilia, 2018), has received little attention within EE.

There are reasons to assume that EE will follow other areas of higher education, where blended learning is already the standard (Anthony Jnr., 2021, 2022) and seen as the "new normal" (Dziuban et al., 2018). Given the prevalence of action orientation and real-world experience in EE, it seems unlikely that purely online EE will be of significant importance in the future of EE. However, it seems equally unlikely that the recent shift to online teaching will not influence post-pandemic EE practice. Instead, entrepreneurship educators may combine and integrate those elements that have worked well online with different forms of established physical face-to-face teaching. In other words, it is fair to assume that blended learning will play an essential role in post-pandemic EE.

Existent research about blended learning in EE is ill-suited to prepare educators for this scenario. There is no coherent debate about blended learning and its role in EE. Studies are usually one-off and fail to form a cohesive body of accessible knowledge for researchers and practitioners alike. Existing research falls short of clearly defining and conceptualizing blended learning and relating it to current scholarly debates on teaching and learning entrepreneurship. Finally, the literature lacks a discussion about how educators can use different types of blends to address the widely diverging environments and purposes of contemporary EE.

This review addresses the outlined problems and contributes to current debates on teaching and learning entrepreneurship in two ways. First, it provides a clear definition and conceptualization of blended learning in EE and relates the concept to current debates about teaching and learning entrepreneurship. Second, the article develops four archetypes of blends and discusses their advantages and limitations for different forms of EE. The review is grounded in two research questions:

RQ1. How can blended entrepreneurship education be defined and conceptualized?

RQ2.Which types of blends can be identified?

Addressing these research questions, the article begins with a brief examination of existent literature reviews on blended learning in higher education, followed by an explanation of the systematic review methodology. The subsequent findings section follows a structure inspired by Fayolle's and Gailly's (2008) teaching model framework and explores characteristics of blended learning in EE. In the discussion section, the article posits blended learning as a unique and independent mode of delivery and develops four different types of blends, outlining their specific strengths, weaknesses, and concrete recommendations for entrepreneurship educators. The article ends with suggestions for further research and concluding remarks.

Blended Learning in Higher Education

Within higher education, blended learning has received much scholarly attention over recent years (Anthony Jnr., 2021; Anthony Jnr. et al., 2020; Dziuban et al., 2018). As a complete examination of blended learning in higher education would be beyond the scope of this article, this section provides a brief overview of recently published review articles on the subject. It shows that there is an exhaustive body of literature reviews on blended learning in higher education generally. However, EE research contradicts this development and lacks a comprehensive review study on blended learning.

Reviews on blended learning in higher education have various angles. They examine studies on the impact of blended learning on students (Nortvig, Petersen, & Balle, 2018) or institutional adaption (Galvis, 2018; Maarop & Embi, 2016). Others explore publication patterns and research trends (Castro, 2019; Smith & Hill, 2019) as well as specific aspects of the blend (Brown, 2016). Some investigated blended learning in particular areas of higher education, such as medicine (Liu et al., 2016) or business (Arbaugh et al., 2009).

Blended learning has received far less scholarly attention in EE. Two review studies addressed blended learning in EE. The review by Arbaugh et al. (2010) found only one study on blended learning within the field of EE. The review by Chen et al. (2021) identified 38 research articles. However, the article lacks a clear differentiation between online and blended forms of delivery, which is reflected in its exclusive focus on online components. The sole focus on the online features is also reflected in the tight exclusion criteria and sample strategy of their review. Hence, there is currently no review that focuses exclusively on blended learning in EE and examines both parts of the blends. This article aims to fill this gap and presents scholars with an overview of existent research on blended learning in EE, highlighting both components of the blends while also contributing to the body of area-specific review studies on blended learning in higher education.

Systematic Review Methodology

This study is based on 75 articles on blended learning in the context of EE published between 2004 and 2021. Assuring a transparent and replicable process, the author employed a systematic review process. This review process is informed by methodological literature (Tranfield, Denyer, & Smart, 2003) and best practices in the field of EE research (Hägg & Gabrielsson, 2020; Nabi et al., 2017; Pittaway & Cope, 2007a).

As a first step of the review process, the author defined its objectives, conceptual boundaries, and inclusion and exclusion criteria. One standard definition of blended learning is to conceive it as “the organic integration of thoughtfully selected and complementary face-to-face and online approaches and technologies“ (Garrison & Vaughan, 2008: 148). Adjusting this general definition to teaching and learning entrepreneurship and emphasizing the idiosyncratic strengths and weaknesses of online and face-to-face teaching methods, this article defines blended learning for EE as follows:

Blended learning is a mode of delivery that seeks out optimal combinations of online and offline teaching methods to foster students' learning of entrepreneurship.

The author employed a broad definition of EE as entailing education for venture creation and forms of education that aim at the development of entrepreneurial knowledge, skills, and attitudes more broadly (Fayolle & Gailly, 2008). Based on this, the review not only includes studies that explicitly refer to the term "blended learning" but also those that were implicitly relating to the concept in the context of EE.

To account for these conceptual boundaries, I employed a wide array of Boolean search terms, such as "blended learning," (and) "entrepreneurship education," "flipped classroom" (and) "entrepreneurship," "flexible learning," and "enterprise education," and "technology-enhanced education" (and) "entrepreneurship education." For a complete list of used search queries, see **Appendix 1**. For a study to be included in this review, it had to provide information on both elements of the blend, the face-to-face and the online element (Garrison & Vaughan, 2008). The study is limited to peer-reviewed academic articles published in English. There was no limit regarding the articles' publication date. However, the oldest included article was published in 2004. Finally, the author excluded articles conducted outside of higher education because of the limited transferability of research findings.

In the second step, the author defined the bibliographic databases and relevant journals for the search process. Four academic databases were selected: Education Resources Information Center (ERIC), Science Direct, Business Source Complete, and Scopus. The searches conducted in Q2 of 2021 resulted in 55 articles eligible for review. As research on blended learning is often closely related to research on pedagogy, the author included relevant contributions to the field of EE pedagogy, which were identified from the review of Hägg and Gabrielson (2020). Using the same search terms as before, another 20 relevant articles were found. For an overview of the articles and journals, see **Appendixes 2 and 3**.

Review Findings

The findings section begins with a brief review of the use of the terms "blended learning" and "blended education" in EE and a short descriptive analysis of the articles identified for this review. This is followed by an analysis of current literature on blended learning in EE structured by Fayolle's and Gailly's (2008) teaching model framework.

The literature on blended learning in EE entails some confusion around the definition and the conceptualization of the term. One group of scholars uses blended learning and blended education to describe programs that combine EE and engineering education (Mason, 2018; Woolard, 2016). Another group of scholars conceptualize blended learning as pedagogy and compare it to other pedagogies, such as case study teaching or simulations (Maritz, Brown, & Jen, 2010; Maritz & Waal, 2014). All these articles were outside the definition of blended learning used in this article.

This article follows the last group of EE scholars who understand blended learning as a mode or approach of delivery (Balan, Maritz, & McKinlay, 2018; Ratten & Usmanij, 2021), which can be combined with different teaching methods diverse as case studies, games, or lectures.

The 75 articles in this review appeared in 40 peer-reviewed academic journals. Reviewing the entire timeframe from 2004 to 2021, 49% of the articles have been published since 2016. Out of the 75 articles, 20% are published in open-access journals.

Why teach entrepreneurship in a blended format?

There are three common motives for the use of blended learning in EE. First, there is the argument that blended learning allows for more inclusive forms of EE. Inclusion can take two forms. One is attracting new groups of students, who due to lack of time (Fenton & Barry, 2014; Jones & Lau, 2010) or the inability to travel, would be unable to take part in existent on-campus entrepreneurship courses (Rusko, 2017; Stewart & Pepper, 2011). The other form of inclusion refers to educators. Certain elements of blended learning, such as pre-class videos or forms of distance communication, allow for integrating remote expertise, such as specialized faculty from other universities (Harichandran, Erdil, Carnasciali, & Nocito-Gobel, 2018; Smith, 2007). This is especially important for those institutions that offer forms of EE without employing entrepreneurship faculty.

The second motive to integrate blended learning into EE is its potential for scale and a reduction of delivery costs. The introduction of asynchronous blended learning activities, for instance, through recording videos, frees time students spend in class (seat-time) and allows universities to scale the number of students in a course while simultaneously reducing the delivery costs (le Roux & Nagel, 2018; Noraini, Ramayah, Jaya, & Noor, 2020). Moreover, introducing such blended learning elements enables adding more content to existent courses without increasing the contact hours with the teacher (Boore & Porter, 2011; Wong, 2017).

The third and most frequently mentioned argument for blended EE is to increase the quality of education. Introducing pre-recorded lectures and videos as preparation for face-to-face classes allows the students to deeply engage with the material while having time for in-depth discussions during class (Liao & Liu, 2015). Educators also use video materials or even entire lecture series as a background for experience-oriented parts of the entrepreneurial process, e.g., business model generation (Müller, Poandl, & Glinik, 2019). The combination of a game or simulation played between classes, and reflective or discussion-based face-to-face sessions (Bellotti et al., 2014; Williams, 2015) is another way to make blended EE practical by nurturing experience-based learning.

Who is teaching entrepreneurship in a blended format?

There is very little information on educators. Those articles reporting educator backgrounds suggest that the engineering (Bosman & Fernhaber, 2018; Liao & Liu, 2015) and management (Dickfos, Cameron, & Hodgson, 2014; Thanasi-Boçe, 2020) as the most common disciplinary background. In other cases, it is practitioners with an entrepreneurial backgrounds (Vadnjal, 2017) or other business-related experiences (Wong, 2017). Even though an explicit reference to entrepreneurship faculty is nowhere to be found in the dataset, it seems unlikely that entrepreneurship faculty is not engaged in blended forms of EE.

The identified lack of information about educator characteristics confirms a common critique of the EE literature (Neck & Corbett, 2018). It is particularly problematic for this study because it prevents a deeper and more contextualized understanding of how teaching and learning are constructed in blended EE. In addition, it makes it impossible to evaluate and compare the influence of educators across different studies.

What is taught in blended entrepreneurship education?

The content of blended EE is diverse and covers a range of subjects. Educators include topics such as opportunity identification (Boore & Porter, 2011), value proposition (Bandera, Collins, & Passerini, 2018), market research (Sinkovics, Bell, & Deans, 2004), business modeling (Müller et al., 2019), social entrepreneurship (Waghid & Oliver, 2017), finance (Mitchell & McKeown, 2004), marketing, growth and exit (Pisoni, 2019). Educators subscribing to the notion of education through entrepreneurship focus on skill-oriented formats such as project-based courses (Kazakeviciute, Urbone, & Petraite, 2016) and pitching exercises (Dickfos et al., 2014) supported by online and technology elements. These courses often entail similar content areas as the ones focused on venture formation. Few educators take a more theory-oriented stand and teach about entrepreneurship, for instance, by covering models and methods of growth and venture lifecycles (le Roux & Nagel, 2018). Most of the educators combine different content elements and cover a variety of aspects in one course.

How is entrepreneurship taught in a blended format?

Blended learning is combined with several teaching methods. Both parts of the blend, the online and face-to-face component, entail typically different teaching methods.

Many educators use a flipped classroom concept where students typically watch asynchronous online videos or lectures before coming to physical class (Harichandran et al., 2018; Harima, Gießelmann, Göttsch, & Schlichting, 2021). Students spend class time with experience-based learning and work on team-based projects (Kazakeviciute et al., 2016), engage in case-based discussions (Hua & Ren, 2020; le Roux & Nagel, 2018), or participate in workshops (Hegarty, 2006). One of the advantages of the flipped classroom concept is that educators can use freely available third-party material such as MOOCs (Müller et al., 2019) for the typically asynchronous online component.

Some educators use serious games and digital simulations in the online component of their blends. Students are asked to play the game synchronously or asynchronously outside class time, which is then used for contextualization, reflection, and discussions (Antonaci et al., 2015; Watts & Wray, 2012). In contrast to games that cover a more comprehensive array of topics, simulations are more focused and cover one aspect of the entrepreneurial process, for instance, marketing (Thanasi-Boçe, 2020). The face-to-face sessions are again used to support students' understanding of theory (Thanasi-Boçe, 2020). While games and simulations are a common element in EE and subject to numerous studies (Bellotti et al., 2014; Fox, Pittaway, & Uzuegbunam, 2018), this literature generally focuses on the game as such and surprisingly little on its mode of delivery or best possible blends.

A third mode of using blended learning in EE is the integration of e-mentoring and e-tutoring into courses and programs. This form of a blend is commonly used in combination with experience-based learning. Typically, students work on projects (Bandera et al., 2018) or ventures (Treanor, Noke, Marlow, & Mosey, 2020) while receiving synchronous online mentorship from experienced entrepreneurs or other relevant practitioners. Moving the mentorship online allows for greater flexibility and on-demand mentorship while reducing the time investments of mentors. Another form of enhancing face-to-face elements in EE is e-tutoring. In contrast to mentors, who are individuals outside the higher education institution, tutors are regularly part of the institution (specialized staff, students). In addition, educators use distance learning technology to integrate expert talks and presentations into their class sessions (Cusson, 2020).

Finally, educators make extensive use of a variety of digital tools in blended EE. Those tools range from smartphone apps and online Wikipedia, where students write about entrepreneurial topics (Menkhoff & Bengtsson, 2012), to usually asynchronous online discussion forums (Chang & Lee, 2013; Wong & Cheah, 2022). They are combined with both experiential and more traditional face-to-face classes. Some educators enhance students' learning by using technology to enable experiences otherwise not possible, e.g., cross-university and cross-cultural team projects (Stefanic, Campbell, Russ, & Stefanic, 2020), or help them reflect and learn from mistakes by letting them record and peer-evaluate their pitches (Dickfos et al., 2014).

Blended EE often contains experiential elements. Articles about blends that only entail traditional methods of teaching are the exception.

For whom is entrepreneurship taught in a blended format?

Educators offer blended entrepreneurship courses, programs, or exercises to students at all levels ranging from undergraduate to Postdoc (Bandera et al., 2018; Jones, Jones, Packham, Thomas, & Miller, 2007; Smith, 2007; Stewart & Pepper, 2011; Treanor et al., 2020). Yet, most of the studies identified in this review concern undergraduates. Younger students are typically perceived as “less mature” learners, and it is difficult for them to keep themselves motivated, make meaningful learning experiences, and reflect upon those afterward in experiential forms of EE (Hägg & Kurczewska, 2019). Consequently, blended learning is often associated with a need for more mature learners because especially asynchronous online elements require personal motivation and self-regulation (Graham, 2006). However, only one study explicitly addresses issues around learners' maturity, in this case, students who did not watch videos prior to the face-to-face classes (Vadnjal, 2017). The limited engagement with learner maturity can point to a lack of rigor when reporting results. It can also mean that specific blends can overcome learners' maturity issues, but more research is needed to test these hypotheses.

<u>Which are the results of blended entrepreneurship teaching?</u>

The articles in the dataset measure common outcomes for EE. In line with other studies on the results of EE (Nabi et al., 2017), several studies find positive effects on students' knowledge generation (Jones & Lau, 2010; Mitchell & McKeown, 2004), skill development (e.g., organization skills, opportunity identification skills, etc.) (Treanor et al., 2020; Wong, 2017), and changes in their entrepreneurial mindset (e.g., intentions) (Bosman & Fernhaber, 2018; Shurville & Rospigliosi, 2009). Other studies measured students' satisfaction and engagement. Except for Vadnjal (2017), who reported partially adverse effects on student engagement, all studies identified a positive impact of their educational interventions on students' satisfaction and engagement (Tunstall & Lynch, 2010; Wong, 2017). The few studies that shed light on the impact blended learning had on educators find that it requires new competencies and skills, increases the workload, yet brings new opportunities not only for teaching but also for examination and assessment (Dickfos et al., 2014; Harichandran et al., 2018). The fact that almost all studies report positive results may point towards a confirmation bias within outcome-oriented studies on blended EE.

Even though blended learning makes new forms of outcome assessment possible, researchers usually measure that with the same instruments as in face-to-face environments. Most of the studies use surveys and interviews to measure effects on students (Jones & Lau, 2010; Wong, 2017). Only a few scholars use process data from online elements of the blend, such as intensity of play in online games or time spent on videos (le Roux & Nagel, 2018). While some studies compare their impact measures with a status-quo before the intervention (Bosman & Fernhaber, 2018) only two studies have a comparative approach contrasting a blended with a face-to-face course (Bosman, Paterson, & Phillips, 2021; Hasanah & Malik, 2020). Both studies find that the blended approach leads to enhanced student learning.

Another notable finding is that some articles ignore one side of the blend when measuring student outcomes. Despite reporting on a blended setup and measuring the results on a course level, these articles typically interpret effects on students as if only one element of the blend, for instance, an online simulation, influenced those outcomes (Secundo et al., 2021; Williams, 2015). Even though these studies typically explain why both sides of the blend were necessary, they are unreflective of its impact on student learning.

In summary, studies about the outcomes of blended EE have similar methodological weaknesses as other EE outcome studies (Nabi et al., 2017; Pittaway & Cope, 2007a). Yet, their analytical weaknesses are compounded by the fact that they often focus only on one element of the blend, miss the opportunity to integrate process data and fail to compare blended learning with other delivery modes, making the identified outcomes problematic.

Discussion

Based on the review, this section posits blended learning as a unique and independent mode of delivery, upon which entrepreneurship educators can set up various teaching methods. This is followed by the development of four archetypes of blends in EE.

Blended learning as a distinct and unique mode of delivery

Blended learning is a distinct mode of delivery. While le Roux and Nagel (2018) use group works in their face-to-face component and combine it with online lectures, Stefanic et al. (2020) use the exact opposite setup. The example illustrates that the mode of delivery, in both cases blended, is distinct from the method of teaching, which can be combined in different ways. However, the mode of delivery is not independent of the method of teaching and other vital factors of EE because the type of blend influences what and how (much) content can be taught, which students can be taught, and which results can be measured. To advance the understanding of blended learning in EE and allow for an exchange with other areas of higher education, the author suggests conceptualizing blended learning as a mode of delivery upon which educators can set up various teaching methods.

Blended learning is a unique mode of delivery and more than the sum of independent online and face-to-face components. It is a mode of delivery that seeks out optimal combinations of online and offline teaching methods, where both parts reinforce students' learning. Some articles in this review have weaknesses in explicating their teaching methods, which is a common finding in the EE literature (Hägg & Gabrielsson, 2020; Nabi et al., 2017; Pittaway & Cope, 2007a). Yet, many articles explain the rationale behind the blend. They show, for instance, how playing an online game reinforces theoretical learning from lectures, while those lectures contextualize the experience when playing the game online (Tunstall & Lynch, 2010). Because of its ability to holistically integrate the online with the face-to-face component, blended learning is more than just the sum of its parts.

Conceptualizing blended learning as a distinct and unique mode of delivery provides the basis for new debates about how entrepreneurship is taught and learned. In addition, such conceptualization opens up conversations with other areas of research, where blended learning is practically and theoretically more established (Arbaugh et al., 2009, 2010). Building on said conceptualization, the following section develops four archetypes of blends in EE and discusses their implications for research and practice.

Four Archetypes of Blends in Entrepreneurship Education

To explicate the potential of blended learning in more detail, the author suggests four archetypes of blends for EE depicted in **table 2**. The vast majority, yet not all of the blended programs, courses, and exercises identified in this review, combine experience-based education with more explanation-based formats of teaching and learning entrepreneurship within and across the two components (face-to-face, online). There are two dominant approaches to learning in contemporary EE, namely experience-based and explanation-based learning (Hägg & Gabrielsson, 2020). Inspired by experiential learning theories (Boud, Keogh, & Walker, 1985; Dewey, 1938; Kolb, 2015; Schön, 1983), EE scholars argued that – like real-world entrepreneurs - students should have entrepreneurial experiences from which they distill new knowledge and competencies through reflection (Jones et al., 2019; Neck & Corbett, 2018). An alternative is explanation-based learning, where the assumption is that learning starts with a form of explanation, typically by the teacher. Even though the latter approach receives much less attention in scholarly debates, both approaches prevail in contemporary EE (Hägg & Gabrielsson, 2020). Taking this distinction into account, each archetype represents one possible combination of explanation-based and experience-based learning in a blended delivery format.

The distinction between experience-based and explanation-based learning in EE is reflected in a current debate about students' and educators' agency and teaching methods. This debate revolves around the concepts of pedagogy, andragogy, and heutagogy in EE (Jones, Matlay, Penaluna, & Penaluna, 2014; Neck & Corbett, 2018). Pedagogy is understood as being the most explanation-based format, where educators lecture students, who remain in a passive role, with content for and about entrepreneurship. In andragogy, students and educators co-create learning. Students learn in more self-directed formats, for instance, from their experiences in simulations or serious games while educators act as coaches. The method of learning is usually experience-based, even though it can also entail some explanation-based elements. In heutagogy, learners are autonomous and self-determine their learning experiences while educators act as facilitators. The author uses the three forms of teaching and learning entrepreneurship, often referred to as the PAH continuum (Jones et al., 2019), to contextualize the four different blends and discuss their differences and similarities.

Table 2:

Four Archetypes of Blends in Entrepreneurship Education

F2F \ Online	Explanation-Based	Experience-Based
Explanation-Based	Traditional Blend ***Example:*** *Online videos & classroom lectures*	In-Action Blend ***Example:*** *Online simulation & classroom lectures*
Experience-Based	For-Action Blend ***Example:*** *Online videos & case-based classroom teaching*	Experiental Blend ***Example:*** *Online mentoring & F2F venture project*

Traditional Blend

The *traditional blend* is one in which educators combine traditional forms of teaching, typically asynchronous online lectures, with face-to-face instructions (Roffe, 2010). This type stands in the tradition of pedagogy, where educators explain concepts, theories and disseminate information for and about entrepreneurship. Learning in both components is directed by the teacher, while students have a recipient role.

The *traditional blend* has advantages. The asynchronous online learning component provides excellent flexibility to learners and allows educators to reach new student groups for which purely on-campus education is an unattractive (Jones & Lau, 2010). At the same time, the face-to-face element, often scheduled in one or several blocks, allows students to engage with their peers, create a network, and build a sense of belonging, which enhances their learning experience and keeps them motivated (Stewart & Pepper, 2011). The ability to reach groups with limited time or access to campus and the capacity to offer the face-to-face components on the block makes this option ideal for social projects aiming at the provision of inclusive EE. Second, pedagogy is still the dominant way of teaching in higher education, and students show a high familiarity with it, thereby reducing transaction costs and feelings of uncertainty. Third, this blend allows educators to use externally produced materials, such as MOOCs, for the online component (Müller et al., 2019) or reuse self-produced material, both of which may reduce faculty workload and preparation time.

The limitation of the traditional blend is that it primarily provides students with theoretical knowledge for and about entrepreneurship. It entails no element of action and is harder to translate into practical skills, entrepreneurial attitudes, or reflections upon actions, which are essential capabilities for entrepreneurs (Cope, 2003). The largely passive format of delivery may limit what students learn and deteriorate their image of EE. On an institutional level, this blend bears the most significant potential to reduce the number of faculty as, arguably and in theory, substantial portions of the teaching can take place in asynchronous and reusable video lectures (Neergaard & Christensen, 2017). Finally, educators may be hesitant to employ this blend and fear social stigma as it essentially contradicts the scholarly consensus of experience-based learning in EE.

A *traditional blend* works best for educators who understand themselves as teachers and explanators of content and theory. An important question for educators when teaching with this blend is to reflect upon which elements should be delivered synchronously or asynchronously online and which should be delivered in a face-to-face set up, and why. This blend also invites educators to combine different forms of knowledge transmission such as YouTube videos, podcasts, documentaries, and MOOCs from other sources. Such multi-media approaches offer multiple perspectives while addressing differences in student learning styles and preferences.

For-Action Blend

The central logic of this blend is that the online component prepares students *for* action in the face-to-face experiential element. In a *for-action blend*, educators combine explanation-based learning in the typically asynchronous, online component with experience-based learning in the face-to-face component. This type stands in the tradition of andragogy, as it combines online learning, typically in the form of asynchronous explanatory videos, with active, self-directed forms of learning in an experience-based face-to-face component (Kazakeviciute et al., 2016). This type is characterized by oscillating roles of educators between teachers and facilitators and changing degrees of autonomy for students between receptivity and action.

The *for-action blend* allows students to have entrepreneurial experiences and develop their capability to reflect while also providing theoretical input to contextualize their experiences and reflections. In combining the known and expected (explanation-based learning, online) with the unknown and unexpected (experience-based learning, face-to-face), this blend helps those students unfamiliar with experiential learning adapt their learning styles. The online component often used to contextualize and conceptualize students' experiences (le Roux & Nagel, 2018) can potentially also be used to explain different ways of translating experience into knowledge, such as reflection and abstraction (Kolb, 2015). In addition, the blend requires moderate time-investments as educators often re-use some of the material for the online component if delivered in an asynchronous format.

One significant challenge for this type of blend is the match between the face-to-face and the online component. To make the online parts valuable for students' experience-based learning, educators need to anticipate what experiences students will have and adjust the online input accordingly. If students will have experiences that the educator did not expect, the mismatch between the online and offline components may diminish the positive effects of this blend on learning. In addition, this blend requires a high learner motivation, especially when the online component is delivered asynchronously. To have a valuable learning experience, students need to be self-regulated enough to watch videos and prepare for their actions during class time (Vadnjal, 2017). Educators can use quizzes or gamification to manage students' engagement in the online component and keep up their motivation. Finally, this blend requires students to be able to reflect on their experiences. While reflection is frequently mentioned as the fundamental mechanism of learning in EE (Hägg & Kurczewska, 2016; Neck & Greene, 2011), there is typically little guidance and preparation for students to learn how to reflect. Employing for-action blends, educators need to make sure that students can reflect and provide them with guidance and support.

Educators who conceive themselves as facilitators of entrepreneurial experiences and have strong competencies in different pedagogies and teaching methods may find the *for-action blend* suitable. One concrete recommendation to solve the matchmaking issue is to provide students with a library of asynchronous online content, including podcasts, short videos, and online lectures. The students can pick and choose the input that best complements their individual experiences. If students are still unable to find matching or helpful content, educators may encourage them to search for themselves. In a *for-action blend*, educators must be comfortable and competent with both experience-based and explanation-based education and have a certain level of reflexivity regarding when to teach and when to facilitate. An essential aspect of balancing those two roles is to communicate both roles and when they switch towards the students.

In-Action Blend

The underlying notion of this blend is that students will have experiences *in* the online component, which are supported or contextualized by classroom teaching. With an *in-action blend*, educators explain theory or concepts in the physical classroom while students perform experiential activities online. Standing in the tradition of andragogy, this type typically combines a synchronous or asynchronous online game or simulation with face-to-face lecturing (Bellotti et al., 2014). Like the previous blend, students and educators continuously oscillate regarding their roles and degrees of autonomy.

One advantage of the *in-action blend* is that, especially when the online component is a serious game or simulation, it allows students to have experiences that would be impossible in a face-to-face educational setting (e.g., the experience of selling a venture to an investor) while having face-to-face sessions for preparation or contextualization (Antonaci et al., 2015). Due to the combination of explanation-based and experience-based learning, this blend also provides a form of introduction to experience-based learning. In addition, games and simulations in the online component often increase student engagement and motivation (Fox et al., 2018). Finally, this blend has advantages in matching students' experiences with the explanation-based forms of delivery. By their very nature, games and simulations limit students' actions to such an extent that educators can anticipate students' experiences.

One of the challenges of this blend is that it is usually quite complex, costly, time-intensive to set up, and challenging to facilitate. In addition to preparing classroom teaching, educators need to either design simulations or games, which requires skills and time investments, or purchase games and simulations, which involves high costs for the educational institution or students and makes this blend less attractive. In addition, games and simulations have high transaction costs because of potential issues of functionality, compatibility, or human errors. Educators need to spend extra time preparing the online component and the students while standing alert during their online playtime to mitigate these risks. In comparison to the *for-action blend*, this again increases faculty workload. Finally, this blend also requires students' capacity to reflect upon their experiences gained in the games and simulations. However, the physical face-to-face sessions provide ample opportunity to provide students with guidance for reflective thinking and invite for different types of reflections (e.g., individual, small group, plenum).

The *in-action blend* is ideal for educators who understand their role as facilitators. In addition, a high technological competence may help them minimize transaction costs and manage online games and simulations successfully. One recommendation, which also applies to the *for-action blend*, is to help students reflect upon their experiences. Especially when playing games or acting in simulations, students might get absorbed by the fun part of the experience and forget to reflect upon it. Educators can provide students with special diaries, reflection logs, or other tools to spark students' reflection. In addition, educators should explain reflection as a concept and different techniques of reflection. While there is a broad consensus that all humans can reflect (Boud et al., 1985), it should be noted that reflection is a learnable competence, which needs more to be developed than massed practice.

<u>*Experiential Blend*</u>

With the *experiential blend,* educators create a continuous learning experience that goes across the two components. In contrast to the *for-* and *in-action blend,* students learn from experiences in the usually largely synchronous online and from experiences in the face-to-face component. This type of blend comes in different variants, such as cross-cultural projects work with partly remote teams (Stefanic et al., 2020) or venture-projects with e-mentoring elements (Bandera et al., 2018). It stands in the tradition of heutagogy, as educators facilitate students' self-determined processes of learning.

One advantage of the *experiential blend* is that it provides an opportunity to gain certain types of experiences that are blended by nature. Today, many entrepreneurs work partially remote, where they are physically in contact with some team members while others work elsewhere, and much collaboration is fully online (Sole & Edmondson, 2002). Entrepreneurial experiences are taking place much more often in between the digital and the face-to-face than currently represented in entrepreneurship teaching, and the experiential blend can bring some of these experiences to students. To fulfill this blend's potential, educators need to identify naturally blended working situations and develop interventions to mimic those as accurately as possible. Second, this type of blend allows students to gain many different, often unique, and self-determined learning experiences, from which to distill knowledge that is usually distinct from that of other students.

While the uniqueness of experiences is a crucial strength of this blend, it is also significantly related to its central weakness. This blend requires highly sophisticated and self-reflective learners. Students need to be self-determined, design their own experiences in meaningful ways, and independently reflect upon those experiences. In contrast to the other two experiential blends (*in* and *for-action*), there is no experiential downtime, which can be defined as the time between instances of experience-based learning, in which students have time off or receive input through explanation-based formats. Even more so than in *for* and *in-action blends*, educators need to make time for students' reflection, which is the sole method of student learning in this model. For educators, this may prove demanding because they need to spend some time and thought preparing and supporting students' reflection capacity while also facilitating their experiences. In addition, transaction and facilitation costs can be high because students typically use online tools or digital equipment and need additional support. Even though this blend is quite powerful and holds strong potential for student learning, its use is limited both by the requirements of students to be mature learners capable of reflecting and by the fact that many aspects of entrepreneurship neither happen naturally blended nor do they lend themselves to such a format.

The *experiential blend* requires versatile educators with high technological competencies who conceive their role as orchestrators of online and face-to-face entrepreneurial experiences. While this blend may come across as the most powerful one, well-aligned with current arguments on how entrepreneurship should be taught (Neck & Greene, 2011), it is the most limited in many ways. When employing this blend, educators should consider whether their students are capable of learning in highly unstructured environments and able to drive their learning process. In addition, there is a limited number of use-cases where actual entrepreneurial experiences are blended naturally. For an overview of all four blends and their particularities, see **table 3**.

Table 3:

Comparison of the Four Archetypes of Blends

Traditional Blend	In-Action Blend	For-Action Blend	Experiental Blend
Tradition: *Pedagogy*	***Tradition:*** *Andragogy*	***Tradition:*** Andragogy	***Tradition:*** Heutagogy
Example: *Online videos & classroom lectures*	***Example:*** *Online simulation & classroom lectures*	***Example:*** Online videos & case-based classroom teaching	***Example:*** *Online mentoring & F2F venture project*
Educator Role: *Active, teacher, explanator*	***Educator Role:*** *Active and passive, facilitator, technological competence*	***Educator Role:*** *Active and passive, facilitator, pedagogical competence*	***Educator Role:*** *Active and passive, orchestrator, technological competence*
Student Role: *Passive, inexperienced with experience-based learning*	***Student Role:*** *Active and passive, self-regulated, some experience with experience-based learning*	***Student Role:*** *Active and passive, self-regulated, some familiarity with experience-based learning*	***Student Role:*** *Active, highly experienced with experience-based learning*
Advantages*: High familiarity of students and educators, low transaction costs, works with 3rd party material, low faculty workload*	***Advantages*****:** *Can provide experiences impossible in reality, high student motivation and engagement, good match making between experience and theory*	***Advantages:*** *Introduction to experience-based learning, works with 3rd party material, contextualizes experience with theory*	***Advantages:*** *Perfect for experiences blended in nature, unique and self-determined student learning*
Disadvantages: *Limiting students learning to theoretical knowledge, potentially harmful for the image of EE and its educators, great potential to reduce number of faculty*	***Disadvantages*****:** *Often complex, costly and time intensive to manage, high transaction costs, teacher and students often need costly equipment and access to technology*	***Disadvantages:*** *Educators need to anticipate students' experiences, high learner motivation, students need to be able to reflect*	***Disadvantages:*** *Requires students to be very good at reflection, no experiential down-time, transaction and facilitation costs are high*
Preparation Time: *Low*	***Preparation Time:*** *Medium*	***Preparation Time:*** *Medium - High*	***Preparation Time:*** *High*
Context: *EE in traditional settings, EE in social projects*	***Context:*** *High wealth students or educational institutions*	***Context:*** *Entrepreneurship programs at business schools, other higher education institutions*	***Context:*** *Experienced entrepreneurs, graduate or post-graduate students with prior entrepreneurial experiences*

Deciding whether and how to blend is essential in the process of designing EE courses and programs. This review has shown that educators need to take purpose, content, context, method of teaching, time, student characteristics, and their preferences and capabilities into consideration when deciding on a type of blend. The four archetypes showcase that the mode of delivery becomes an essential aspect of how educators teach entrepreneurship and something to reflect upon when planning courses and programs. To this end, it is important to point out that the four archetypes are not mutually exclusive. Studies in this review combine two or more types of blends (e.g. Laine, 2008). Such combinations, especially between the *in-* and *for-action* blends, may be helpful to introduce experience-based learning to students unfamiliar with this form of learning as they bring together what students know and expect (explanation-based learning) with what is new and unfamiliar (experience-based learning).

Future Research

This review has shown that we have just begun to understand the role of blended learning in EE. The author now presents three areas of future research, which can improve our understanding of blended learning in EE.

First, the literature lacks comparative studies that contrast different blends with one another or blended with face-to-face or online courses. Studies that compare different blends will further enhance and refine the here-developed archetypes and allow for a more granular understanding of the blends' strengths and weaknesses. Studies that compare blended with face-to-face or online formats, as they exist for many other fields of higher education (Bernard, Borokhovski, Schmid, Tamim, & Abrami, 2014; Means, Yukie, Murphy, & Baki, 2013), will be helpful to understand better under which conditions blended setups are well- or ill-suited compared to other modes of delivery.

Second, this study raises questions about the role of learners' maturity in EE. When calling for andragogy and heutagogy as leitmotifs for EE, scholars argued that learners' maturity becomes a central issue in EE (Hägg & Kurczewska, 2019). Even though many of the reviewed studies lean towards andragogy or even heutagogy, only one study reported about learners' maturity (Vadnjal, 2017). While this could mean that blended learning mitigates learners' maturity challenges, more research on learners' maturity in EE is needed to solve this puzzle. This should go hand in hand with a theoretically informed discussion about the concept of learners' maturity itself.

Third, the review suggests that blended learning offers an opportunity for collecting and analyzing new data for researching the process of learning EE. Taking face-to-face as the for-granted mode of delivery in EE has prevented broader scholarly engagement with blended learning and limited which data scholars use for their research. It is challenging to collect process data in face-to-face environments and track what students are doing and how they do it. Much of the scholarship that tries to understand the process of learning relies on ex-post data collection methods, such as surveys, exams, or written reflections. Blended learning, with its online component, allows educators to track and observe students' learning process, for instance, by monitoring their engagement in synchronous online games or with asynchronous online videos (le Roux & Nagel, 2018).

One under-explored aspect of learning entrepreneurship is reflection (Hägg & Kurczewska, 2016; Kassean et al., 2015; Neck & Greene, 2011). Engaging with blended learning can enhance our understanding of the process of reflection in EE. When students perform entrepreneurial actions in the online component of a blend, researchers can record and after that observe students' performance and compare their actions with subsequent (written) reflections. Currently, written reflections are used in isolation as the default data to understand how students reflect in EE. Through blended learning, which makes it possible and economically feasible to observe students' entrepreneurial actions, researchers could relate to and compare students' actions and reflections. In addition, educators can facilitate students' reflections in the online component of the blends and record the result of students' reflections and the process of it, for instance, when they have reflective conversations with their peers. In other words, blended EE might be the ideal testing ground to advance our understanding of reflection as an essential aspect of learning entrepreneurship.

Conclusion

Blended learning has the potential to become an essential mode of delivery in post-pandemic EE. This article has systematically reviewed the literature on blended learning in EE and defined blended learning in EE as a mode of delivery that seeks out optimal combinations of online and offline teaching methods to foster students' learning of entrepreneurship. It highlighted why blended learning is a unique and independent mode of delivery and developed four different blends: the *traditional blend*, the *for-action blend*, the *in-action blend,* and the *experiential-blend*. These blends and the discussion of their specific strengths, weaknesses, and some concrete recommendations provide entrepreneurship educators with decision support for whether and how to blend their courses. To EE scholars, this article has shown that blended learning is an important aspect of understanding current practices in the field and a mode of delivery that allows asking new and relevant questions for further research.

CHAPTER V: GROUP REFLECTIONS IN ENTREPRENEURSHIP EDUCATION: EXPLORING STUDENTS' LEARNING PROCESS AND OUTCOMES

Christoph Viebig

Copenhagen Business School

Submitted to International Journal of Entrepreneurial Behavior and Research

Abstract

Purpose – The purpose of this paper is to examine the process of group reflections in entrepreneurship education (EE) and advance theoretical knowledge on reflection as a component, activity, and capabilities in experience-based EE. The paper challenges the prevalent understanding of reflection as an individual activity, identifying inconsistencies of this view with theories of experience-based learning and the entrepreneurial learning literature.

Design/methodology/approach – The study is designed as a video ethnography. Data consists of 36 audio-visual recordings of group reflections based upon a group-based equity-split experience from two entrepreneurship courses. The author analyzes the data following the three-step process of video interaction analysis.

Findings – The study finds that the group reflection process consisted of a framing phase and an analytical phase, in which students used different capabilities.

Students developed two types of learning outcomes, namely, changed perspectives on themselves and the world around them and proposed actions for similar situations in the future. The processes of how students constructed individual learning outcomes were positively and negatively influenced by their interaction with others. Those findings have been integrated into a process model for group reflections in EE.

Originality/value – The process model contributes to EE literature by (a) outlining the conditions for individual learning in group reflections, (b) clarifying the relationship between group reflection and instrumental and transformational learning in EE, and (c) reconfiguring reflection capabilities suggesting a new approach for developing entrepreneurship students' reflective thinking.

Keywords Entrepreneurship Education, Group Reflection, Experiential Learning, Equity Split, Video Ethnography

Paper type Research

Introduction

This study examines how entrepreneurship students learn in group reflections. The current discourse in entrepreneurship education (EE) is dominated by experience-based formats of teaching and learning entrepreneurship (Hägg & Gabrielsson, 2020), related to an epistemology of social constructivism (Löbler, 2006) where students develop new insights through an iterative process of experience, reflection, and action (Neck & Greene, 2011; Neergaard et al., 2020). This learning process is informed by several theories of experience-based learning (e.g., Dewey, 1933; Kolb, 2015; Mezirow, 1991) and resembles how entrepreneurs learn in practice (Cope, 2005; Pittaway & Cope, 2007b). Recent years have seen an increase in studies about reflection in EE, focusing on the reflection component as part of the learning process (Hägg, 2017; Hägg & Kurczewska, 2016; Kurczewska, Kyrö, Lagus, Kohonen, & Lindh-Knuutila, 2018), the outcomes of reflection (Hägg, 2018; Lindh, 2017; Lundmark, Tayar, Qin, & Bilsland, 2019), and reflection as a learnable entrepreneurial capability (Hägg, 2021; Wraae, Tigerstedt, & Walmsley, 2021). Within this scholarship, reflection is commonly defined as a process of meaning-making where students develop new insights that influence future behavior (Hägg & Kurczewska, 2016). From the literature, reflection emerges as the primary method for learning in experience-based formats of EE.

However, EE research examined almost exclusively individual reflections (Hägg, 2018; Lindh & Thorgren, 2016; Wraae et al., 2021), often in written formats such as diaries or logs (Hägg, 2021; Ilonen & Heinonen, 2018; Pittaway & Cope, 2007b). The singular focus on individual reflection provides a barrier to the theoretical advancement of EE research on at least three levels. First, it challenges experience-based learning theories (Dewey, 1933; Mezirow, 1991) and undermines attempts to create a strong theoretical foundation for the learning process in experience-based EE (Fayolle et al., 2016; Rideout & Gray, 2013). Rodgers (2002: 845), for example, argued that John Dewey thought of reflection as being relational and something that "needs to happen in community, in interaction with others". Second, the focus on individual reflection contradicts the idea of modeling teaching and learning formats in EE after entrepreneurial practice (Neck & Greene, 2011), for which research has shown that team reflection is an important activity in entrepreneurial teams (Breugst, Preller, Patzelt, & Shepherd, 2018). Finally, conceptualizing reflection as an individual activity has made it methodologically challenging to observe students while reflecting. It prevents the development of a theoretical model of the reflection process in EE that also includes the capabilities students use when reflecting. Hence, taking a relational stance on reflection and systematically examining relational reflection formats strengthens the theoretical ties to experience-based learning theories and the entrepreneurial learning literature and advance our theoretical knowledge about the reflection process and its conditions in EE.

The purpose of this paper is to examine how entrepreneurship students learn in group reflections. It employs a video ethnographic approach, analyzing 36 self-recorded student group reflections based upon a shared entrepreneurial experience generated in two entrepreneurship courses. Randomly assigned into groups of three or four, the students first negotiated an equity split based on a case-based role-play exercise (Wasserman & Malhotra, 2012) and afterward reflected upon their experiences using a reflection manual (Pearson & Smith, 1985). The equity split is an important moment in the entrepreneurial process with long-term consequences for the founder team and firm performance (Breugst, Patzelt, & Rathgeber, 2015; Hellmann & Wasserman, 2017). I adhered to procedures for video-interaction analysis (Knoblauch, 2009) which means that after the *transcription*, I engaged in non-sequential *interpretation,* identifying students' individual learning outcomes using qualitative coding techniques (Gioia, Corley, & Hamilton, 2013) before *analyzing* the sequential construction of those learning outcomes using ethnographic methods.

The study develops a process model for group reflections in EE that shows the phases, conditions, and individual learning outcomes in group reflections. Based on the process model, the study makes three distinct contributions to EE research. First, the study sheds light on the conditions for individual learning in group reflections. The findings suggest that learning outcomes in group reflections are conditioned not only by students' personal frame of reference and their reflection capabilities but also directly and indirectly shaped by their interaction with others. Second, the study clarifies the relationship between group reflection and instrumental and transformational forms of learning. The findings suggest that the communication prevalent in group reflections makes this reflection format effective for facilitating transformational learning in EE. Third, the study challenges the prevalent perspective on reflection as one learnable entrepreneurial capability. Instead of understanding reflection as one capability, this study suggests that reflection is the interplay of two capabilities that can be individually taught and learned before being used in the reflection process.

Reflection in Entrepreneurship Education

There is a growing body of literature on reflection in EE. EE scholars focus on one or more of three aspects of reflection: a) reflection as a process component of learning entrepreneurship, b) the outcomes of reflection, and c) reflection as a learnable entrepreneurial capability.

Reflection is a central component of the learning process in EE. Inspired by the entrepreneurial learning literature (Cope, 2005; Cope & Watts, 2000), scholars have described the process of learning entrepreneurship as continuous iterations of experience, reflection, and action (Hägg & Kurczewska, 2016; Kassean et al., 2015; Neck & Greene, 2011). Adopting this learning process shifted the dominant epistemological perspective from an objectivist understanding of knowledge accumulation linked to a focus on teacher-led knowledge transmission (pedagogy) toward a social constructivist notion of knowledge creation paired with student-focused self-directed (andragogy) and self-determined (heutagogy) forms of learning (Bell & Bell, 2020; Neck & Corbett, 2018). In conceptualizing the reflection component of the learning process, scholars turned to John Dewey's (1933) ideas about learning through inquiry and suggested that reflection itself is a process of meaning-making from past experience through which students arrive at new knowledge, which then shapes their future actions (Hägg & Kurczewska, 2016). When reflecting, students combine cognitive, affective, and conative modes of mental functioning (Kurczewska et al., 2018) to develop knowledge that is shaped by students' existent knowledge, beliefs, values, and experiences (Hägg, 2021; Lundmark et al., 2019), which together form their frames of reference (Mezirow, 1991). Following this literature, I understand reflection as being a cognitive, affective, and conative mental process of meaning-making from entrepreneurial experience that is influenced by students' frames of reference and leads to knowledge that shapes future actions.

A second focus in the literature lies on the outcomes of reflections in EE, indicating that learning through reflection takes one of two forms. First, students develop entrepreneurial knowledge, skills, and abilities through reflection (Lundmark et al., 2019). From this perspective, reflection enables instrumental learning (Mezirow, 1991) and produces directives that allow entrepreneurship students to alter their behavior and improve their performance in entrepreneurial situations (Davidsson, 2015). Second, scholars suggested that through reflection, students can develop their entrepreneurial mindset (Larsen, 2022) or frame of reference, for example, by changing their perspective on themselves as nascent entrepreneurs (Neergaard et al., 2020). From this viewpoint, reflection enables transformational learning (Mezirow, 1991), as it changes how students see themselves and the world around them, fundamentally changing the direction and aims of students' future actions (Neergaard et al., 2020). Those two learning outcomes indicate the two-dimensional relationship between reflection and action in the learning process of EE: Through reflection, students can develop new means (instrumental learning) and ends (transformational learning) for future entrepreneurial action.

Finally, scholars understand reflection as a learnable entrepreneurial capability. The scholarship on entrepreneurial learning has highlighted the importance of reflection as an essential capability for learning from mistakes and failures and consequentially for becoming a successful entrepreneur (Lattacher & Wdowiak, 2020). Due to the model character of the entrepreneurial learning process for the learning process in EE (Pittaway & Cope, 2007b), reflection plays a dual role in EE. It is a capability required to learn from educational experiences (Hägg & Kurczewska, 2016) and, at the same time, one desired outcome of experience-based EE (Jack & Anderson, 1999). The EE scholarship has addressed this dual role of the reflection capability with pedagogies aimed at stimulating students' reflection and a learning-by-doing approach (Hägg, 2021; Wraae et al., 2021). Scholars suggested employing different stimuli, such as the entrepreneurial diary (Hägg, 2021) or reflective videos (Wraae et al., 2021), for developing students' reflection capabilities.

However, the underlying assumption for this approach is that students naturally have the capability to reflect and that asking them to reflect, supported by questions and feedback (Hägg, 2021), enables them to access and strengthen their reflection capabilities. While the stimulation and learning-by-doing approach to reflection has received pedagogical critique (Neck et al., 2014: 84–85), studies examining the effectiveness of various stimuli report mixed results in terms of their capacity to strengthen students' reflection capabilities and help them develop meaningful learning outcomes (Hägg, 2018; Lindh & Thorgren, 2016; Neergaard et al., 2020). Even though the scholarship on reflection in EE has advanced greatly over the last decade, there is one central limitation within this literature that motivates this study: Reflection in EE is typically conceptualized as an individual activity taking place in isolation. Existing literature on reflection in EE, whether focusing on its role in the learning process, outcomes of reflection, or pedagogies for reflection, almost exclusively deals with individual reflection formats (Hägg, 2018; Lindh, 2017; Wraae et al., 2021), in most cases conducted in writing (Hägg, 2021; Ilonen & Heinonen, 2018; Pittaway & Cope, 2007b).

The focus on individual reflection is problematic for at least three reasons. First, this view on reflection contradicts the theoretical foundations of experience-based EE. In addition to the aforementioned community perspective on reflection held by John Dewey (Rodgers, 2002), Jack Mezirow (1991) also highlights the importance of social interactions in the reflection process, especially when aiming at transformational learning. It is also questionable from an epistemological viewpoint that scholars highlight the importance of social construction in the action and experience components of the learning process while conceiving reflection as a solitary non-relational activity. This perspective seems rooted in a confusion between the reflection process and its outcomes. While knowledge is personal and manifests on the individual level, this does not imply that the process of knowledge construction takes place on the individual level (Hägg, 2021). A social constructivist perspective instead suggests that the construction of knowledge, for which reflection is the central mechanism, is social and relational. Second, the individualized view opposes entrepreneurial practice and insights from the literature on entrepreneurial learning. Researchers have shown that team reflections are an important activity in entrepreneurial teams (Breugst et al., 2018) and highlighted that the entire entrepreneurial learning process is relational (Thompson & Illes, 2021). Third, individualizing reflection has made it challenging to observe students' reflections *in situ* and examine what capabilities students use when reflecting. Understanding those capabilities could stimulate new pedagogy development for training students' reflection capabilities and consequentially improve students' learning outcomes in EE. Hence, understanding reflection as a relational activity and exploring non-individual forms of reflection in EE can lead to stronger theoretical ties with the literature on experience-based education, social-constructivist epistemology, and entrepreneurial learning while strengthening our knowledge about the process, outcomes, and pedagogies for strengthening students' reflection capability.

Data and Methods

This study is designed as a video ethnography and answers the research question, '*how do entrepreneurship students learn in group reflections,*' by examining 36 video recordings of students' reflective conversations after a shared, group-based entrepreneurial experience. Video ethnographies have been used to study entrepreneurial learning (Thompson & Illes, 2021) and allow for examining audio-visual recordings of naturally occurring human behavior and interactions (Knoblauch, Schnettler, & Tuma, 2018). Employing a video ethnographic approach to studying students' group reflection process is preferable over more common approaches, such as interviews or surveys, because it allows watching and re-watching the embodied, emotional and verbal expressions in the cognitive, affective and conative process of students' meaning-making. The analytical approach follows a three-step process of video interaction analysis (Knoblauch, 2009). This approach suggests that after the *transcription*, researchers may engage in *interpretation*, a step that is analytical yet not sequential. For this step, I followed a grounded-theory-inspired approach (Gioia et al., 2013) to identify students' individual learning outcomes focusing predominantly on verbal expressions. In the subsequent *analysis*, I investigated the sequences of how students constructed those learning outcomes, examining not only verbal but also embodied and emotional expression.

The Context

Data for this study has been generated in one undergraduate and one graduate entrepreneurship course dealing with people problems in early-stage startups (Wasserman, 2012) at a European business school. The instructor, an experienced entrepreneurship professor who is not authoring this study, used a blend of case teaching, experiential exercises, and lecturing delivered primarily online due to Covid-19 restrictions. Data generation took place in week four of the two courses, which consisted of two sessions dealing with equity splits in early-stage startups (Breugst et al., 2015; Hellmann & Wasserman, 2017). In the two sessions, students experienced an equity split firsthand by engaging in a role-play exercise followed by a structured reflection and debriefing session.

The first sessions focused on the equity split role-play exercise. After receiving a short introduction on equity splits in early-stage startups and a brief recap of the case study about a startup team entering their equity split negotiation (Wasserman & Malhotra, 2012), the students were randomly assigned into groups of three or, if necessary, due to group size or late arrival, four students. Each student then received one confidential role note detailing qualitative and quantitative information about the character's position on four issues to be negotiated (equity distribution, seed equity distribution, equity for a co-founder who left, and salary for one of the three co-founders). While the qualitative information allowed students to develop their own line of argumentation, the quantitative information specified dealbreakers for each role. The students had 60 minutes to negotiate the four issues, and one of them had to report their results using an online form. The entire session was delivered online via Zoom and taught by the entrepreneurship professor.

The second sessions consisted of a guided group reflection exercise and a plenary debrief. The sessions began with a brief introduction to reflection and the distribution of the reflection manual.[1] The manual followed suggestions from Pearson and Smith (1985). It entailed three sections, one focused on recalling the experience, one centered on emotions associated with the experience, and finally, one targeted at developing meaning from the experience. While the first two sections had an open group discussion format, the last section asked students to alternately interview one another. While this session was planned to take place in the classroom for both cohorts, a Covid outbreak in the master course made it necessary to deliver their session in the same format online, whereas the undergraduate class met in person. The group reflection exercise was facilitated by the researcher, while the entrepreneurship professor conducted the subsequent general plenary debrief.

Data Generation & Analysis

This study uses video recordings from 36 groups (16 graduate, 20 undergraduate) totaling 109 students (52 graduate, 61 undergraduate). Students recorded themselves in their 45 to 60-minute-long group reflection and uploaded the footage afterward to an online file depository.[2] Even though participation was voluntary, all students present agreed to participate and signed the consent form. As participation in the two sessions was not mandatory, some students participated in none or only one of the two sessions. Students who participated only in the reflection session and had not negotiated an equity split were added to groups that missed team members from the previous session. In this way, the instructor kept the maximum number of fully intact groups (14 graduate and 12 undergraduate) in which all students went through the negotiation and the reflection session. Ethics approval for the data collection was granted by the school.

[1] See Appendix 4 for the reflection manual.
[2] See Appendix 5 for a freeze frame of the group reflection setup.

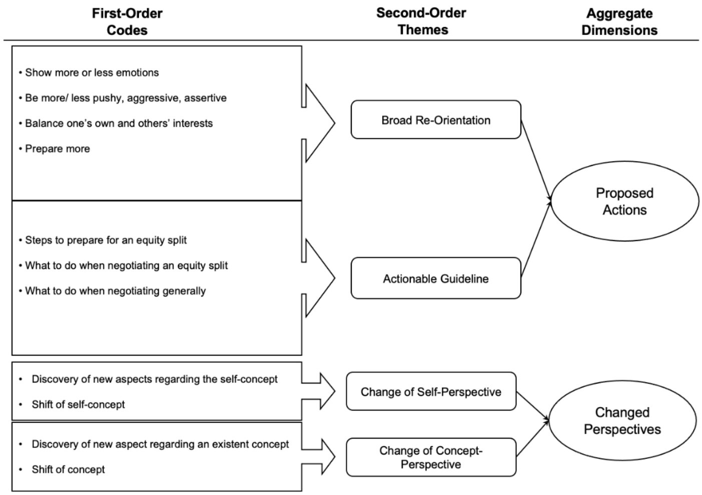
The data analysis followed a three-step process for video-interaction analysis (Knoblauch, 2009). For the first step, the *transcription*, I used software and received support from three student assistants manually correcting mistakes. In the second step, the *interpretation*, I engaged in a round of open coding going through all 36 transcripts trying to understand what happened during the group reflections. This was followed by a grounded-theory-inspired process of inductively coding what the students have learned in their group reflections and developing a two-order code scheme relating students' learning outcomes to instrumental and transformational forms of learning (Mezirow, 1991). I adhered to the literature for building grounded theory (Gioia et al., 2013) that suggests that first-order codes represent as closely as possible the informants' language while second-order codes are an analytical synthesis of multiple first-order codes. For example, different students recommended "spending more time preparing" or changing how they would "balance their own and others' interests" in a future equity split negotiation as something they learned, for which I came up with the second-order code "broad reorientations" describing learning outcomes suggesting broad behavioral changes. After developing four different second-order codes, I examined the relationship between them and developed two theoretical constructs, "proposed actions" linked to instrumental learning and "changed perspectives" linked to transformational learning using axial coding techniques (Corbin & Strauss, 2008). The relationship between first and second-order codes, as well as the theoretical constructs, is depicted in **Figure 1.**

Second, I focused on the process of how students constructed their reflection outcomes. I started this part of the analysis by splitting the groups in my dataset into two sections. In the first section were those groups in which students reached only instrumental learning outcomes. The second section comprised groups in which at least one student reached a transformational learning outcome.

For each section, I analyzed sequentially how the students constructed their learning outcomes over time by oscillating between the verbatim transcript and the videos focusing on students' emotional states, body language, and verbal expressions to find patterns within the two sections (Knoblauch et al., 2018). For example, I found that the atmosphere in some groups, where students only achieved instrumental forms of learning, was hostile as students used offensive language, expressed themselves with aggressive body language, and showed signs of emotional discontent throughout the entire reflection process. Synthesizing those observations, I developed a concept that I called the *hostility effect*, which functions as a barrier to constructing changed perspectives. Following this analytical approach, I identified five different effects explaining how students' interactions influence individual learning in group reflections.

Figure 1:

Data Structure: Insights Students gain through Group Reflections



Findings

Following my analytical approach, this section reports on the student's reflection process. Using representative quotes, the first part of this section outlines students' learning outcomes. The second part of the analysis focuses on the different elements of the reflection process and outlines relational effects that influence individual learning in group reflections.

Learning Outcomes in Group Reflections

Outcomes I: Proposed Actions

All students in my data set developed proposed actions about how they would approach an equity split or similar situation in the future. Students generated two types of proposed actions, namely broad re-orientations and actionable guidelines, which took different forms.

Broad re-orientations were a form of proposed action that suggested a vague change in future behavior, usually explicitly framed for a situation like the equity split. I identified four different forms of broad re-orientations. The first one concerned how students wanted to deal with emotions in the future. Students proposed to either show more or fewer emotions. Suggesting a more rational approach, a student said: "*We talked for quite a long time about feelings in the beginning. [Next time] maybe prepare in a different way with less emotions and then just cut it out like, 'Ok, so this is the situation, what do we need? Let's take this logical. What does the company need to succeed?' Even though I am not sure it is possible because there are always feelings […] I will try to do that* (G6_S3_31:35)". Another broad reorientation concerned the verbal and non-verbal approach undertaken in the negotiation. For example, by suggesting to "*push a bit* *harder […], being more stubborn in the beginning [and] put your nose up and hold […] a little bit more*" (G7_S3_42:16) a student recommended a tougher approach to the negotiation. I also identified the reverse orientation of being more compassionate and compromising. The third form of re-orientation concerned the balance of interests in the negotiation and what to emphasize more. One student, for example, suggested focusing more on his team members' viewpoints and less on his own by saying: *"I was very focused on my own side, and I didn't really think much about your arguments that much. […] So, be more aware of the others and their reasoning*" (G8_S3_43:03). Finally, students suggested broad behavioral changes concerning their preparation and frequently suggested to "*better prepare more for next time* (G19_3_29:12)."

Actionable guidelines were a more precise form of proposed actions, where students suggested concrete actions for situations resembling the equity split. Those actionable guidelines took one of three forms. First, students recommended concrete actions for how to prepare for another equity split negotiation. Because they are quite concrete, those recommendations took very different forms ranging from practicing with friends or experienced founders to developing extensive notes and preparation material. One illustrative example is a student who said: *"I would try for my own negotiations in the future, that I sit down and really put down on paper my goals as well as a minimum amount of equity. And if I don't get it, I have to walk away. [In addition, I try] to put myself into the shoes of each […] co-founder and try to understand what they want, what their arguments [will be]* (G10_S2_29:06)." Second, students developed actionable guidelines for behavior during equity split negotiations. Those suggestions often concerned negotiation tactics, for example, when to use the weakest/strongest argument, how to challenge others, or when to make suggestions. An example is a student who suggested short reflection breaks in an equity split negotiation to re-think tactics and approaches. She said: "*I think it's very important to have these small breaks between […]. I mean, because it's very important that you kind of reflect and think about tactics. […] Because otherwise, […] it's like a bulk of [a] conversation. You don't even have time and space to think about your thing. What do you feel? What's right and what's wrong? […] I mean, I think it's very important to have this reflection [in] between*" (G18_S2_35:07). Third, students developed broader actionable guidelines for negotiation situations more generally. While these sometimes related to tactics and strategies, too, one student suggested a specific approach for preparing for negotiations by saying: "*I think really playing through tough negotiations a couple of times and making sure that you spend at least twice as much time on preparing a negotiation than being in the actual negotiation, especially when it's emotional, like doing it four times even that it's because you're in a clear advantage if you practice. […] Never go into a negotiation again without knowing exactly where you want to be and what your bottom line is. Then rather say can we move this to next week or next month*" (G13_S2_32:16).[3]

An important finding was also that the students conceived these proposed actions as hypotheses for future action that they can test in similar situations. One student who suggested being more proactive in future negotiations even claimed that he would like to "*try different [negotiation] approaches […] and see what changes for me and for the others, [and] compare which makes more sense*" (G12_S1_30:23). The example also shows that students think about performance improvements and have a specific goal in mind they hope to achieve by following their proposed actions. Hence, one can assume that this form of learning outcome has a direct effect on students' future actions.

[3] See Appendix 6 for a data table with additional selective evidence for proposed actions.

Outcomes II: Changed Perspectives

About one-third of the students developed changed perspectives by either changing their self-image or changing their perspective on a concept outside themselves. Both perspective changes were either achieved by discovery, that is, by finding something new, or by shift, that is, updating an existent perspective.

Perspective changes in students' self-image occurred through the discovery or shift of new character traits or personal abilities. For example, one student discovered about herself that she has the ability and the courage to be confrontational and focus on her interests despite the involvement of other people that are close to her and said: "*I learned that I can negotiate [...]. I think sometimes in situations like that, when I know the people personally, I think maybe you tend to shy away a little bit from confrontation. But during this exercise it's kind of showed that I can be confrontational. Also, that I can argue and get points across that I want to get across without saying the wrong thing or forgetting to say something*" (G16_S2_17:50). The quote indicates that the student began to add a new aspect of 'comfort in confrontational situations' and 'an ability to argue and make a case' to her self-image, which were not part of it before. An example of a perspective shift is a student who thought of herself as having difficulties in taking up a leadership position in the team. However, through the group reflection, she learned that taking up this leadership role is not only something she can do but also something that feels right. She said: "*I think it was really nice to see that I was able to take on a leadership role in the situation. That's something I struggle with sometimes. So that was really nice to see that. And also, that I enjoyed it. I think that was also surprising to me*" (G8_S1_38:34). The student began to update her self-image from a person struggling with taking a leadership role to someone who liked and appreciated that.

Apart from changing perspectives on themselves, students also changed perspectives about more general concepts. Students discovered or shifted perspectives on concepts such as conflict, teamwork, the entrepreneurial process, or entrepreneurial decision-making. One example of this is a student who discovered something new about entrepreneurial decision-making involving financials and the role emotions play in that. He said: "*I think that when it comes to equity split and money, I realized [that] the emotional side plays a big role. Like, I realize really how feelings, in the end, just drive decisions and make people agree or disagree. […] Yeah, like that emotions were just really there, and I cannot detach myself from it.* (G3_S1_49:34)." The example shows that the student did not think of emotions as an important driver in decision-making situations and added this aspect to his frame of reference for those situations. An example of a student who shifted a concept perspective comes from a group with a quite confrontational splitting experience. Considering that, the student shifted his perspective on conflict from something that is purely negative and must be avoided to something of value. She said: "*[I learned that] that confrontation is something good if you do it right. So usually, we have the stigma around confrontations. Like, everyone seems to be pretty scared of [it]. But it can be something good as well. At the end of the day, we were all happier because I got what I […] wanted. You got it as well. And [the CEO of the startup] got to keep his team members*" (G16_S3_22:30). The example shows that the student had a negative view of conflict and its value and shifted that through the group reflection.[4]

Changed perspectives frame how students see themselves and the world around them. In contrast to proposed actions that have a direct effect on future action, changed perspectives change students' frame of reference and, therefore,

[4] See Appendix 7 for a data table with additional selective evidence for changed perspectives.

indirectly shape what actions students are performing and why, and influence how students frame and analyze their experience.

Constructing Learning in the Group Reflection Process

When conducting their group reflections, most student groups followed two reflection phases by framing their experience before analyzing it. One can distinguish those two phases by the language students used: past tense for the framing phase, and present and future tense for the analytical phase. During the framing phase, students developed a narrative of their experiences, highlighting certain aspects of it while leaving out others. The narrative included what had happened, recalling certain events or phases of their negotiation and emotions linked to their experiences. During the analytical phase, students interpreted the narratives of their experiences. This interpretation focused on developing new insights from the experience meaningful for future action. In contrast to the previous phase, which is mostly descriptive, students analyzed their experience narratives abstracting from the concrete experience into more generalizable insights. It was also during this phase that students typically developed their two learning outcomes.

Proposed Actions

Students developed proposed actions in both phases of the reflection process. Even though most students came up with proposed actions in the analytical phase, there were a few students who developed proposed actions already during the framing phase. There is a common pattern of developing proposed actions by copying either what the students have observed during the negotiation or by repeating what others suggested as their proposed actions during the reflection process. This *copycat effect* can be observed among many of the groups in the dataset. A group that shows the two facets of the *copycat effect* is group G2, where S1 framed her role during the experience as being "someone [who] stay[ed] calm and [took] the lead" (G2_S1_27:59). S2 confirmed this framing, indicating that she was impressed by that behavior. In reaction to this, she suggested copying S1's behavior by "stay[ing] calm and be[ing] the one watching [and] "be[ing] the cool guy" (G2_S2_40:48) in upcoming negotiations. While S2 wanted to behave like S1 during the negotiation, S3 copied the proposed action of S2 and stated that he would like to "stay calmer" (G2_S3_46:58) in a future negotiation, too. Hence, a common strategy of how students developed proposed actions was to suggest copying what others did during the experience and what they formulated as proposed actions during the reflection process.[5]

While students increased the number of proposed actions, they came up with during the reflection process through the *copycat effect*, they limited the number of proposed actions they could have developed when focusing on just one or two aspects of their experience in the framing phase. An example is UG9, wherewith their opening statements, the two students framed their experience as challenging in terms of "decisions where I [S3] had to compromise" (UG9_S3_0:06) and "hard to be assertive" (UG9_S1_0:33) at other moments during the negotiation. Throughout the entire reflection process, the students continuously return to this frame of compromise vs. assertiveness, for example, when explaining how they want to balance this in the future. S1 summarized this as "at first [I want to] be more assertive and then influence the others [to] compromise more" (UG9_S1_11:32). Apart from a broad re-orientation about preparing more, all other insights the students developed were directly linked to

[5] See Appendix 8 for the full transcript of group G2 including codes and a more extensive description of the copycat effect.

the assertiveness-compromise focus. For future negotiations, S1 wanted to be more assertive and make others compromise, while S2 changed his perspective on himself from a non-assertive to an assertive person. Hence, by focusing almost exclusively on one aspect of their experience, students can limit the variety of proposed actions they develop (*focus effect*).[6]

Finally, I found that developing proposed actions requires fewer analytical efforts. In contrast to changed perspectives, proposed actions follow often relatively directly from either listening to what others said or framing the experience. Even though some students develop their proposed actions over time and highlight different aspects of them, their appearance in the conversations is often sudden and spontaneous. As all students in the dataset developed at least one proposed action, reaching this learning outcome seems quite robust in group reflections.

Changed Perspectives

Students developed changed perspectives almost exclusively during the analytical phase. Instead of simply copying what their fellow students said during the reflection, almost all students use those inputs to construct changed perspectives. This *build-up effect* is strong within the dataset, and almost every student developed their changed perspectives using their and others' previous input. In building on their own and others' input, students often connected their changed perspectives directly with proposed actions. For example, in group G1, one student changed her view of negotiations in a startup context from being about competition for individual gains to one where those gains depend on team

[6] See Appendix 9 for the full transcript of group UG9 including codes and a more extensive description of the focus effect.

cohesion and happiness. Emphasizing her initial perspective during the framing phase, she was very surprised that “none of [the others] asked [me] to decrease my equity” (G1_S1_15:52). While S2 challenged her directly on that statement, saying that she indeed had asked her multiple times, the third student said that he could not “understand why [S1 was] not willing to give more just to get everyone happy” stating that his “goal was us, everyone” (G1_S3_25:06). He emphasized how unhappy he was about the negotiation process and that he felt extremely frustrated and demotivated. When analyzing her experiences, S3 struggled to deal with the feedback from her peers, first defending her position (“if we don’t have to give out my equity, if you don’t ask for it, then I am not going to do it […] why should I give [equity] out if I am not asked for it?” (G1_S3_41:00)) and then giving in proposing some behavioral reorientation (“I should consider [giving out equity] even though you weren’t asking for equity […] I feel that would maybe make you less frustrated with the team and overall negotiation” (G1_S1_42.01). At the end of her analytical phase, where she suggested broadly changing her future behavior by taking a more long-term approach in team negotiations and focusing more on other team members’ happiness, she integrated all these inputs into her frame of reference, stating: “I think I'm just very protective of my own wealth, so that's something that I learned about myself, but then again, that wealth is not going to multiply if I won't have a team that is happy with how things are evolving. So, yeah, so that's for sure. I mean, like, I have to pay attention to those things” (G1_S1_49:26). This example briefly indicated how students changed perspectives throughout the reflection process by building on what they and others have said during the group reflection process.[7]

While this *build-up* effect explains how most students developed changed perspectives, I found that a hostile group atmosphere prevented students from

[7] See Appendix 10 for the full transcript of group G1 including codes and a more extensive description of the build-up effect.

reaching changed perspectives. In their framing phase, those groups had in common that they talked about the experience unempathetically, and a logic of individual winning vs. losing was prevalent. In their analytical phases, those student groups failed to reach changed perspectives and even had trouble gaining proposed actions. Students seemed to lack trust in their group members. They could or did not want to open up, making themselves vulnerable by stating a changed perspective or even an actionable guideline as those insights signal individual mistakes, which they want to avoid showing in hostile groups. An example of such a group is UG1, where two male students began framing the experience in competitive ways. Early on, one of them pitied and talked down to the female student in the group by saying with a laughing voice: "I feel like we have ruined it for you a little. I feel bad for you. You will have some of my equity now … it is fine. Ok? (UG1_S1_13:17)". Due to this hostile environment, the students remained quite descriptive throughout the analytical phase. Only the female student developed actionable guidelines, while the two male students developed broad reorientations only. The suppression of changed perspectives in hostile groups can be seen in a statement made by the female student. Asked what she learned about herself from the experience, she said: "Seems like there is a tendency that everyone is a bit quieter for the last [question] (insecure laughing)" (UG1_S2_27:07). Hence, hostile group environments prevent students from reaching changed perspectives.[8]

When developing changed perspectives, students use analytical capabilities. As the above-outlined examples of proposed actions indicate, students abstracted from their experience toward more general categories and concepts. In addition, students used analogies, metaphors, and similes in their analytical phase. For example, one student changed his perspective on the value of equity in an equity

[8] See Appendix 11 for the full transcript of group UG1 including codes and a more extensive description of the hostility effect.

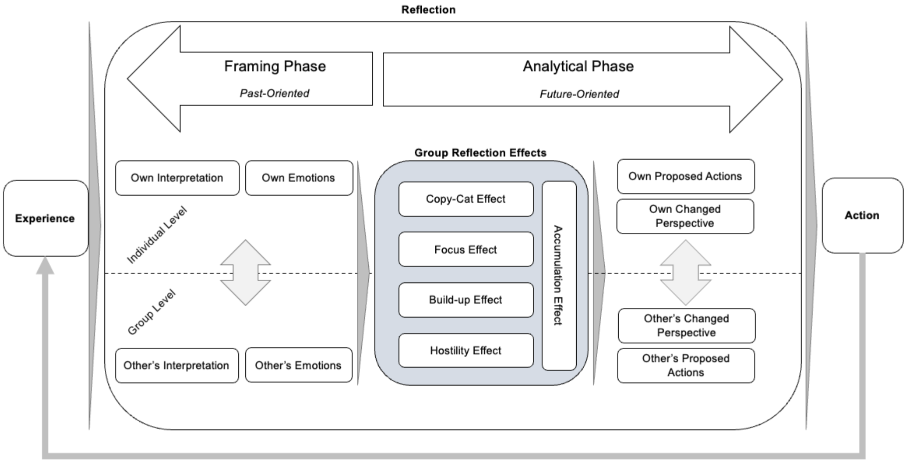
split by using a tea master simile, stating that "[My role in the equity split should be] like, the tea master […] the more you let go, the more like you let your partners receive, you the healthier the relationship you have" (UG5_S2_31:52). Hence, in contrast to most proposed actions, it took students time and analytical effort to develop their changed perspectives.

Finally, I found that even though the groups were created randomly, students who changed perspectives accumulated in certain groups. There are 19 out of 36 groups in which at least one student developed changed perspectives. Out of those 19 groups, there are 12 in which more than one student changed their perspectives. Out of the 109 students that participated in the study, 33 developed a changed perspective, while 27 of them found themselves in groups where at least one other student developed a changed perspective. This *accumulation effect* suggests that group interactions may have a strong influence on students' ability to change perspectives in group reflections.[9]

[9] See Appendix 12 for a table on learning outcomes per student and group.

Figure 2:

The Process of Group Reflections in Entrepreneurship Education



Discussion

The findings of this study are summarized in the process model for group reflections in EE, depicted in **Figure 2**. The model shows that group reflections consist of two phases, a framing phase which is oriented toward past experiences, and an analytical phase which is directed toward future actions. During the framing phase, students create a narrative that includes events and emotions linked to their entrepreneurial experiences. During the analytical phase, students interpret their narrative and develop two forms of learning outcomes, namely proposed actions that directly influence future action and changed perspectives that shape students' frame of reference and therefore have an indirect effect on future behavior. The group reflection effects influence individual learning in groups and show that interaction with others during the reflection process can both enhance or block individual learning.

The remainder of this section will draw out the theoretical implications of this study for EE research, including (a) the conditions for learning in group reflections, (b) instrumental and transformational learning in group reflections, and (c) the capabilities for learning in group reflections. Thereafter, I outline the practical implications for entrepreneurship educators and discuss the limitations of this study and opportunities for future research.

The Conditions for Learning in Group Reflections

The findings of this study provide a new perspective on the reflection component in the learning process of experience-based EE. Building on Dewey (1933) and Mezirow (1991), as well as insights from the literature on entrepreneurial learning (Breugst et al., 2018), this study has argued for shifting our understanding of reflection from being purely individual and taking place in isolation to also being relational, taking place in interaction with others. The process model for group reflection in EE empirically shows that this shift requires reconsidering the conditions for learning entrepreneurship through reflection. While current scholarship suggests that learning through reflection is influenced by individuals' frames of reference and their reflection capabilities (Hägg, 2021; Neergaard et al., 2020), this study shows that interaction with others during the reflection process is a third factor that shapes individual learning in relational reflection formats.

The relationship between interaction with others and individual learning in group reflections consists of direct and indirect effects. While students directly construct learning outcomes by interacting with others, described by the *copycat* *effect* (proposed actions) and *build-up effect* (changed perspectives), they also construct conditions that shape the group's ability to facilitate individual learning outcomes. This indirect influence can be seen in groups that create a hostile environment (*hostility effect)* or a discussion focusing on only one aspect of their experience (*focus effect*). These direct and indirect effects on learning in group reflections are one fundamental difference between relational reflection formats and individual reflection formats without social interaction.

The findings of this study also shed light on the strength of these effects on specific learning outcomes. The *accumulation effect* suggests that the construction of changed perspectives is more significantly influenced by interactions with others than the construction of proposed actions. Even though changed perspectives may be more difficult to develop because they require more analytical thinking (Hägg, 2018; Neergaard et al., 2020), this cannot explain why students developing changed perspectives accumulate in certain groups and, unlike with proposed actions (*copycat effect*), develop unique forms of changed perspectives by building on other students' input (*build-up effect*). Hence, interaction in group reflections has a stronger effect on those individual learning outcomes that require more analytical thinking and lead to changes in individuals' perspectives on themselves or the world around them.

Instrumental and Transformational Learning in Group Reflections

This study extends our knowledge about the learning outcomes that can be achieved through group reflections by suggesting that group reflections show great potential in facilitating transformational learning. First, the study confirms the findings of studies examining individual forms of reflections (Hägg, 2018; Lundmark et al., 2019; Neergaard et al., 2020) and suggests that entrepreneurship students engage in instrumental and transformational learning also when reflecting in groups. When developing proposed actions, students formulate more (actionable guidelines) or less (broad re-orientations) precise hypotheses that can be tested in problem-solution-oriented situations against their anticipated consequences. Employing this hypothetical-deductive process allows entrepreneurship students to develop certain skills and competencies that enable them to control and manipulate their environment and improve their entrepreneurial performance (Davidsson, 2015). When developing changed perspectives, students transform their self- or concept perspectives, which changes their frames of reference. As students cannot test their changed frames of reference employing a hypothetical-deductive methodology, they instead verify their frame of reference through communication and agreement with others (Mezirow, 1991). Their newly acquired frame of reference shapes not only what actions the students perform in the future but also why they conduct these actions and influences what learnings they generate in future reflections (Neergaard et al., 2020). Hence, I posit that entrepreneurship students can engage in instrumental and transformational learning when reflecting in groups.

Second, the findings of this study further clarify the relationship between group reflections and those two forms of learning and suggest that group reflections could be more powerful than individual reflections in engaging students in transformational learning. The reason for this is the difference in the communication forms students engage in when constructing the two learning outcomes. When constructing changed perspectives, students typically engage in multidirectional forms of communication where they build upon what others have said (*build-up effect*). This process requires multiple speakers and the development of new meanings in multidirectional communication with others. When constructing proposed actions, students often copy what others have said or what they have observed during the experience (*copycat effect*). This process is characterized by unidirectional communication between a sender and receiver. While group reflections allow for both multidirectional and unidirectional communication, students can only engage in unidirectional communication during individual reflections and take into consideration what others said or did before the actual reflection process. Hence, in line with Mezirow's (1991) notion that relational reflection formats may be more suitable for transformational learning because they allow for verification of students' changes in their frames of reference, I posit that group reflections are also advantageous for transformational learning because they enable multidirectional forms of communication that allow students to formulate possible changes in their frames of reference in the first place.

The potential of group reflections in enabling entrepreneurship students' transformational learning has important implications for scholars interested in developing tools and pedagogies for stimulating students' reflections. Current approaches in stimulating students' transformational learning focus on individual reflection and report that many students have problems reaching transformational learning outcomes (Hägg, 2018; Neergaard et al., 2020). While some of this scholarship even suggests accepting that some students may never transform (Neergaard et al., 2020: 270), relational reflection formats may provide an alternative and, as this study suggests, an effective approach for stimulating transformational learning among entrepreneurship students.

<u>The Capabilities for Learning in Group Reflections</u>

The findings of this study also shed light on the current conceptualization of reflection as learnable entrepreneurial capabilities and have important consequences on the pedagogy development for training and developing entrepreneurship students' reflection capabilities. Existing scholarship conceptualizes reflection typically as one entrepreneurial capability or skill (Hägg & Kurczewska, 2016) that is best developed through a learning-by-doing approach (Hägg, 2021; Wraae et al., 2021). The process model for group reflections in EE challenges these perspectives and instead suggests that reflection is the interplay between two capabilities. Instead of relying on a learning-by-doing approach to developing students' reflection capabilities, I suggest systematically developing and training those two capabilities before employing them in reflective practice.

The group reflection process consists of a framing and an analytical phase in which students use different capabilities. During the framing phase, students create a common narrative about their experiences. In this phase, students use memory, narration, and empathy to construct a shared narrative about the experience. Students who lack especially the ability to narrate and show empathy often create groups that focus on one aspect of the experience (*focus effect*) or hostile group environments (*hostility effect*). During the analytical phase, students interpret their experiences and develop new insights. In this phase, students use an abstraction capability that allows them to move away from the concrete experience, for example, by using analogies, metaphors, or similes, towards more generalizable insights connecting them to their frames of reference. Students who lack those analytical capabilities have problems developing changed perspectives and more concrete proposed actions (actionable guidelines). However, it is important to note that group interaction can prevent and encourage students from employing these capabilities and thereby influences learning. Hence, learning in group reflections requires the interplay between descriptive capabilities directed toward developing a narrative and being empathetic about the experience and analytical capabilities aiming at developing learning outcomes that shape future actions.

The insight that students employ two capabilities when reflecting in groups challenges not only the current conceptualizing of reflection as one capability or skill but also advances our pedagogical approach to systematically developing students' reflection capabilities. The findings of this study, even though suggesting that group reflections may be effective in stimulating both instrumental and transformational learning, also confirm findings that entrepreneurship students have problems reaching transformational learning outcomes (Hägg, 2018; Neergaard et al., 2020). Overall, only about one-third of the students (30%) reached transformational learning outcomes, and they concentrated in some groups (*accumulation effect*). However, instead of simply suggesting that group reflections are an effective stimulus for engaging students in transformational learning and yet another pedagogical format for training students' reflection capabilities following the learning-by-doing approach, I posit that the observation that students employ two capabilities suggests a different approach. Rather than following the learning-by-doing approach, we may begin by systematically developing students framing and analytical capabilities sets before we ask them to reflect. In so doing, scholars may focus on a stronger integration of the humanities into EE (Wadhwani & Viebig, 2021), which can develop students' narration, empathy, and abstraction capabilities (Landfester & Metelmann, 2019).

Practical Implications for Entrepreneurship Educators

The findings of this study have important implications for educational practice. First, group reflections may be a valuable pedagogical approach for entrepreneurship educators, independent of whether they are interested in developing students' entrepreneurial skills and competencies or impacting their entrepreneurial mindset and frame of reference. However, group reflections may be especially valuable for educators interested in stimulating students' transformational learning due to the multidirectional communication this form of reflection enables (Neergaard et al., 2020). Second, when using group reflections, educators interested in maximizing all students' learning should try to minimize the conditions that hinder learning in group reflections (*focus* and *hostility effect*). One possible way to minimize the focus effect is to provide students with concrete questions on different aspects of the experience. When asking those questions, for instance, when using a reflection manual or guide, educators may be cautious that those questions are not too narrow and still allow students to focus on aspects of their experience outside what the educator anticipated. When it comes to avoiding the *hostility effect*, educators may pay special attention to group formation. One way of minimizing possible hostility could be to let students self-select their groups, even though this may create a homophily bias (Warhuus, Günzel-Jensen, Robinson, & Neergaard, 2021). An alternative would be to conduct empathy training with the students before the reflection and make them aware of the negative consequences of hostile group environments for reflection outcomes. Third, to maximize learning through (group) reflection in EE, students must learn to reflect beforehand. This means that educators may train students' reflection capabilities before putting them to practical use. In developing training to strengthen students framing and analytical capabilities, educators may find inspiration in the literature on transformational education in management learning (Landfester & Metelmann, 2019).

Limitations and Future Research

This study has limitations that need to be acknowledged. First, the examined group reflections are based on a team-based and relatively short entrepreneurial experience. While this setup reflects common educational practice and allowed for a focused analysis of the group reflection process, the transferability of the findings is limited to this form of experience. This means that future research may examine group reflections based on non-shared or temporally more extensive experiences. On a more general level, this calls for more research on the relationship between different types of experiences and reflection formats. Second, the study cannot qualify students' learning outcomes. Because the study has focused on one experience only and not on how students behave afterward, it is unclear whether and to what extent the here identified learning outcomes are 'true learning' to the degree that they influence future behavior or situational verbalism without any effect on future action. Linked to this is the limitation that group reflections could continue after I have stopped my observation or that group reflections stimulate subsequent individual reflections, which then influence students' future actions. This calls for studies that close the gap between reflection and action and examine the effect of group reflections on future behavior. Finally, this study has examined group reflections within the specific context of a European business school. Future research may explore group reflections in other educational and non-educational settings, for example, how students at high schools or real-world entrepreneurs learn through group reflections.

Conclusion

Reflection is a key component in the learning process of EE, an important activity inside and outside the entrepreneurial classroom. Showing the theoretical inconsistencies between the current individualized perspective on reflection in EE and relational perspectives on reflection in the literature on experience-based learning, the social-constructivist epistemology prevalent in the field, and insights from entrepreneurial learning literature, I examined the process of how students learn in groups. In this study, I developed a process model for group reflections showing how social interaction conditions learning in group reflections, suggesting that group reflections may be effective in stimulating transformational learning and proposing that reflection consists of two capabilities that can be trained independently of one another. This suggests that rather than speaking of one reflection capability, we may speak of reflection capabilities in EE. These contributions extend our perspectives on reflection as a component, activity, and capability in EE and further strengthen the fields' theoretical ties with the literature on experience-based education and entrepreneurial learning.

CHAPTER VI: SOCIAL IMAGINARIES OF ENTREPRENEURSHIP EDUCATION: THE UNITED STATES AND GERMANY, 1800 - 2020

R. Daniel Wadhwani

University of Southern California

Christoph Viebig

Copenhagen Business School

In Academy of Management Learning and Education 2021, Vol. 20, No.3, 342-360

Abstract

While conventional historical narratives of entrepreneurship education focus on its rise in business schools since the 1970s, this paper traces its roots to the early 19th century and chronicles its evolution within the field of higher education more broadly. Using a comparative-history design, we show how changing social imaginaries of entrepreneurship education in Germany and the United States were based on divergent and evolving justifications of entrepreneurial autonomy and its relationship to the common good. Our narrative explores how these social imaginaries shaped the moral and political legitimacy of entrepreneurship and the

aims, practices, and organizational forms of entrepreneurship education. We draw out the implications of this deeper history for entrepreneurship education today, including: (a) its current social imaginary, (b) the character of entrepreneurial knowledge, and (c) the relationship of entrepreneurship education to the modern university.

Introduction

Contemporary histories of entrepreneurship education date its origins to the 1970s and 1980s and chronicle a meteoric rise in classes, students, and university-based programs over the subsequent decades (Kuratko & Morris, 2018). While scholars point to educational programs that predate this period (Katz, 2003), the widely accepted narrative takes a clear and compelling shape: "the reality of entrepreneurship education as a force in business schools began in the early 1970s" at a handful of North American universities (Kuratko & Morris, 2018: 12) and grew unabated in the United States and then internationally beginning in the 1990s (Dana, 1992).

Business schools, according to this interpretation, responded to soaring demand for entrepreneurship education from students, foundations, and government authorities by launching classes and developing curricula that have institutionalized the teaching of entrepreneurial knowledge and skills (Solomon & Fernald, 1991), which subsequently spread into other corners of the university and even into the business ecosystem (Gorman, Hanlon, & King, 1997). This historical narrative serves as more than just a colorful backdrop for entrepreneurship educators; it shapes the self-identity of entrepreneurship as a new and promising field and serves as the yardstick against which the progress of entrepreneurship education is evaluated. Also, it is often used, at least implicitly, as the starting point for imagining the future aims and methods of entrepreneurship education and its place in the university (Kuratko & Morris, 2018; Neck & Greene, 2011). Thus, the way we tell the history of entrepreneurship education anchors its identity today and shapes its ambitions and programs for the future.

However, a richer view of the prospects and aims for entrepreneurship education's future can be gained by developing a deeper understanding of its past. In contrast to histories of management education (Engwall, Kipping, & Üsdiken, 2016; Khurana, 2007), historical narratives of entrepreneurship education have been limited to the recent past and focused on university-based business schools. As a result, entrepreneurship education's deeper historical roots – originating well *before* the rise of modern university-based business schools – have been lost, and with them the opportunity to reflect more critically on the accomplishments and limits of entrepreneurship education today and to imagine more boldly its relevance for our world tomorrow.

In this paper, we develop a deeper historical narrative of entrepreneurship education, comparing its development in the United States and Germany since the early 19th century and taking into account broader developments in the field of higher education. Our approach situates the evolution of entrepreneurship education within what the philosopher Charles Taylor (2004) has called the development of "modern social imaginaries" of human freedom and their relationship to everyday theories of the common good. Applied to entrepreneurship research (Dey & Mason, 2018; Laine & Kibler, 2020), the construct of modern social imaginaries has been associated with a definition of entrepreneurship characterized by a drive for emancipation from an existing social status quo (Rindova, Barry, & Ketchen, 2009) and, hence, with the process of social and economic change (Schumpeter, 1934). In line with this scholarship, we define entrepreneurship education as the forms of business education that prepare students for business formation in ways that aim at autonomy and emancipation from an imagined social status quo.

To produce this deeper history of entrepreneurship education, we examine the development of educational publications, courses, and programs not only in universities, but also, more broadly, in the field of education and knowledge dissemination. Drawing on a rich variety of historical sources, we trace the origins of modern entrepreneurship education to the declining legitimacy of apprenticeships and the establishment of new higher educational institutions: proprietor-owned commercial colleges in the United States and higher polytechnical schools in Germany. These institutions embraced entrepreneurship as a form of self-empowerment, albeit with very different social imaginaries about its relationship to the common good. The subsequent rise of university-based business education in the late 19th century initially held out the promise of producing broadly educated entrepreneurial leaders, but evolved in a way that marginalized this vision in favor of training in "management" as a profession that used scientific methods to produce, test, and codify knowledge. The post-World War II resurgence of student and public interest in entrepreneurship education in response to the perceived dangers of managerialism and the stagnation of large corporations in the 1960s and 1970s was initially served by business associations, government agencies, local nonprofit organizations, and vocational schools, but again with very different social imaginaries of entrepreneurship in Germany in comparison to the United States. Universities, in contrast, were relatively slow adopters of entrepreneurship education because their epistemic and pedagogical aims fit poorly into the disciplinary conventions and standards that had evolved in the modern research university. Understanding this longer history helps us grasp the nature and limitations of entrepreneurship education and knowledge today, and provides a vantage point from which to more fully appreciate its promise as what we call the "undisciplined discipline."

The Social Imaginaries of Entrepreneurship Education

To examine the deeper history of entrepreneurship education, we adopt a theoretical frame that allows us to identify historical variations and changes in entrepreneurship education in relation to its social, cultural, and political contexts (Welter, 2011). In particular, we draw on the theoretical perspective that characterizes "entrepreneurship as social change" rather than "entrepreneurship as positive economic activity" (Calás, Smircich, & Bourne, 2009: 552; Rindova et al., 2009). The scholarship that takes such an approach – sometimes embracing the term "entrepreneuring" – conceives of entrepreneurship in terms of "efforts to create something new – a new idea, a new thing, a new institution, a new market, a new set of possibilities for the entrepreneuring individual or group and/or for other actors in the environment" (Rindova et al., 2009: 478). The perspective has its roots in the Schumpeterian concept of entrepreneurship as involving human autonomy and agency to contest a status quo in order to create a desired change in the modern capitalist world (Swedberg, 2006).

Following Laine and Kibler (2020) and Dey and Mason (2018), we see the concept of entrepreneurial autonomy not only as an academic theory of entrepreneurship but also as embedded in what the Canadian philosopher Charles Taylor termed modern social imaginaries. Taylor (2004: 23) defined a "social imaginary" as a widely held conception of "moral order" that defines the way people "imagine their social existence, how they fit together with others, how things go on between them and their fellows, the expectations that are normally met, and the deeper normative notions and images that underlie all these expectations." Social imaginaries, Taylor emphasized, may be based in but are distinct from academic theories in that they may not involve conscious theorizing, are widely held by a community of people, and form a common understanding that legitimizes social action. According to Taylor (2004), modern Western social imaginaries in which self-determined humans exchange goods and services within a mutually beneficial economy replaced classical and pre-modern imaginaries in which one's place was divinely determined and hierarchically organized.

A defining aspect of the modern social imaginaries of entrepreneurship is the extent to which entrepreneurship's conception of agency rests on a robust premise of human freedom. Taylor (2004: 49–50) attributed this emphasis on freedom to the influence of Enlightenment thought over the public imagination, and to the "great disembedding" that accompanied the "unprecedented primacy" it ascribed to the individual in moral, economic, and political thought. Following Rindova et al. (2009), a number of entrepreneurship scholars have come to view the premises for treating entrepreneurship within this line of reasoning as an act of emancipation (Alkhaled & Berglund, 2018; Calás et al., 2009). Most of this scholarship defines "emancipation," in the context of entrepreneurship, as an act of breaking free from a status quo (e.g. Alkhaled & Berglund, 2018). But as Taylor (2004) emphasized, modern social imaginaries couple the exercise of human free will to a conception of the common good. Entrepreneurial autonomy, like most conceptions of freedom, is thus premised on the notion that there is a relationship between entrepreneurial action and a mutually beneficial common good.

Focusing on the changing social imaginaries of entrepreneurship, including their conceptions of the relationship between entrepreneurial freedom and their vision of the common good, provides a robust approach to producing a more socially and culturally contextualized history of entrepreneurship education for several reasons. First, as education scholar O'Neill (2016) observed, educational institutions explicitly or implicitly reflect the social imaginaries of the societies and historical periods in which they are embedded. Thus, they help us take context into account, especially since the concept of entrepreneurial emancipation only makes sense "in relation to a status quo" (Rindova et al., 2009). Examining the prevailing social imaginary of entrepreneurship in any historical time and place hence involves asking what social status quo is legitimate entrepreneurial action presumed to be challenging.

Second, as Laine and Kibler (2020: 2) pointed out, "social imaginations […] change over time," thus allowing us to consider how the meanings of entrepreneurship education evolved over time and how these shaped educational aims, practices, and institutions. Third, thinking in terms of social imaginaries allows us to examine the moral foundations of entrepreneurship education and identify its social and ideological relationship to a society at large.

Scope and Methods

Our study is designed as an "analytically structured history" (Rowlinson, Hassard, & Decker, 2014) in that it uses the core construct of the "social imaginaries of entrepreneurship" to examine the evolving organization and practices of entrepreneurship pedagogy in the United States and Germany between 1800 and 2020. We begin in the early 19th century as this period aligns with Taylor's (2004) account of the origins of modern social imaginaries and because the decline in traditional apprenticeships based on the legal and social authority of masters and the emergence of new educational models to fill this void constituted a major shift in the educational landscape throughout much of the Western world (Aldrich, 1999). Building on Godley and Hamilton (2020), we use a comparative history design to identify similarities and differences in the evolution of entrepreneurship education and to move beyond U.S.-centric accounts. Germany represents an especially useful point of comparison because its pioneering and influential role in the development of business education had a strong influence on similar developments in much of Continental Europe and in Japan (Engwall, 2004; Locke, 2008), and because its role in the development of the model of the modern research university had a more general long-term influence on higher education (Rüegg, 2004).

Our interpretive approach is based on the application of cultural history methods to entrepreneurship research (Wadhwani et al., 2020). Specifically, we draw on a variety of primary sources – including archival records of early educational institutions, textbooks, memoirs, regulatory reports, and published pamphlets – and interpret them using hermeneutic methods (Kipping, Wadhwani, & Bucheli, 2013). Our interpretive aim is to understand the "social imaginaries of entrepreneurship" within which particular authors and texts made sense of and legitimized their educational practices.

The relationship between our theory and our methods accounts for how we interpreted entrepreneurship education over two centuries, during which language, categories, and meanings of both entrepreneurship and education changed significantly (Koselleck & Presner, 2002). In line with our theory, we define "entrepreneurship education" as the forms of business education that prepare students to create businesses in ways that foster autonomy and emancipation from an imagined social status quo. Hence, we identify sources and historical developments in 19th- and 20th- century Germany and the United States that validate and give credence to this definition. In line with Engwall et al.'s (2016) treatment of "management," these sources are not limited to those produced by formal educational institutions, but also include educationally motived publishing and lecturing outside of formal educational institutions and involving a wide array of organizations. In interpreting these sources, we adopt a hermeneutic stance through which we seek to understand the definitions, meanings, and moral reasoning that actors themselves ascribed to the social context for their actions, including the language and distinctions through which these actors saw and ascribed legitimacy to the aims, epistemologies, and practices of actions (Stutz & Sachs, 2018). In short, we seek to understand the historically situated social imaginary of entrepreneurship in which entrepreneurial educators acted, especially their constructs of the character of entrepreneurial freedom and agency and the morally legitimate ends to which it could be applied. We develop our three-period structure based on our interpretation of major changes in the social imaginaries of entrepreneurship and developed our historical narrative based on actors' own accounts of the moral illegitimacy of a declining social imaginary and the legitimacy of an ascendant one (Wadhwani & Decker, 2018).

A History of Entrepreneurship Education

Entrepreneurial Virtues in an Industrializing World (c. 1800-1880)

Modern entrepreneurship education in the West, with its connotations of preparing students for economic autonomy and self-determination, can be traced to the rise of Enlightenment political thought about liberty. Rejecting age-old conceptions of a people's political dependence on church or state, intellectuals from John Locke to John Stuart Mill developed a notion of political sovereignty that was closely tied to economic self-determination. Political freedom, it stood to reason, required economic foundations in order for people to be capable of self-governance (Pocock, 1972).

Within Western systems of training and education, this political movement, along with the rise of wage labor relations, led to the rejection of hierarchical systems of master and apprentice, in which masters held almost complete social and political authority over their charges (Ruef, 2020). Economic and political independence could not rest on an educational institution deeply embedded in dependence (Rorabaugh, 1986). These educational movements took on different meanings and forms in Germany and in the United States that depended on each nation's specific understanding of both the threats to and the appropriate ends of freedom.

United States.

In the United States, the emancipatory goals of "practical" education in a trade were infused with an ascendant republican ideology that rejected European conventions of social hierarchy in favor of a citizenry capable of the character and virtues of self-government (Pocock, 1972). As early as the 18^{th} century, but gaining considerable momentum in the 19^{th} century, this education took the form of published pamphlets, magazine articles, and books that emphasized the importance of virtue and character as much as the knowledge and skills required in trade. The decline of apprenticeship was replaced by publications, public lectures, and apprentice's libraries in which the young could educate themselves and acquire both the skills and mindset required to make their own way in trade, avoiding the economic dependence associated with the kind of economic and political corruption that was thought to undermine republics since classical times (Wilentz, 2004).

No figure served as a more influential teacher and model of that ethos than Benjamin Franklin (Reinert, 2015). An ideal type as much as an actual historical figure, Franklin was both a high-minded modern man who rejected social hierarchy based on political principle and a practical entrepreneur who navigated social and commercial relationships with street-smart skills. Though Franklin lived in the 18th century, his influence as an educator and exemplar grew even larger in the 19th century due to the enormous popularity of his publications. *Advice to a Young Tradesman* (Franklin, 1748) and *Way to Wealth* (Franklin, 1758) were published in dozens of languages and hundreds of editions (Reinert, 2015). In these handbooks, Franklin focused on "industry" and "thrift" as the crucial attributes of successful entrepreneurship and the essential qualities of an economically virtuous citizenry. These attributes and practices not only built the character required to be a good entrepreneur, Franklin argued, but also formed the basis of credit – and hence of access to capital – for young entrepreneurs.

Franklin's influence on entrepreneurship education is difficult to overestimate and was reflected not only in the advice and guidance he espoused but also in his own story. Franklin's (1793) autobiography, which narrates his rejection of apprenticeship and his experience in making his own way in the "foreign country" of Pennsylvania as an upstart printer, became its own textbook in entrepreneurship (Rorabaugh, 1986). It is also arguably the most influential of a genre that quickly became a mainstay of entrepreneurship education: the entrepreneurial biography. In the decades between the 1820s and the 1860s, publishers in the United States offered a growing number of books and pamphlets that focused on the lives of famous entrepreneurs as models for aspiring businessmen. These profiles offered key lessons as a form of pedagogical knowledge and drew on the ancient Greek tradition of *historia magistra vitae,* or history as life's teacher (Koselleck, 2017). Freeman Hunt's *Merchants' Magazine and Commercial Review*, arguably the most important publication for young

American businessmen around the mid-19th century, published regular profiles of founders of notable institutions (e.g., Hunt, 1854).

Entrepreneurial knowledge was disseminated in a number of new forms. First, the publication of advice books and manuals for those looking to become independent tradesmen or merchants emerged as an industry unto itself. Most of these, published in Franklin's shadow, combined practical and moral advice and intimated a close relationship between business success and personal virtue. Among other topics, they addressed how to seek commercial advice and partners and the high failure rate among those who ventured on their own (Rorabaugh, 1986: 160). Second, "mechanics libraries" and "apprentice's libraries" were established in most commercial cities as a means not only of providing access to practical and moral knowledge to aspiring tradesmen, but also as a form of community building. Finally, lectures on commerce and the trades reflected the values of the American Lyceum Movement, which sought to cultivate self-improvement through free public lectures. As one lyceum orator explained: "Where liberty is given to each one to act freely for himself, and by all lawful means to better his condition, the consequence is inevitably what we see – an universal and unprecedented activity among all the classes of society, in all the departments of human industry," explained one lyceum orator (Dewey, 1838: 10).

By the middle of the 19th century, a number of small private schools were established for tradespeople and merchants in the major commercial cities of the Northeastern and Midwestern United States. The first of these appear to have been founded as early as the 1820s as essentially little more than tutoring businesses, but some of them had grown into modest private academies by the time of the Civil War (Conn, 2019). Their curriculum was typically divided into "theoretical" classes in business law, accounting, penmanship, and political economy, as well as an extensive "practical" curriculum that involved elaborate simulations in which students established a business by making initial investments, engaged in transactions with suppliers and customers, and pursued strategies involving leveraging banks, the post office, the telegraph, and insurance companies. The education was often rounded out with invited public lectures by political, commercial, or religious leaders as part of the Lyceum Movement.

The history of Eastman Business College illustrates well the trajectory of the commercial college movement as a whole. H.G. Eastman was a lawyer, abolitionist, and the nephew of a prominent commercial college proprietor from Rochester, New York, who set up his first school in Oswego in 1855. Eastman pioneered the development of a simulated market as part of his curriculum and incorporated an impressive set of public lectures on political, literary, and moral topics that featured some of the country's leading figures. Sensing the opportunity for business education in the West, Eastman decamped to St. Louis in 1858, but while his new school was commercially successful his list of speakers, which included strong abolitionists and founders of the newly established Republican Party, generated a political firestorm in a city edging toward the Civil War. Eastman retreated back East to Poughkeepsie to design a business college that was "a fitting finale to such a curriculum as that of Yale, Harvard, Hamilton, or Union (Eastman Business College, 1875: 10)."

The curriculum was divided into three stages that lasted approximately four weeks each. The first stage, designated "preparatory" or "theoretical," introduced students to bookkeeping, commercial law, political economy, and penmanship in a lecture-based format.

The Eastman College student guidebook introduced the remaining, practical phases of the curriculum, labelled "junior" and senior," by emphasizing: "You are here enabled to gain a knowledge of *men* and *things*" (Eastman Business College, 1866: 3). In an elaborate college-wide simulation, the school's main building was laid out as a small economy, complete with simulated banks, insurance companies, post offices, and telegraph offices, to teach students to navigate the practical and competitive world of commerce. In the school's simulated merchant business, students purchased and resold clothing inventory, real estate, and stock in addition to managing all other aspects of their business. Students then rotated through other positions in the school's simulated offices and companies (Eastman Business College, 1866).

By the late 19th century, however, the character of commercial colleges like Eastman's was changing dramatically. Responding to the rapidly growing demand for skilled office workers – telegraph operators, clerical assistants, and office managers – many of them reoriented their curricula to focus on specific technical skills and clerical occupations. Some – like Bryant and Stratton College – expanded rapidly, using franchise operations and highly standardize curricula designed to credential graduates for entry-level positions (Gulski, 1973). This rapid expansion and standardization left little time for the broader education Eastman had initially promoted. The business colleges "may qualify a young man to be a good clerk, but they do not prepare him to be merchant in the wider and nobler meaning of the word," complained James Hodges (1887: 465), the co-founder of the Hodges Brothers trading firm and mayor of Baltimore. "They give a technical, but not a liberal education...to look beyond the limited horizon of his personal occupation and interests."

Germany.

Nineteenth-century Germany had a very different social imaginary shaping entrepreneurship education. In contrast to the United States, German entrepreneurship education was largely organized and funded by state governments and set up as part of a broader political agenda that promoted industrialization and ultimately aimed at strengthening the economic position of the German states (Kocka, 1975). Shaped by the historical experience of a set of loosely affiliated states facing growing foreign competition from British manufacturing in the wake of the Industrial Revolution, German entrepreneurship education was oriented toward cultivating emerging industry and bolstering national economic autarky (König, 1990). The focus on the strength of the state and the economic independence of the nation reflected the historical influence of "Cameralism," a German version of mercantilism that conceived the state as the prime beneficiary of economic activity (Wakefield, 2009). However, state officials influenced by Adam Smith's idea of a free-market economy rejected the old cameralist notion that the state must be the prime initiator of entrepreneurial activities and encouraged private entrepreneurs to establish industrial firms. Hence, educational initiatives set up in German states in the early 19th century focused on new industrial technologies, engineering skills, and commercial competencies to prepare entrepreneurs who were free to make profits and decide what to produce but, in the process, contributed to the economic strength of the German states (Mieck, 1965).

The German authorities identified a lack of technical and commercial competences as the prime obstacle for industrialization. As the Humboldtian universities, delivering an education predominantly in classics and humanities for the elite, refused the idea of integrating technical and commercial education into their curricula, the German authorities established commercial schools (Gewerbeschulen), which varied substantially in terms of curricula (e.g., some included languages, natural sciences, commerce, and administration), educational quality, and educational aims (König, 1990). In addition to formal education, state authorities promoted exhibitions and competitions for technical innovations to strengthen the transmission of technical-commercial knowledge and to create incentives for entrepreneurial action. The emphasis on industry creation was picked up by liberal media ("Kaufmann und Fabrikant," 1856), which promoted the social imaginary of an economically strong Germany based on the idea of a unified nation (Kocka, 1975).

From the 1820s onwards, many of the commercial schools were transformed into higher polytechnical schools, the birthplaces of early modern entrepreneurship education in Germany. The curriculum of the new schools initially entailed a combination of technical and commercial subjects, such as political economy, commercial geography, commercial history, bookkeeping, commercial correspondence, commodity composition, and calligraphy (Passant, 2019). More than that, the higher polytechnical schools even offered courses specialized in industrial entrepreneurship with topics such as founding, staffing, financing, organizing, and managing an industrial company (Emminghaus, 1868; Haushofer, 1874).

The higher polytechnical school in Carlsruhe (Karlsruhe) established in 1825 served as a role model for higher polytechnical schools in Germany (Passant, 2016). In its early years, the school offered a two-year program for aspiring "manufacturers and entrepreneurs" (*Fabrikanten und Unternehmer*), which entailed a variety of technical subjects as well as classes on general commerce and trade (Polytechnische Hochschule Karlsruhe, 1832). After a curriculum reform in 1865 the school added commercial courses to all civil engineering programs, among them, an entrepreneurship course called "General Industrial Commercial Doctrine" (*Allgemeine Gewerkslehre)* taught by Arwed Emminghaus (Polytechnische Hochschule Karlsruhe, 1865). Considered one of the intellectual pioneers of German business economics (*Betriebswirtschaftslehre*) (Klein-Blenkers, 1996), Emminghaus published a textbook, *Allgemeine Gewerkslehre*, in

1868 that included not only an overview of the rationale and content of an early modern entrepreneurship education course, but also defined the role, rewards, and responsibilities of industrial entrepreneurs in Germany. The book depicted the industrial entrepreneur as a man of character and virtue, who, in his pursuit of profits, also contributes to economic progress and societal prosperity. This role required a combination of comprehensive theoretical education in technology and entrepreneurial knowledge and skills, such as finding and combining resources, managing workers, and understanding entrepreneurial finance, in addition to practical work experiences (Emminghaus, 1868).

However, in the 1870s, the higher polytechnical schools abandoned their curriculum on entrepreneurship in favor of a narrower focus on engineering as an academic discipline and profession (Passant, 2019). This shift was motivated by the schools' "teaching staff, who aspired towards full recognition by the established universities" (Berghoff & Moller, 1994: 271). To improve their academic status, technical courses became increasingly theoretical and scientific while commercial and entrepreneurship courses were either eliminated or replaced with economics, a well-established discipline (Locke, 1984). At the polytechnical school in Carlsruhe, all commercial courses were shut down in 1873 and it was more than a hundred years before students could take an entrepreneurship course again (Karlsruhe Institute of Technology, 1999; Polytechnische Hochschule Karlsruhe, 1865).

Rise of University-Based Business Education (c. 1880-1950)

In the late 19th century, education reformers in both the United States and Germany began to articulate new social imaginaries for entrepreneurship education that sought to take into account the increasing scale of domestic and international trade and the emergence of complex corporations. They rejected older conceptions of entrepreneurship based on small business or industrial start-ups as antiquated dogma that had itself become part of a social status quo, hindering the pursuit of entrepreneurial opportunities for better organizational coordination and control in service of the common good. In doing so, they reimagined entrepreneurial freedom in a way that rejected classical liberalism's emphasis on the autonomous individual in favor of a moral vision based in the social sciences of pragmatic experimentation, group dynamics, and mutualism. And they looked to the university as the only institution that could prepare such entrepreneurial leaders broadly enough to pursue such a vision.

United States.

Joseph Wharton, the benefactor of what is considered the first freestanding business school within a university, heralded from a long line of Philadelphia merchants steeped in classical republican moral values. But his vision for the Wharton School was forged through his own entrepreneurial experience in the increasingly complex industrial world of metal mining, processing, and international trade (Yates, 1987). The trade in nickel and steel alone required knowledge of developments in an increasingly globalized world as well as the ability to lobby skillfully to shape trade policy (Sass, 1982: 19). The commercial colleges' narrow focus on technical knowledge and clerical skills, he argued, made them incapable of preparing modern entrepreneurs for this increasingly complex world. Ambitious young businesspeople needed a university-based business education steeped in "broad principles deduced from all human knowledge, and ground in science, as well as in art, pupils who are thereby fitted both to practice what they have learned and to become themselves teachers and discoverers" (Sass, 1982: 22). As Stephen Sass has explained in his careful history of the Wharton

School, Joseph Wharton sought to create a “new market for an entrepreneurial service—a market for entrepreneurial education” (Sass, 1982: 19).

The contention that a broad university-based business education was the best way to cultivate well-rounded leaders capable of becoming entrepreneurs as well as political leaders and effective managers emerged in the late 19th century. At Wharton, this meant a course of study that introduced students to accounting and commercial law in their later undergraduate years but especially to political economy, which included elements of what we would today categorize as moral philosophy, economic history, and logic, in addition to classical and heterodox economic thought. “Students of the economy did not unfold a chain of rules and reasons as did accountants and lawyers,” Sass (1982: 37) noted. “They had to use the apparatus of scientific investigation: induction and deduction—the interpretation of evidence and logical reasoning.”

Though Penn was the only one to establish a separate school, many other late 19th-century American universities revised their curricula to introduce social science courses that prepared students broadly for entrepreneurship and business. Explaining how universities had adjusted to the needs of their students, a 1903 conference report of business educators explained: “Just as modern conditions have made necessary special preparation for the direction of modern industry in the school of engineering, so modern business demands preparation of young men to act as entrepreneurs, employers, and supervisors of business” (Loos, 1903: 548). Indeed, for nearly two decades after its founding in 1881, Wharton was the only separate school of business; universities simply incorporated business-relevant education as an extension of a liberal arts education designed to produce well-rounded citizens for the world they encountered.

The social imaginary underlying the new vision of university-based business education was based on a fundamentally novel moral formulation of the relationship between human freedom and the common good. Moral philosophers like John Dewey questioned antiquated formalist conceptions of individual human freedom as solipsistic and articulated an alternative concept based in "the development of a shared culture" (Dewey & Tufts, 1906: 129). Meaningful entrepreneurial freedom, in this vision, took a pragmatic bent in the human capacity for inquiry and experimentation across a broad range of areas of knowledge. A liberal education could play a central role in deepening this intrinsically social character of freedom because it "trained powers of initiative and reflection requisite for free preference and for circumspect and far-seeing desires" (Dewey & Tufts, 1906: 438).

Yet the actual practice of university-based business education soon drifted away from this social imaginary of entrepreneurship education after the turn of the century. Between 1900 and 1913, 25 universities established separate schools of business based on the premise of training professional salaried managers rather than liberally educated entrepreneurial leaders. While the liberal arts model persisted in some places, university administrators increasingly treated business as a distinct and specialized form of education. Growing numbers of students saw employment opportunities in the emerging occupations that technological changes and corporations had created and sought classes and programs that could be relevant to these goals. Corporations not only sought employees capable of staffing such positions, but also came under increasing public scrutiny for the concentrations of wealth and power they were accumulating and controlling, and looked for ways to politically and morally legitimize their power over labor and markets. Caught between these shifting pressures, universities increasingly introduced the separate business school as a way to legitimize university-based business education based on the premise that management was a "profession," and that management education required a professional school analogous to those serving medicine and the law (Khurana, 2007).

The shift in the focus of university-based business education was clearly reflected in the curricula of business schools by the 1920s, including the one Joseph Wharton had funded. Emory Johnson, Wharton's dean from 1919 until 1933, pushed the school's programs to specialize by occupation and industry. Fully reversing Wharton's identity as a school steeped in educating business leaders within a liberal arts tradition, Johnson introduced commercially successful programs in accounting and insurance and fragmented the general curriculum to emphasize specializations in finance, marketing, and production. Economics classes embraced neo-classical orthodoxy and an essentially value-free technical stance, fundamentally rejecting the political economic premises on which Wharton was founded. Taking over Wharton in the mid 1930s, its new dean Joseph Willits pondered a question that ended up being repeatedly asked for the remainder of the century: "Have we not put too much emphasis on turning out business technicians alone, and paid too little attention to the development of business men with a sense of statesmanship?" (Khurana, 2007: 183).

Germany.

In Germany, entrepreneurship education reappeared in the higher education system of as a response to a legitimacy crisis of German businessmen. The country's economy, thanks in part to earlier generations of German entrepreneurs, had come to rival Britain's and in many ways surpassed its former competitor in the high-technology industries of the Second Industrial Revolution (Fear, 1997). Yet German entrepreneurs continued to be looked down upon by social elites as self-interested actors focused narrowly on the pursuit of personal wealth

(Böhmert, 1897). Envying lawyers and doctors for their status as "legitimate" members of the middle class and confronting an increasingly well-organized and politically recognized working class, German businessmen pursued the creation of a university degree to secure their social status and moral standing in the country's corporatist political order (Redlich, 1957). This social imaginary not only shaped the reappearance of entrepreneurship education but also would eventually lead to its demise.

Entrepreneurship education reappeared in German higher education with the formation of the higher trade schools (*Handelshochschulen*), established between 1898 and 1920. Funded primarily by the business community, the higher trade schools initially aimed at educating entrepreneurs and business leaders with a combination of broad humanist subjects and practical business knowledge (Meyer, 1998). Their early curricula included courses in established academic disciplines such as law, economics, history, and geography, and more practical subjects such as bookkeeping, commercial technique, arithmetic, and correspondence (Tribe, 1994). The idea was that humanist subjects ensured academic and social legitimacy, while commercial ones provided use-value for practice. However, the focus on educating a civic and virtuous entrepreneur, equipped for high society and business alike, soon vanished in favor of an education for the employed manager based on codified and specialized business knowledge (Locke, 1984), much as it did in the United States.

The higher trade school in Leipzig, Handelshochschule Leipzig (HHL), the first of its kind in Germany, serves as a good example to illustrate the shift from entrepreneurship to management education. Established in 1898, the school aimed to educate those "that will be part of the business class" (Ehrenberg, 1897: 1). Eugen Schmalenbach, a graduate of HHL, and later, one of the founding fathers of business economics, specified: "We wanted to educate the future entrepreneur at the higher trade school [which meant not] to fill his head with information [but] to impart on him the entrepreneurial way of thinking in the best sense of the word; which means to think in a collective way" (Schmalenbach, 1920: 106). This aim could be reached, he posited, with a curriculum that consisted of broad liberal subjects such as law, economics, geography, literature, history, and philosophy taught by professors from the University of Leipzig and practical courses in commercial arithmetic, bookkeeping, and merchants' correspondence supplied by teachers from a vocational commercial school in the city (Handelshochschule Leipzig, 1898). Like commercial colleges in the United States, HHL had a model bureau (*Musterkontor*) for experiential learning in which students practiced business processes (Franz, 1998: 73–74). Over the first decades, HHL gradually replaced the liberal and practical courses with theoretical business subjects (Handelshochschule Leipzig, 1914). The focus shifted from educating well-rounded entrepreneurs to educating specialized managers.

The transformation was paralleled by the formation of business economics as a discipline. Faculty at the higher trade schools pushed towards the formation of a business discipline, which helped to fulfill the aspiration of the business class for a university degree equal to those of doctors and lawyers. The university degree (*Diplom-Kaufmann*) brought social prestige while also establishing business as a morally sound discipline that contributes to society. After significant scholarly debate about its aim and purpose (*Methodenstreit*), the new discipline centered on the company as an extant entity for which questions of efficiency became the paradigm (Locke, 1984). Business efficiency was understood as a contributor to common welfare and not only to individual profit making (Kieser, 2004). It was argued that there should no longer be a difference between a business education for entrepreneurs and one for employed managers, as both are commanders of codified business knowledge and scientific principles (Thieß, 1914).

The higher trade schools fulfilled their mission to socially legitimize the business class by establishing a specialized discipline, and they were also successful at educating entrepreneurs. In a statistic of trade school graduates from 1924, independent businessmen formed the largest group (Walb, 1927 as cited in Lindenfeld, 1990). By the end of the 1920s, business economics was a legitimate academic discipline with a "self-recruiting, orthodox elite comparable in training and outlook to the elite that held faculty positions in older university disciplines" (Locke, 1985: 234). Thus, the higher trade schools were either integrated into the universities or closed down entirely by 1945, while business economics programs were established in almost all German universities (Franz, 1998). In many ways, the higher trade schools followed the same path as the polytechnical schools in the earlier period; both started outside of the established universities with a rather broad and unscientific curriculum, gave birth to their respective disciplines, and became integrated into the German university system (Tribe, 1994).

During the Third Reich (1933-1945), business economics and its focus on large corporations "came under attack for installing a liberal, capitalist spirit, and prioritizing self-interest" (Engwall et al., 2016: 103). Instead, the Nazis rhetorically celebrated the "Mittelstand," referring to independent, owner-managed companies (von Saldern, 1979). Business economics as a discipline survived this time and continued its development path after World War II. The years after the war until 1970 were a period of integration of existent research areas and gradual addition of new fields influenced by US business schools under the scope of business economics (Klein-Blenker & Reiß, 1993). The pedagogy and general aim of higher business education in Germany remained unchanged.

The Rebirth of Entrepreneurial Education (c. 1950-2020)

The growth of entrepreneurship education in the last quarter of the 20th century is most often attributed to the economic crisis of big business in the 1970s and the need for business students to find salaried employment. But its origins also lay in a growing critique of big business, and of management as a profession in particular, that had begun brewing much earlier. Social critics charged that management as a profession had failed to deliver on its promise of making business more rational and socially just and had in fact systematically constrained the humane qualities of individual salaried managers to judge and act for themselves. Economic critics added that the ethos of managerialism and planning had constrained competition, stifled innovation, and undermined individual liberty. The economic crisis of the 1970s hence only served as powerful confirmation of a new social imaginary of entrepreneurship that had begun to see management careers – along with management education – as a constraint on a more authentic human capacity to innovate and compete, free from the contrived hierarchies of corporations.

United States.

In contrast to common narratives, government, and private business organizations, and not the American business schools, were the first to re-introduce entrepreneurship education in the United States. The Small Business Administration (SBA), established under the Eisenhower administration in 1953, was the frontrunner in this development and revived entrepreneurship education as a way to strengthen individual economic autonomy and the creation of small businesses (Bean, 2001). In opposition to "big business dogma," it was the SBA's mission to provide support for small business entrepreneurs in forms of capital, contracts, and counseling (Schoen, 1957). Eugene Foley, the administrator of the SBA from 1963 to 1965, pointed out that the term “counseling” “covers a tremendous range of topics and a variety of activities including educational courses” (Foley, 1965: 2). In response to growing interest and demand in the 1970s and 1980s, the SBA set up numerous entrepreneurship education programs. The courses and programs, often jointly offered with chambers of commerce and trade or local community colleges, were broad and practical, covering a wide array of business subjects such as taxation, strategy, market research, and production, and were delivered with a variety of pedagogies ranging from lectures and discussion-based formats to forms of experiential learning such as role plays and simulations of concrete business situations (Luchsinger & Luchsinger, 1977; Solomon & Carney, 1985).

When American business schools integrated entrepreneurship education into their curricula in the 1970s and 1980s, the focus shifted from small businesses to entrepreneurship for high-growth companies, a narrative that aligned much better with the big-business focus of business schools (Carland, Hoy, Boulton, & Carland, 1984). In light of the economic stagnation of large corporations of the 1970s, business students increasingly demanded courses and programs providing an alternative career path that corresponded to their need for authenticity and purpose. Business students in the United States, tired of the big-business orientation that favored analytics and tools over skills and mindset, demanded entrepreneurship courses (Solomon & Fernald, 1991). Within higher education in the United States, entrepreneurship education courses and programs have seen unprecedented growth since the 1980s (Katz, 2003; Kuratko, 2005). This most recent wave of entrepreneurship education in the United States has embraced a neoliberal social imaginary in which entrepreneurial freedom in the form of startups has disrupted the status quo of corporate stagnation and managerial complacency in order to once again stimulate innovation and economic growth for the common good.

Even though entrepreneurship education is comparatively well established within higher education in the United States, it has still suffered from skepticism regarding its character as a legitimate discipline (Finkle & Deeds, 2001). Critics of early entrepreneurship education believed that entrepreneurship lacked the distinct domain of knowledge required to form a legitimate and independent discipline at business schools, which underwent a notable process of "scientification" after the 1960s (Khurana, 2007). Seeking academic legitimacy as a discipline, entrepreneurship scholars devised the metaphysical notion of "opportunity" as the distinctive domain of entrepreneurship (Shane & Venkataraman, 2000). At the same time, entrepreneurship educators moved further away from teaching codified scientific knowledge and towards teaching the entrepreneurial process. More recently, they have adopted cognitive and methodological conceptions of being and acting entrepreneurially (Neck & Greene, 2011). Nevertheless, entrepreneurship at business schools today remains in a paradoxical position of drawing strong interest from students while still facing skepticism from scholars from other business disciplines (McMullen, 2019).

Germany.

As it did in the United States, entrepreneurship education reemerged in post-World War II Germany in collective and public efforts to support small and medium-sized businesses, rather than in universities. In the "miracle years" of the 1950s and 1960s, German policymakers and public officials sought to navigate a "third way" between unfettered free-market capitalism and socialism by pursuing the notion of a "social market economy" that could capitalize on the advantages of the markets while harnessing them to ensure balanced development (Giersch, Paqué, & Schmieding, 1994). A central aspect of the ordoliberal imaginary of the social market economy was re-envisioning the role of *Mittelstand* firms, Germany's historically vibrant small and medium-sized enterprises, as those embracing an ethos of independent ownership and societal responsibility and opposed to the excesses of big businesses controlled by salaried managers (Welter, 2018).

Alarmed by the decline of *Mittelstand* firms throughout the 1960s and 1970s, chambers of industry and trade (*Industrie- und Handelskammer*) re-introduced entrepreneurship education programs in the 1970s. The chambers identified a negative public image of the entrepreneur and a lack of business knowledge as the main barriers for entrepreneurship. In response, they created educational programs, some of them inspired by those of the SBA (Naujoks, 1978) that entailed basic business knowledge and, occasionally, elements of personality development (Vogel, 1979). The chambers' attempts were reinforced by increased interest in entrepreneurship from the German media (Rosellen, 1984), which promoted the societal shift from the entrepreneur as a man of yesterday towards the image of an important figure contributing to society and the economy. In particular, younger generations began to see entrepreneurship as an authentic, exciting, and purposeful path to self-fulfillment (Bögenhold, 1999).

Besides the chambers of industry and commerce, it was most notably German banks that offered entrepreneurship education. The German banks, especially the government-sponsored *Sparkassen,* had a long tradition of supporting the small and medium-sized companies of the *Mittelstand* (Lubinski, 2022). Seeing how quickly many of the small *Mittelstand* firms transformed into profitable clients during the post-war boom, banks provided guidance, planning tools, and educational seminars for new entrepreneurs (Deutsche Bank, 1981).

German universities were hesitant to integrate entrepreneurship education into their curricula. While the more practice-oriented universities and colleges (*Fachhochschulen*) began with entrepreneurship education in the 1980s (Uni- und Berufswahl, 1981), it was not until 1997 that the first entrepreneurship chair was established at a university. Prior to that, influential scholars of business economics, such as Horst Albach (1979: 538) argued that studying business economics was the ideal preparation for entrepreneurs and salaried managers alike. Others openly admitted that the focus on functional business processes in large companies was ill-suited to educate entrepreneurs (Szyperski, 1980). Critics pointed to a societal and economic need for entrepreneurship education as well as to the precedents set by U.S. universities, but business economics scholars still remained wedded to providing codified knowledge for the management of established businesses (Kipping, 1998). Unsurprisingly, the establishment of the first university chairs for entrepreneurship in the late 1990s and early 2000s was grounded not so much in scholarly interest as in political considerations and push from the business community.

Since the turn of the century, entrepreneurship education has proliferated rapidly in higher education in Germany. As in the United States, entrepreneurship education courses can be found at almost all German universities, while its research struggles to gain legitimacy within the business economics discipline (Klandt, 2018). Large numbers of accelerators, incubators, consultancies, and other private entrepreneurship support organizations entered the scene by providing a mix of educational formats related to entrepreneurship (Zinke et al., 2018). However, entrepreneurship education focused on high-growth firms a model imported from the United States stands in some opposition to the German *Mittelstand* tradition of entrepreneurship as an ethos around the responsible owner-manager contributing to the social good.

Table 4:

Social Imaginaries and Emergent Forms of Entrepreneurship Education in the United States and Germany, 1800 - 2020

	Early Modern Period (c. 1800 – 1880)	Modern Period (c. 1880 – 1950)	Rebirth Period (c. 1950 – 2020)
	United States		
Social Imaginary	Republicanism	Corporate Liberalism	Neoliberalism
Challenge	Self-Government	Coordination & Control	Corporate Stagnation
Initial Aim	Independent Businessman	Well-Rounded Entrepreneurial Leader	Business Founder
Organizational Form	Commercial Colleges, Lyceums & Magazines	University-Based Business Schools & Departments	SBA, Community Colleges (later) Universities & Business Schools
	Germany		
Social Imaginary	State Industrialism	Corporatism	Ordoliberalism
Challenge	Foreign Economic Competition	Legitimacy Crisis of Business Class	Domestic Economic Competition
Initial Aim	Industrial Entrepreneur	Well-Rounded Business Class	Mittelstand /Independent Entrepreneur
Organizational Form	Polytechnical Schools, Exhibitions & Competitions	Higher Trade Schools	Chambers of Industry & Trade, (later) University Colleges & Universities

Discussion and Conclusion

Table 4 provides an overview of selected aspects of our historical narrative. For each period and country, we identify an ascendant social imaginary that theorized a relationship between the exercise of entrepreneurial freedom on one hand and a vision of the common good on the other. In all cases, the relationship between entrepreneurship and the common good was premised on the contention that entrepreneurial autonomy was justified because it challenged the status quo in a way that was mutually beneficial. However, each social imaginary articulated a unique, historically situated moral vision of the common good and of the central challenge posed by the status quo. Hence, early 19th-century entrepreneurship education in the United States was shaped by republican political theories of individual economic independence as essential to the challenge of self-governance in a new democratic nation, whereas in Germany it was shaped by the promise of developing strong industrial states capable of competing internationally against the ascendant economic might of the United Kingdom. As our historical narrative shows, these social imaginaries in turn shaped the design of entrepreneurship education in each period, including perceptions of the ideal-type entrepreneur who was being trained, the choice of curricular content and methods, and the organizational forms through which entrepreneurial action was pursued.

The remainder of this discussion draws out the implications of this deeper history for entrepreneurship education today, including (a) how entrepreneurship education evolves, (b) the nature of entrepreneurial knowledge, and (c) the relationship between entrepreneurship education and the university.

The Social Imaginary of Entrepreneurship Today

Our historical narrative demonstrates that entrepreneurship education does not evolve in a linear fashion but rather experiences periods of punctuated change when new social imaginaries arise that challenge new understandings of the status quo. As **table 4** shows, the end of the 19th century and the 1970s-1980s were moments of significant change when new forms of entrepreneurship education linked to new social imaginaries were introduced that challenged the educational institutions and practices of the previous period. Historically, the conditions for these punctuated changes in entrepreneurship education arose because of the apparent success – *not* the failure -- of existing institutions and practices.

Based on these patterns, we posit that entrepreneurship education has its own internal dynamic of change in which each wave of educational reform creates conditions for its own potential demise. As the entrepreneurial imaginaries of today become part of the status quo of tomorrow, existing institutions and forms of education come to be seen as constraints on the meaningful exercise of entrepreneurial freedom. Over time, educational institutions and practices can become routinized and detached from the social imaginary on which they were initially based. Likewise, a historically situated vision of the common good or understanding of the status quo can seem less morally pressing as perceived challenges to the common good change. The growth of entrepreneurship education institutions and standardization of practices can hence come to form their own status quo and become a target for educational reformers with a new and more compelling social imaginary.

Our historical view of how entrepreneurship education evolves has important implications for how we evaluate the status of entrepreneurship education today. From this point of view, the rapid expansion of entrepreneurship education in recent years can be seen as much as a cause for concern as a reason to celebrate. On one hand, the growth of programs and students since the 1970s and 1980s provides strong evidence for the relative strength of entrepreneurship education today (Kuratko & Morris, 2018). On the other hand, it raises questions about whether the problems of corporate and economic stagnation that initially motivated this wave of growth remain the most important challenges for a compelling social imaginary of entrepreneurship education in our own time. Critics argue that they do not (Hägg & Schölin, 2018; Lackéus, 2017), and that the neoliberal view of entrepreneurship education has itself become a threat to freedom by producing "useful unreflective citizens" (Hägg & Schölin, 2018: 656) who are capable of advancing their own wealth and happiness at the expense of freedoms available to others (Lackéus, 2017). The growth of student interest in social entrepreneurship (Pache & Chowdhury, 2012), with its focus on addressing inequality, poverty, environment, and health (Kickul, Janssen-Selvadurai, & Griffiths, 2012; Lyons, Hamlin, & Hamlin, 2018), can also been interpreted as a critique rather than an extension of the social imaginary of mainstream entrepreneurship education.

Our view is that the future of entrepreneurship education lies in the field's ability to articulate a morally compelling social imaginary at a larger societal scale once again. Just as previous periods of change led reformers to reimagine the moral and political foundations of entrepreneurial freedom and its relationship to a mutually beneficial vision of the common good, the vitality of entrepreneurship education in the future will be determined by educators' ability to reimagine entrepreneurship education in response to the challenges we face today.

Moral Reasoning as Entrepreneurial Knowledge

Our narrative also has implications for how we conceive of "entrepreneurial knowledge" today. Much of the scholarship on entrepreneurship education focuses on one of two "epistemic stances" (Bhatia & Levina, 2020) regarding the nature of entrepreneurial knowledge. The first views entrepreneurial knowledge as based in the core social sciences of management (i.e. economics, sociology, psychology) but evolving to create a distinct field focused on a core body of scientific knowledge on how entrepreneurs pursue opportunities (Shane & Venkataraman, 2000). For example, Kuratko and Morris (2018: 16) articulate that the "content of modern entrepreneurship program[s]" that has matured over the last few decades includes: "(1) business basics in a new venture management context; (2) core entrepreneurial content; and (3) the entrepreneurial mindset." A second view of entrepreneurship knowledge sees it as based in personal experience and practice. For example, in calling entrepreneurship education a "method," Neck and Greene (2011: 62) describe going "beyond understanding, knowing and talking" to "using, applying, and acting." Neck and Green (2011) also locate their notion of pragmatic, experiential entrepreneurship knowledge in relation to the recent history of entrepreneurship education as the “new frontier” of entrepreneurship education that moves beyond the “analytical-functional” conceptions of entrepreneurial knowledge.

Our historical narrative reveals that both these forms of knowledge contributed to important aspects of entrepreneurship education dating back to the early 19th century, but so did a third form of entrepreneurship epistemology that plays a far more marginal role today: moral reasoning. Whereas modern business schools based on social sciences embrace an essentially value-free concept of knowledge, viewing it as akin to knowledge in the physical sciences, 19th-century entrepreneurship education was steeped in moral reasoning, which included both logical and political reasoning from philosophy and empirical reasoning from history. Indeed, many programs aimed at entrepreneurship included courses in “political economy,” which in the 19th century was seen as a branch of moral philosophy and included logic, history, and economics. Early business schools, such as Wharton or HHL, that viewed business education as part of the liberal arts, in fact elevated moral and political reasoning in relationship to technical skill as integral to business practice (Sass, 1982). It was only when university-based business schools in the United States and higher trade schools in Germany truly embraced the premise that management was a science focused on training professionals for business occupations that moral reasoning was marginalized, and later reinvented as a separate subject called “business ethics.”

Before the “professionalization” of modern business education, moral reasoning was understood as essential for educating entrepreneurs because it gave purpose to the scientific and experiential aspects of entrepreneurship knowledge. Given that entrepreneurship education involved the disruptive notion of emancipation from an existing status quo, it raised questions of “freedom from what" and "freedom to what" that made entrepreneurship just and justifiable (Laine and Kibler, 2020). As **table 4** shows, the ideologies that underlay entrepreneurship education in the United States and Germany all entailed entrepreneurial freedom, but each also espoused unique and historically situated conceptions of the societal challenges that justified that freedom and the moral and political ends that entrepreneurial freedom was designed to achieve. While the German social imaginaries of entrepreneurship have been more collectively oriented than the American ones, both involved theorizing about how a vision of mutually beneficial common good could be achieved by entrepreneurs challenging an existing status quo. Without this foundation of moral reasoning, the promise of emancipation and agency would have seemed directionless; there would have been no shared understanding about those aspects of the status quo worthy of challenge nor a vision of the positive ends of entrepreneurial action.

Today, moral reasoning, in the form of both philosophy and history, is rarely understood as an *essential* form of entrepreneurial knowledge with anything near the same standing as objective social scientific or experiential knowledge. Yet, the premise that entrepreneurship knowledge, or any form of social scientific knowledge, can be value free is questionable at best (Sandel, 2013). Our ability to effectively teach a subject that is premised on human freedom and the exercise of human agency without careful attention to the development of the skills involved in weighing the purposes of that freedom are at best incomplete. As John Dewey pointed out, "experiential education" that allows students to learn by doing is of little promise without the skills to reflect on the moral justifiability of its ends (Dewey and Tufts, 1906).

A future that integrates moral reasoning back into entrepreneurship education, in our view, would necessarily require incorporating humanistic thinking as a fundamental and practical entrepreneurial skill rather than as part of a general education. It would include moral and political philosophy – the ability to critically reason about not only the justifiability of entrepreneurial means but also the just ends of entrepreneurial agency – as essential to reflexively considering the social imaginary of entrepreneurship in which one is embedded. And second, it would include history as a way to grapple with and take into account alternative social imaginaries of entrepreneurship. In effect, studying entrepreneurial history would allow entrepreneurs to learn to judge the ends and consequences of entrepreneurial action, and to understand both the context in which entrepreneurs are operating and the change they seek to create.

The Undisciplined Discipline

Our history of entrepreneurship education also sheds light on the fraught relationship between entrepreneurship education and the modern university. Today, these tensions are often ascribed to entrepreneurship's status as a new field, and hence to uncertainty over if and how it fits within the classification system of disciplines and professions that constitute higher education. After all, entrepreneurship education today may be housed in a variety of different departments within a business school or at a variety of other schools within a university (Kuratko & Morris, 2018). Our historical narrative, however, highlights that entrepreneurship education can be seen to predate the modern research university and its disciplinary conventions. From this historical point of view, the issue of the relationship between entrepreneurship education and the university can be recast; rather than asking how entrepreneurship education can fit within the existing disciplinary structure of the university, we might ask instead how the modern research university evolved in such a way as to struggle to incorporate a robust conception of entrepreneurship education, and how contemporary entrepreneurship education might serve to reintegrate the disciplinary fragments that universities have created.

As our historical narrative demonstrates, efforts to incorporate entrepreneurship education into modern research universities beginning in the late 19th century faltered as universities themselves engaged in efforts to establish themselves as value-neutral institutions organized along specialized lines of scientific and professional knowledge (Reuben, 1996). For example, German higher polytechnical schools in the 19th century and higher trade schools in the 20th century jettisoned their initial visions of training entrepreneurs as a form of liberal education in favor of a much narrower, formalized, and value-free conception of engineering education and business economics. American universities likewise increasingly categorized business education as professional education founded in social scientific knowledge, separating it from the liberal arts and cutting off the possibility of a broadly conceived entrepreneurship education that considered entrepreneurial autonomy and action in relationship to questions of the just exercise of freedom. In both cases, the disciplinary classification that came to constitute the modern university served to legitimize its identity as a place of highly specialized knowledge and learning at the cost of excluding a broad-minded vision of entrepreneurship education that integrated scientific, embodied, and moral inquiry. In doing so, the modern university seems to have repeatedly failed to create the foundations for a more broad-minded conception of entrepreneurship and its role in a free and just society.

From this historical perspective, entrepreneurship education's ongoing identity as an "undisciplined discipline" can be seen not as a problem to be overcome but an unfulfilled opportunity to be pursued. Disciplinary categories – like any system of classification – are not immutable structures but can be reconstituted through strategic and entrepreneurial action (Pontikes & Rindova, 2020). They are subject to change and reclassification by historically reflective actors over time (Khaire & Wadhwani, 2010). Unencumbered by the status quo of disciplinary categories, entrepreneurship education holds the potential to free the university of its conventions. Practical and theoretical, scientific and humanistic: entrepreneurship education's deeper roots provide it the historical stance to make the university into its own entrepreneurial project. That social imaginary for entrepreneurship education cannot be charted from the trajectory of its recent past, but requires a much more reflexive and critical examination of the time before modern university disciplines to understand the possibilities it creates for the future.

CHAPTER VII: DISCUSSION

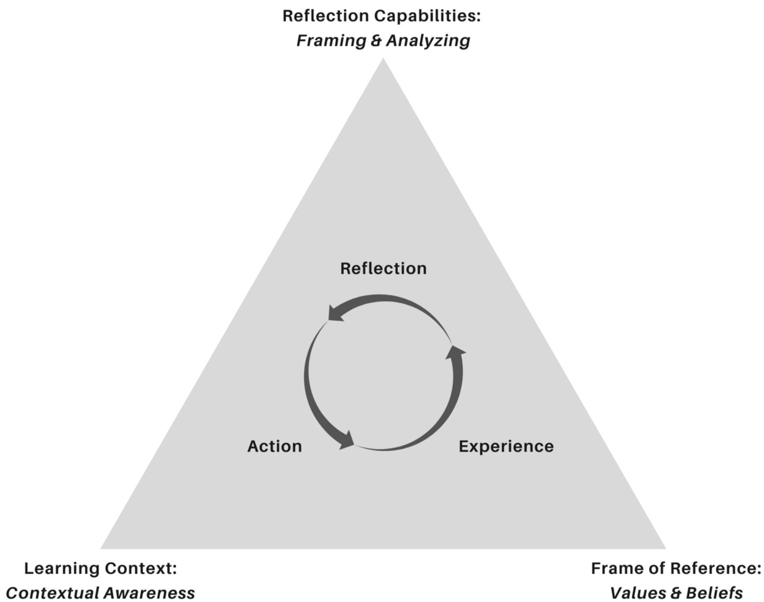
This chapter discusses the three papers presented in chapters IV to VI and develops a joint contribution to entrepreneurship education literature. While each of the three papers makes unique contributions to the literature, the purpose of this section is to show the combined implications of this dissertation for both entrepreneurship education theory and practice. I show that the three papers, each of which challenges one taken-for-granted assumption about the learning process in experience-based entrepreneurship education, reveal that learning through experience, reflection, and action is influenced by three factors, namely students' individual reflection capabilities, their personal frames of reference, and the context in which learning takes place. I define an influencing factor as a factor that affects an individual's learning process. Those factors can be internal to individuals, such as their prior knowledge, experiences, values, or belief, or external such as the social context the individuals are in when learning.[10] I show how each of the three factors influences individual learning and discuss the limitations of contemporary experience-based entrepreneurship education in addressing these conditioning factors. I argue that one way of strengthening students' learning in experience-based entrepreneurship education, independent of whether the aim is to educate for business venturing or for societal value creation, is to reintegrate the humanities into the curriculum because they allow a) developing students' reflection capabilities, b) strengthening their value and belief system as part of their frame of reference, and c) advancing their contextual awareness and agency. The three influencing factors of experience-based learning in entrepreneurship education and the contribution of the humanities in preparing students for their learning are depicted in **Figure 3**. Building on insights from the

[10] Note that an external influencing factor is not 'externally given' but a social construction of something perceived external to the individual.

literature on business education more broadly, I argue that this calls for an integration of the 'business humanities' into entrepreneurship education, for which I provide a definition at the end of the next section. The chapter ends with a section on the practical implications of the PhD dissertation, which includes a proposal for an entrepreneurship master's program that integrates the business humanities and combines experience-based and explanation-based teaching and learning.

Figure 3:

The Capabilities that shape Learning from Experience, Reflection, and Action



Three Influencing Factors and Individual Capabilities for Learning in Experience-Based Entrepreneurship Education

Students’ Reflection Capabilities as an Influencing Factor for Learning

The first influencing factor for learning through experience, reflection, and action is students’ reflection capabilities in framing and analyzing experiences. While the importance of reflection as the method of transforming experience into knowledge that guides future action has been widely acknowledged in the entrepreneurship education literature (Hägg, 2017; Kassean et al., 2015; Neck & Greene, 2011), my study on group reflections unpacks the reflection capability and suggests that rather than being a single capability, reflection may be better conceptualized as an interplay between framing and analytical capabilities. Therefore, I suggest speaking of reflection in plural rather than as a single capability. In the paper, I conclude that students’ proficiency in those reflection capabilities shapes how learning in group reflections takes place. Turning to education literature (Rodgers, 2002), one can extend this claim and suggest that the capabilities of framing experiences through narration, memory, and empathy and the capabilities of analyzing experiences through abstraction, analogies, and similes are generic capabilities. They condition learning through reflection not only in relational settings but also in individual reflection formats. This has important implications for learning in experience-based entrepreneurship education generally, as it suggests that students with limited or no command of those capabilities have problems generating knowledge through their reflections and consequentially take uninformed and unreflective decisions about future actions. In fact, the entrepreneurship education literature gives evidence of the challenges of ‘unreflective students’ who have problems developing meaningful insights through individual reflections (Hägg, 2018; Neergaard et al., 2020).

Building on the above argument, I suggest that part of this problem is their lack of systematic training in reflection capabilities.

Understanding the reflection capabilities as influencing factors for learning in experience-based entrepreneurship education challenges the current approach to how entrepreneurship educators develop students' reflection capabilities. In my study on group reflection, I suggest that the current approach to strengthening and developing students' reflection capabilities follows a logic of learning-by-doing translated into an educational practice where students are thrown into the process of experience-based learning and asked to reflect with some reflection stimulation and pedagogical support from educators (Hägg, 2021; Wraae et al., 2021). Considering the capabilities-understanding of reflection and studies that suggest limited effectiveness of the learning-by-doing approach (Hägg, 2018; Lindh & Thorgren, 2016; Neergaard et al., 2020), I propose that an alternative could be to systematically train and develop students' capabilities in framing and analyzing experiences before they use them for reflection. Effectively, this suggests developing students' reflection capabilities outside of the learning process of experience, reflection, and action. This perspective accounts for the dual role of reflections in entrepreneurship education, which are not only capabilities for learning in entrepreneurship education (Neck & Greene, 2011) but also entrepreneurial capabilities for becoming a successful entrepreneur capable of learning from entrepreneurial experiences in practice (Cope & Watts, 2000). Developing students' reflection capabilities systematically outside the experience-based learning process requires shifting gears and moving the development of reflection capabilities from a by-product that some entrepreneurship students develop and others do not to an elementary goal and priority of experience-based entrepreneurship education (Jack & Anderson, 1999).

Developing students' reflection capabilities outside the experience-based learning process adds a new perspective to current debates about the future of entrepreneurship education. While the paper on social imaginaries in entrepreneurship education has shown that experience-based learning has been an integral part of entrepreneurship education throughout its history, we can witness a current scholarly trend toward more experience-based forms of entrepreneurship education (Hägg & Gabrielsson, 2020) also linked to debates about the role of andragogy and heutagogy in entrepreneurship education (Hägg & Kurczewska, 2020a; Jones et al., 2019; Martínez & Muñoz, 2021). The notion that reflection capabilities shape learning in experience-based entrepreneurship education questions the evolutionary perspective, according to which entrepreneurship education should move toward an ever more experience-based future following an ideal of heutagogy (Neck & Corbett, 2018) because many students are not equipped with framing and analytical capabilities to learn from their experiences. Instead, my argument supports the scholarship that suggests a combined or staged approach across the entire Pedagogy-Andragogy-Heutagogy continuum (Bell & Bell, 2020; Hägg & Kurczewska, 2020a; Jones et al., 2019), in which students' reflection capabilities are systematically developed before being used for experience-based learning. The reason for combining and staging explanation and experience-based entrepreneurship education, I argue based on my work, is not the lack of students' entrepreneurial experiences and maturity, as called out by some scholars (Hägg & Kurczewska, 2019, 2020a), but rather their lack of reflection capabilities. In fact, students seem not to differ that much from real-world entrepreneurs, for whom research shows that many of them have similar problems when learning from experience (Winkler, Fust, & Jenert, 2021). In other words, asking "who are the entrepreneurship students" may be the wrong question in this regard (Hägg & Kurczewska, 2019) because it highlights differences between entrepreneurship students and real-world entrepreneurs that seem of little importance for the activity of learning through reflection. Instead, we may ask how we can develop students' and entrepreneurs' reflection capabilities alike.

One way of developing entrepreneurship students' reflection capabilities of framing and analyzing experiences outside the experience-based learning process is to reintegrate the humanities back into entrepreneurship education, which had a place in earlier versions of entrepreneurship education. Colby et al. (2011) have argued in the Carnegie Report on *Rethinking Undergraduate Business Education* that the humanities are particularly suitable for developing students' capabilities in multiple framing and creating narratives as well as for training their capabilities in analytical thinking and questioning narratives. While their report has been influential in debates about the future of management education (Johnsen, Skoglund, Statler, & Sullivan, 2021; Landfester & Metelmann, 2019; Statler & de Monthoux, 2015), I argue that the humanities, in their capacity to develop students' framing and analytical capabilities, could also be an integrative component in strengthening students' ability to learn through reflection in experience-based entrepreneurship education. For example, entrepreneurship educators may discuss eminent philosophical texts with their students in light of contemporary challenges and thereby train their capacity in analytical thinking (Johnsen, Thaning, & Pedersen, 2016) or use philosophy to strengthen students' ability to frame things from different perspectives (Johnsen, Olaison, & Sørensen, 2018). Additionally, educators may use historical entrepreneurial case studies comparing them to contemporary entrepreneurial challenges, training not only students' contextual awareness but also their ability in framing and taking a different perspective on a phenomenon (Lubinski, Wadhwani, & Giacomin, 2020). It is important to note that integrating the humanities into experience-based entrepreneurship education can happen independently of the educational aim (practical entrepreneur; entrepreneurial practitioner) because both forms require students to learn from experience through reflection. It is exactly the reflection capabilities of framing and analyzing experience that the humanities may bring to experience-based entrepreneurship education.

Students' Frame of Reference as an Influencing Factor for Learning

The second factor that conditions individual learning in experience-based entrepreneurship education is students' personal frames of reference, defined as their existing knowledge, experiences, values, and beliefs (Mezirow, 1991). While students' framing and analytical capabilities influence students' ability to develop knowledge through reflection, their frames of reference shape all three components of the learning process. When students interact with the world, their frame of reference functions as a filter that turns that interaction into an experience (Mezirow, 1991). When reflecting, the study on group reflection shows that students' frame of reference shapes how they look back at their experiences, for example, relating the equity split with another negotiation experience. It also shapes their analysis, for example, when they refer to moral views about fairness or team cohesion when developing changed perspectives or proposed actions. The study on group reflection also sheds light on the role of students' frame of reference for their future actions. The relationship between developing changed perspectives and proposed actions suggests that changing one's frame of reference about the self-concept or other concepts in the world has a direct influence on developing propositions for future behavior. Entrepreneurship education scholars argued that changing students' frame of reference is one central objective of experience-based entrepreneurship education because it is directly linked to changes in their future behavior, which leads them to anticipate positive change within the economy and society (Neergaard et al., 2020).

Contemporary entrepreneurship education focuses predominantly on changing the knowledge and experience parts of students' frames of reference while omitting the development of their values and beliefs. In fact, the distinction in the scholarly debate between explanation-based and experience-based entrepreneurship education fundamentally concerns the relationship between entrepreneurial knowledge and experience. While explanation-based entrepreneurship education focuses on disseminating analytical-functional knowledge and conceives entrepreneurial experiences as subordinate to that, experience-based entrepreneurship education starts with experiences from which the students generate pragmatic-experiential knowledge. The dialectic of knowledge and experience also influenced the critiques of those approaches. The explanation-based approach has been accused of being inadequate in preparing entrepreneurs for "solving ill-defined, unstructured, ambiguous, complex multidisciplinary, holistic real-world problem" (Plaschka & Welsch, 1990: 61), and can thereby be considered 'empty-handed'. The critique of the experience-based approaches to entrepreneurship education has been that learning outcomes are difficult to validate as learning is so detached from academic theory (Scott et al., 2016) and thereby 'empty-headed'. As my review study on blended learning indicates, in practice, entrepreneurship educators remedy those deficiencies by combining explanation and experience-based forms of entrepreneurship education through in-action and for-action blends.

However, the paper on social imaginaries suggests that contemporary entrepreneurship education, even when combining those two approaches, is limited because it fails to systematically develop students' values and beliefs. In other words, contemporary entrepreneurship education is 'empty-hearted'. We arrive at this claim by showing that previous versions of entrepreneurship education focused on developing students' values and belief systems. We argue that a subject such as entrepreneurship that is premised on human freedom and the exercise of agency requires an education that prepares students not only for deciding upon the means of their entrepreneurial agency but also on their ends. Understanding entrepreneurship as an activity of social change-making (Calás et al., 2009; Rindova et al., 2009) embedded in changing social imaginaries (Taylor, 2004) suggests that the decision about the ends of such an entrepreneurial agency are value judgments and demand the capacity of moral reasoning justifying them in relation to the common good. From this perspective of linking entrepreneurship education to its presumed outcome of entrepreneurial agency, we have argued that education on values and beliefs should be reintegrated into entrepreneurship education curricula. In reintegrating educational interventions focusing on students' values and beliefs in combination with other approaches to entrepreneurship education would enable educators to change all aspects of students' frames of reference.

The absence of forms of entrepreneurship education focusing on values and beliefs is also problematic with respect to the learning process in experience-based entrepreneurship education. Learners' autonomy is central in experience-based entrepreneurship education, not only because of the importance of autonomy in being an entrepreneur (van Gelderen, 2010) but also because students need to self-direct (andragogy) or self-determine (heutagogy) their learning process (Kyrö, 2015). The concept of learners' autonomy in entrepreneurship education is closely linked to their freedom in steering their learning process, that is, deciding on the actions they want to perform (means) and the personal learning goals they want to achieve with them (ends). Students are limited in their autonomy depending on the course setup (e.g., andragogy, heutagogy) but also by the courses' learning objectives and other parameters like the course theme and its purpose. Within those limitations, students decide on their personal learning goals and what activities to perform, not only considering prior knowledge and experiences but especially based on their values and beliefs. The group reflection paper shows that students with values and beliefs around fairness and compassion performed different actions directed to different learning goals than their peers who expressed values around self-interest and competition. More importantly, many students expressed surprise and unawareness of their values and beliefs and how they shaped their behavior. This suggests that current forms of experience-based entrepreneurship education that do not explicitly address values and beliefs limit students' autonomy as they leave them ill-equipped to actively steer their learning process and give it meaning and direction.

One way to address values and beliefs in entrepreneurship education is to leverage the humanities. As suggested in the article on social imaginaries, subjects like political and moral philosophy, today often called business ethics, may be reintroduced to the entrepreneurship education curricula because they facilitate discussions about values and beliefs and develop students' capacity in moral reasoning. Educators can use philosophical texts or cases that highlight ethical dilemmas and thereby help students develop their own stances on values and beliefs (Johnsen et al., 2016). In addition, educators may use literature and art, for example, discussing novels or movies with their students in relation to ethical dilemmas or questions of morality (Landfester & Metelmann, 2019). It is important to stress such an education is not about prescribing certain values or beliefs desirable for entrepreneurship from a position of the "moral high ground" (Johnsen et al., 2016: 374) but rather develop students' capacity to build and maintain their own values and beliefs by making them think about "the implicit frameworks which shape [their] response to a world that is increasingly characterized by Volatility, Uncertainty, Complexity, and Ambiguity, as the famous Harvard VUCA acronym has it" (Landfester & Metelmann, 2020: 160).

This requires educators to provide multiple perspectives and positions concerning values and beliefs and to be transparent and self-critical about their personal stances. It is important to note that the reintroduction of humanities may seem to be more appropriate for the experience-based type of entrepreneurship education that leans toward humanism and employs a broader understanding of entrepreneurship as value creation and societal change-making (entrepreneurial practitioner). Departing from such an understanding of entrepreneurship, the article on social imaginaries has argued that entrepreneurs need to make moral decisions about the ends of their entrepreneurial autonomy and therefore require an education that develops their capacity for moral reasoning. However, the argument that learners' autonomy in the learning process of experience-based entrepreneurship education requires students to make value judgments about the direction of their learning process has shown that humanities may also be essential when departing from a narrow understanding of experience-based entrepreneurship education linked to business formation (practical entrepreneur). In other words, the humanities can contribute to developing students' values and beliefs as part of their frame of reference for experience-based entrepreneurship education.

The Context as an Influencing Factor for Learning

The third influencing factor for individual learning in experience-based entrepreneurship education is the context in which the learning process is situated. As with students' frame of reference, context shapes individual students' learning on all three components of the learning process in experience-based entrepreneurship education. The review paper shows how blended learning as a context in which experience-based entrepreneurship education is delivered enables certain experiences and actions otherwise not possible or frames students' experiences and actions in certain ways. For example, constructing a context in which students experience and act within semi-remote cross-cultural teams is only possible through blended learning but also puts constraints on what students can do and experience in their project work (Stefanic et al., 2020). The paper on group reflections moreover shows how the co-created social context of the reflection group can enhance and inhibit individual students' learning. For example, a hostile group environment largely prevents students' learning (*hostility effect*), while a group with multi-faceted perspectives and different positions provides fertile ground for building up learning (*build-up effect*). The study on social imaginaries goes one step further in suggesting that the macro context of shifting social imaginaries not only shapes what direction entrepreneurship education offerings take but also whether entrepreneurship education is offered at all. Hence, context is a factor that shapes students' learning in experience-based entrepreneurship education and influences all three components of the learning process.

Even though context plays a rather marginalized role in the debates about entrepreneurship education (Loi & Fayolle, 2022; Neergaard & Christensen, 2017), there is an emerging focus on the relationship between context and entrepreneurship educators (Blenker, Dreisler, Faergemann, & Kjeldsen, 2008; Maritz & Brown, 2013; Thomassen et al., 2019). Thomassen et al. (2019: 864) stressed the importance of educators' contextual awareness. They argued that context is not merely the setting in which entrepreneurship education takes place but rather a "dynamic space that can be designed with" and that can partly be controlled by educators but also represents something outside their control they must adhere to. The papers in this PhD dissertation show this control-adherence relationship between educators and context for the process of experience-based learning. The study on blended learning, for example, displays evidence for educators who aimed to adjust their courses and classes to a specific context, for instance, by designing a blended yet partly experience-based entrepreneurship course for reaching new student groups who have time and resource constraints and little access to campus (Rusko, 2017). The study on group reflections shows how educators may partly control the context in which students learn, for example, by avoiding the *hostility effect* through modified group composition or averting the *focus effect* through adjusting questions in the reflection manual. Hence, context both influences students learning process in experience-based entrepreneurship education and is, at the same time, a dynamic space educators may try control and adhere to.

However, what is largely absent in current debates about entrepreneurship education is the role of contextual awareness for entrepreneurship students. The study on social imaginaries shows why developing students' contextual awareness is an important aspect of entrepreneurship education. The understanding that entrepreneurship education prepares students for social change-making linked to emancipation from a status quo toward a social imaginary suggests a dual importance of contextual awareness. Students may not only interpret the current context they are in but also develop a dynamic contextual understanding of evolving cultural, social, and economic values and beliefs linked to a social imaginary. Even when departing from a narrow understanding of entrepreneurship education as training for business venturing, contextual awareness of students may be paramount because it enables students to discover or create entrepreneurial opportunities which are embedded in different contexts (Welter, 2011). This suggests that developing students' contextual awareness is an important aim of both experience-based types of entrepreneurship education.

A potential way forward to increase contextual awareness of entrepreneurship students is to turn to the humanities. Several scholars have argued that humanities subjects such as history, arts, and literature are well suited to train students' ability to understand and make sense of different contexts (Madsbjerg, 2019; Wineburg, 2001). Following this rationale, some business schools and universities integrated mandatory courses or electives from the humanities into their curricula. One example of this is the University of St. Gallen, where business students must take 25% of their coursework in “contextual studies”, which covers a wide variety of humanities subjects (Landfester & Metelmann, 2019). An alternative approach may be to target a humanities approach to entrepreneurial activity, for example, through historical case studies that examine entrepreneurial opportunities in their social, cultural, and economic context and contrast them with contemporary entrepreneurial challenges (Lubinski et al., 2020). It is important to note that contextual awareness is not only important for experience-based entrepreneurship education that follows a broad approach of value creation and societal change-making linked to a humanistic idea of education but also for experience-based forms of entrepreneurship that aim at business venturing. This is because understanding the context in which entrepreneurial opportunities are embedded is key to their discovery or creation (Dimov, 2007; Fletcher, 2006; Welter, 2011).

This PhD dissertation has shown that the learning process in experience-based entrepreneurship education is shaped by three factors, students' reflection capabilities, their frames of reference, and the context in which learning occurs. I have argued that reintegrating the humanities into experience-based entrepreneurship education may help students to develop their capabilities in framing and analyzing experiences, strengthen their value and belief systems as part of their frames of reference, and improve their contextual awareness. I have shown that developing those capabilities is independent of the purpose of entrepreneurship education but required for an experience-based learning process. In other words, integrating the humanities may strengthen experience-based entrepreneurship education, whether it is directed at business formation aiming at developing practical entrepreneurs or focused on value creation and social change-making with the aim of educating entrepreneurial practitioners.

Finally, this PhD dissertation speaks to the literature on management learning and business education more broadly. Within this field, one can witness a debate about the value of the humanities in business education (Gagliardi & Czarniawska-Joerges, 2006; Landfester & Metelmann, 2019; Steyaert, Beyes, & Parker, 2016). Revolving around an emergent idea of the business humanities, this scholarship suggests that subjects like philosophy, history, or literature studies develop students' ability to think critically, ethically, and contextually about business and its role and consequences for society. This PhD dissertation has shown that the business humanities are particularly important for entrepreneurship education, which is an important element of business education. The importance of the business humanities for entrepreneurship education is not only reflected in the role of entrepreneurship within the economy and society but also because they address the three conditioning factors of the experience-based learning process. On this basis, I define the role of the business humanities in entrepreneurship education as follows:

> *The business humanities advance human-centered forms of reasoning rooted in history, philosophy, art, or literature that aim at developing individuals' reflection capabilities, their value and belief systems, and their contextual awareness, thereby strengthening students' ability to learn from*

entrepreneurial experiences and leading them to become reflective and entrepreneurial individuals.

Practical Implications: A Proposal for a Master Program in Transformational Entrepreneurship

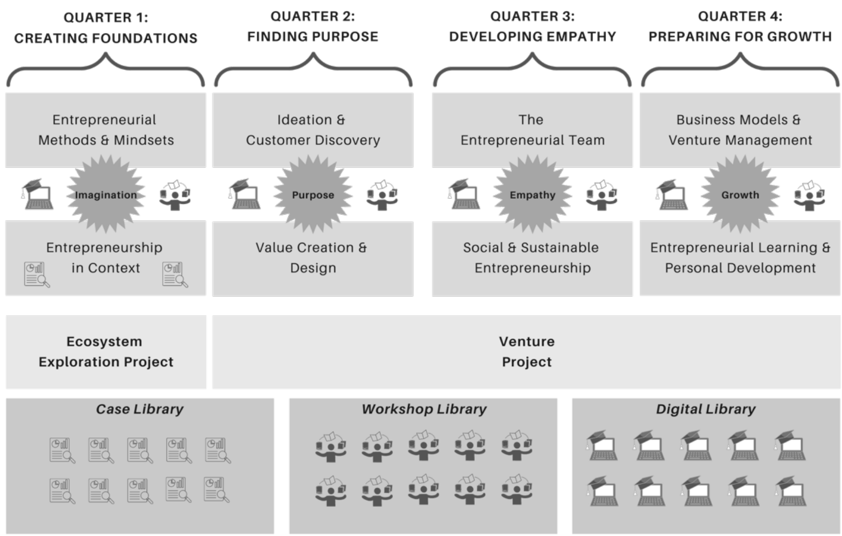
In the last section of this chapter, I transfer the insights gained from my PhD dissertation into a proposal for an entrepreneurship master program, which includes both experience- and explanation-based teaching and learning formats and the business humanities. The program's objective is to prepare students for business venturing and societal value creation. Hence, the educational aim is to develop both practical entrepreneurs and entrepreneurial practitioners. The students will step into these roles already during the program, which requires them to create a real business and to develop tangible value of different kinds for the entrepreneurial ecosystem, their university, and their fellow students. The program is called *Master in Transformational Entrepreneurship*, highlighting the transformational character of creating both economic value through business formation and social value for the community while at the same time being transformative for the students themselves.

The program is designed as a two-year master’s program. While the first year consists of mandatory elements, the second year is devoted to electives or studying abroad and the master's thesis. The program follows a quarter structure. In each quarter, students will have two courses, which are six weeks-long courses. Students will also participate in one capstone seminar per quarter, which is a one-day workshop, that bridges the two quarter-courses. In addition, students must take two sprints per semester, which are small 2–3-hour workshops held at the university incubator and online courses covering a specific topic.

Parallel to the courses, the seminar and the sprints runs a project component in which the students work on two different projects in collaboration with the university incubator. Progressing through the program, students will contribute to the program itself by engaging in the entrepreneurial community, developing workshops and online modules for the sprints, and writing teaching case studies as part of their examination. For an overview of the program, see **Figure 4**. In the following, I will provide a short description of each quarter, including the courses, capstone seminars, sprints, and project components.

Figure 4:

Proposal: Master in Transformational Entrepreneurship



Quarter 1: Creating Foundations

The purpose of the first quarter is to prepare students for self-directed and self-determined learning throughout their master's program. The focus is on the business humanities and developing students' foundational capabilities for experience-based learning.

The first course in this quarter, called *Entrepreneurial Methods and Mindsets*, focuses on entrepreneurial learning, research methods, and students' entrepreneurial mindsets. The course follows the idea that learning through inquiry (experience – reflection – action) resembles a research process (data – analysis – contribution) (Dewey, 1933). Building on this notion, students will learn how to develop pragmatic-experiential knowledge and analytical-functional knowledge using different methods. One particular aim is to develop students' reflection capabilities. The course uses literature from the philosophy of science to train students' analytical capabilities as well as literature on the basics of humanities and social science methods with a focus on developing knowledge relevant to entrepreneurship. The second part of the course will concentrate on entrepreneurial mindsets entailing both research insights about the topic and practical exercises to strengthen students' ability to navigate volatility, uncertainty, complexity, and ambiguity. The course exam is an essay in which students write about the intersection of academic research and learning as entrepreneurs.

The second course this quarter, named *Entrepreneurship in Context*, concentrates on entrepreneurship as a phenomenon in context and on ethical dilemmas in entrepreneurial decision-making. The course is fully case-based and uses historical cases from different times and contexts, strengthening students' capability in contextual awareness and their capability in framing. In addition, cases will entail ethical dilemmas and highlight the often unproductive and destructive forms of entrepreneurship (Baumol, 1990). The literature for this course is a combination of entrepreneurship theory and philosophical texts useful for analyzing ethical entrepreneurial dilemmas. Through the ethical component, this course also aims at developing students' values and beliefs system and strengthening students' capability in moral reasoning. The course exam is team-based. Students will write a teaching case, including a teaching note about a historical entrepreneurial case linked to an ethical dilemma. The best cases will become part of the program's *Case Library* and will be used in the following year.

The *Capstone Seminar* toward the end of the first quarter focuses on *Imagination*. This is a full-day workshop on futures literacy (Miller, 2018), in which students practice their framing and analytical competencies by imagining and analyzing different futures. Students will learn that the future is uncertain but, at the same time, a resource for entrepreneurial imagination and envisioning both social and economic change. The workshop will not only make students think about the future but also become more aware of the contextual constraints of the present. There is no exam for the *Capstone Seminars*, but participation is mandatory. In addition, students must complete two *Sprints*, one interactive workshop held at the incubator (*Workshop Center*), and one online module (*Digital Library*). *Sprints* cover content from the business humanities, general entrepreneurship, and other business subjects. For example, students may select a pitching workshop at the incubator, an online module on founder agreements, or take an online module on the philosophy of John Dewey and his influence on entrepreneurship (education).

The *Ecosystem Exploration Project* is organized by the university incubator and invites students to several entrepreneurial events and workshops at different locations in the entrepreneurial ecosystem. The aim is that students develop an understanding of the entrepreneurial ecosystem they are in and create an entrepreneurial network outside of their program. Each week there will be one event that students can attend. There will be no exam or assignment, but students must attend the majority of the events.

Quarter 2: Finding Purpose

The purpose of the second quarter is to get students started in their self-directed and self-determined learning journey. The focus of the second quarter is on the different aims of entrepreneurship and personal entrepreneurial motivation and purpose.

The first course is called *Ideation and Customer Discovery*. It takes a business venture-oriented perspective on entrepreneurship and focuses on ideation processes and methods for developing and testing business ideas and prototypes, such as the Lean Startup (Ries, 2011). The course is project- and team-based and guides students through the process of developing ideas together with potential customers and testing them rapidly through their feedback. The educators will organize class sessions in an open space, such as the business studio (Barry & Meisiek, 2015), to facilitate interactive and collaborative working and where they give group feedback and team coaching. The course literature will come from the field of entrepreneurship and focus on ideation, testing, and prototyping.

The second course of the second quarter, named *Value Creation & Design* takes a contrary position to the purpose of entrepreneurship and defines it as value creation and social change-making. The case-based course critiques the narrow understanding and approach students go through in the parallel course and shows alternatives to value creation with a particular focus on design processes that are non-customer-driven. The course literature will come from design and entrepreneurship literature with a more critical perspective on entrepreneurship. While the combination of the two courses this quarter shows the different purposes of entrepreneurship, it also trains students' ability to deal with ambiguity. The exam will be across the two courses and consists of a pitch and trade show presentation of their prototype from the first course and a reflective paper defending and critiquing their approach to developing a prototype drawing on the literature from both courses.

The *Capstone Seminar* is about *Purpose*. The full-day workshop focuses on constructing an entrepreneurial identity and finding one's purpose as an entrepreneurial individual. Students will practice self-reflection and participate in a group-based transformational reflection workshop (Mezirow, 1991). Students will further strengthen their framing and analytical capabilities in this workshop. As an outcome, students should understand what motivates and drives them and what kind of entrepreneur or entrepreneurial practitioner they want to become. As in the first quarter, students must pick two *Sprints* throughout the quarter.

The second project also marks the start of the students' *Venture Project*. The project is designed as an entrepreneurial project, which means that the students should develop a viable operational and profitable business by the end of their first year. This part of the program is a fully self-determined learning journey. While the students will receive support from the incubator and become part of their incubation program, students are fully autonomous in their choices in this part of the program. However, there are two requirements. First, students must officially register and run a company. Second, students will receive a small investment from the university at the project start. They should aim for paying (at least) the investment back to the university at the end of the project (end of fourth quarter). Students who exceed the university investment by more than triple the amount received can keep the remaining profits. During the second quarter, the focus of the students will be on identifying or creating a business opportunity and developing/testing prototypes. The aim of this project is not to develop a fast-growing startup but rather a small business that can reach profitability quickly.

Quarter 3: Developing Empathy

The focus of the third quarter lies on strengthening students' interpersonal capabilities and developing their ability to be compassionate in society. The purpose of the third quarter is to continue the self-directed and self-determined learning processes showing the social component of being an entrepreneur both in working in teams and within society.

The first course of this quarter, titled *The Entrepreneurial Team,* concentrates on the social relationship founders have with co-founders and employees but also with advisors and investors. The aim of this course is for the students to understand and experience the social dynamics among founding teams and their social relationships with other important stakeholders. Building on the strong entrepreneurship literature on entrepreneurial teams (Breugst, Patzelt, Shepherd, & Aguinis, 2012; Wasserman, 2012), this course follows a case-based approach with integrated experiential exercises. Students not only discuss cases but engage in roleplays and other exercises to experience some of the tensions, problems, and dilemmas of entrepreneurial teamwork. A related focus of this course is on learning in teams, providing and receiving feedback, and reflecting collaboratively. The exam format will be a case analysis, where students demonstrate their analytical capabilities and analytical-functional entrepreneurial knowledge.

The second course of this quarter, called *Social & Sustainable Entrepreneurship*, focuses on the impact of entrepreneurial ventures on society and the environment. The course is project-based, and students are tasked to identify a social or sustainability challenge within the context of the university (campus) that they want to analyze and work with. Identifying and working with problems at the university (campus) is another way the program creates value for the community. The focus is on developing an understanding of a problem and less on developing a solution. The course builds on the literature on social and sustainable entrepreneurship (Barinaga, 2014; Mittermaier, 2019; Muñoz & Cohen, 2018) and combines theoretical readings with students' practical project work. The exam format is a reflective paper on the project that uses students' practical experience to extend or critique the literature.

The *Capstone Seminar* focuses on *Empathy*. Being empathetic toward others is an important entrepreneurial capability, whether collaborating in entrepreneurial teams or developing social impact to the benefit of others. In this full-day workshop, students go through several exercises and workshops to better access their own and others' emotions and develop their ability to be empathetic in working with others and be considerate and compassionate in their entrepreneurial decision-making. As in the previous quarters, students must pick two *Sprints* throughout the quarter.

The students continue working on the venture project. During this quarter, students should complete the ideation phase of their project, register their business, and begin operations. Students are encouraged to use insights about collaborating in teams and the social and sustainable impact of ventures for their business development.

Quarter 4: Preparing for Growth

The purpose of this quarter is to conclude students' learning journeys and look ahead. The focus is on developing students' analytical-functional entrepreneurial and business knowledge and strengthening their capabilities of becoming lifelong (entrepreneurial) learners.

The first course of this quarter, called *Business Models & Venture Management*, focuses on the development of financially sustainable business models and developing strategies for growth and expansion. The course takes a more managerial perspective on entrepreneurship as a process and concentrates on established ventures and how to accelerate their growth. The course uses entrepreneurship literature that focuses on the growth and maturity stages of startups and ventures. One main theme is entrepreneurial finance and growth strategies. The course is case-based and puts strong emphasis on tools and frameworks that students can then use in their *Venture Projects*. The exam format of this course will be a case analysis where students demonstrate their entrepreneurial knowledge and analytical capabilities.

The second course of this quarter, named *Entrepreneurial Learning and Personal Development*, concludes the program and circles back to the first course students had on *Entrepreneurial Methods and Mindsets*. It departs from the idea that entrepreneurs are fundamentally expert learners (Minniti & Bygrave, 2001) who learn about themselves, their environments, and their businesses and uses literature on (entrepreneurial) learning. The course is project-based, and students work on two deliverables, which are also their exams. First, they develop an online module about content they found lacking in the program. Second, they create a setup for a workshop they would have found useful to have during their studies. High-quality productions create direct value for the entrepreneurial ecosystem. They become part of the *Digital Library* and *the Workshops*, which subsequent student cohorts can select as *Sprints* on their entrepreneurship learning journey.

The *Capstone Seminar* focuses on *Growth*. One central aspect of being an entrepreneur is to grow a business or venture while growing personally. The seminar will focus on finding a balance between those two aspects and aims at developing the students into lifelong learners. Again, students must complete two *Sprints* in this quarter.

The fourth quarter marks the end of students' venture projects. During the semester, students have operated their businesses, and some of them have created a return on the university's investment. Throughout this self-determined learning journey, students were entrepreneurs learning from their practical experiences while being in them. The project will end with a closing ceremony, where all projects are celebrated, and the best ones are honored. In addition, there will be a semester-end party with students, educators, alumni, and stakeholders from the ecosystem.

This program proposal for a master's in *Transformational Entrepreneurship,* highlights some of the practical implications that follow from this PhD dissertation. It integrates the business humanities vertically in the first semester with two courses focusing on the business humanities. It follows the idea of developing students' reflection capabilities, their values and belief systems, and their contextual awareness before asking them to learn from their own experiences. The business humanities are also horizontally integrated into some of the other courses (such as *Value Creation & Design*, *Social & Sustainable Entrepreneurship*) and through the *Sprints*, which aids in continuous development and expansion upon the foundations created in the first quarter. The program combines both explanation- and experience-based entrepreneurship education within courses but also through the combination of *Sprints* and the two projects. The program is blended, that is it combines online and offline elements and moves students from a pedagogy orientation in the first quarter to self-directed learning in most of the courses throughout the program (andragogy) in combination with a self-determined learning experience through the venture project (heutagogy).

CHAPTER VIII: CONCLUSION

This PhD dissertation examined the learning process in experience-based entrepreneurship education. By challenging three taken-for-granted assumptions concerning the learning process, I have shown that learning entrepreneurship through experience, reflection, and action is influenced by three factors: students' reflection capabilities, their frames of reference, and the context in which learning takes place. I argued that contemporary entrepreneurship education inadequately addresses those factors and fails in systematically training students' reflection capabilities, falls short of developing their value and belief systems as part of their frames of reference, and does not systematically strengthen students' contextual awareness. Finally, I suggested that one way to remedy those deficiencies is to integrate the business humanities into entrepreneurship education.

In so doing, this PhD dissertation provides a new perspective on the future of entrepreneurship education. An integration of the business humanities into entrepreneurship education is not only a call from its past; instead, it suggests a future in which this form of business education reflects the holistic role entrepreneurship plays in our societies and economies. There is no doubt that grand societal challenges, such as the climate catastrophe, social injustices, and economic crises, are not only shaping our present but will demand original solutions and innovative mitigation strategies in the future. Policymakers, business leaders, and university deans all have high hopes for entrepreneurial activity and its capacity to tackle those grand societal challenges. When preparing students for becoming entrepreneurial individuals and practical entrepreneurs, it seems paramount to help them understand that entrepreneurship is not just a possible response to grand societal challenges but has also been part of the problem causing them. This calls for a form of entrepreneurship education that integrates the business humanities and thereby aims at educating reflective entrepreneurial individuals able to understand the world we live in, to be critical about its past, and to act constructively for a better future.

But what does entrepreneurship education with a focus on the business humanities look like? How can educators most effectively integrate the business humanities into entrepreneurship courses and programs, what teaching methods and approaches suit this best, and finally, how effective are the humanities in developing students' entrepreneurial capabilities, especially those mentioned in relation to the conditioning factors identified in this work? This calls for a research agenda at the intersection between the humanities, entrepreneurship, and education to examine the potential and limitations of the business humanities as part of the curriculum of entrepreneurship courses and programs. While this PhD dissertation developed arguments for why and how the business humanities matter, especially for entrepreneurship education, this work should not be seen as a conclusive statement but rather as the beginning of a research conversation about the business humanities and its interrelation with entrepreneurship and education.

BIBLIOGRAPHY

Albach, H. 1979. Zur Wiederentdeckung des Unternehmers in der wirtschaftspolitischen Diskussion. ***Zeitschrift für die gesamte Staatswissenschaft***, 135(4): 533–552.

Aldrich, R. 1999. The apprentice in history. In P. Ainley & H. Rainbird (Eds.), ***Apprenticeship: Towards a new paradigm of learning***: 14–24. London, UK: Kogan Page.

Alkhaled, S., & Berglund, K. 2018. ‘And now I’m free’: Women’s empowerment and emancipation through entrepreneurship in Saudi Arabia and Sweden. ***Entrepreneurship & Regional Development***, 30(7–8): 877–900.

Anthony Jnr., B. 2021. Institutional factors for faculty members’ implementation of blended learning in higher education. ***Education + Training***, 63(5): 701–719.

Anthony Jnr., B. 2022. An exploratory study on academic staff perception towards blended learning in higher education. ***Education and Information Technologies***, 27(3): 3107–3133.

Anthony Jnr., B., Kamaludin, A., Romli, A., Mat Raffei, A. F., A/L Eh Phon, D. N., et al. 2020. A managerial perspective on institutions’ administration readiness to diffuse blended learning in higher education: Concept and evidence. ***Journal of Research on Technology in Education***, 52(1): 37–64.

Antonaci, A., Dagnino, F. M., Ott, M., Bellotti, F., Berta, R., et al. 2015. A gamified collaborative course in entrepreneurship: Focus on objectives and tools. ***Computers in Human Behavior***, 51: 1276–1283.

Arbaugh, B. J., Desai, A., Rau, B., & Sridhar, B. S. 2010. A review of research on online and blended learning in the management disciplines: 1994–2009. ***Organization Management Journal***, 7(1): 39–55.

Arbaugh, B. J., Godfrey, M. R., Johnson, M., Pollack, B. L., Niendorf, B., et al. 2009. Research in online and blended learning in the business disciplines: Key findings and possible future directions. ***The Internet and Higher Education***, 12(2): 71–87.

Balan, P., Maritz, A., & McKinlay, M. 2018. A structured method for innovating in entrepreneurship pedagogies. ***Education + Training***, 60(7/8): 819–840.

Bandera, C., Collins, R., & Passerini, K. 2018. Risky business: Experiential learning, information and communications technology, and risk-taking attitudes in entrepreneurship education. ***The International Journal of Management Education***, 16(2): 224–238.

Barinaga, E. 2014. ***Social entrepreneurship: Cases and concepts*** (1st ed). Lund [Sweden]: Studentlitteratur.

Barry, D., & Meisiek, S. 2015. Discovering the Business Studio. ***Journal of Management Education***, 39(1): 153–175.

Baumol, W. J. 1990. Entrepreneurship: Productive, Unproductive, and Destructive. ***Journal of Political Economy***, 98(5): 893–921.

Béchard, J.-P., & Grégoire, D. 2005. Entrepreneurship education research revisited: The case of higher education. ***Academy of Management Learning & Education***, 4(1): 22–43.

Bell, R. 2021. Underpinning the entrepreneurship educator's toolkit: Conceptualising the influence of educational philosophies and theory. ***Entrepreneurship Education***, 4(1): 1–18.

Bell, R., & Bell, H. 2020. Applying educational theory to develop a framework to support the delivery of experiential entrepreneurship education. ***Journal of Small Business and Enterprise Development***, 27(6): 987–1004.

Bellotti, F., Berta, R., De Gloria, A., Lavagnino, E., Antonaci, A., et al. 2014. Serious games and the development of an entrepreneurial mindset in higher education engineering students. ***Entertainment Computing***, 5(4): 357–366.

Berger, P. L., & Luckmann, T. 1967. The social construction of reality: A treatise in the sociology of knowledge. ***Anchor Books***, 589.

Berghoff, H., & Moller, R. 1994. Tired pioneers and dynamic newcomers? A comparative essay on English and German entrepreneurial history. ***Economic History Review***, 47(2): 262–287.

Berglund, K., Hytti, U., & Verduijn, K. 2020. Unsettling Entrepreneurship Education. ***Entrepreneurship Education and Pedagogy***, 3(3): 208–213.

Berglund, K., Hytti, U., & Verduijn, K. 2021. Navigating the Terrain of Entrepreneurship Education in Neoliberal Societies. ***Entrepreneurship Education and Pedagogy***, 4(4): 702–717.

Berglund, K., & Verduijn, K. 2018. ***Revitalizing entrepreneurship education: Adopting a critical approach in the classroom*** (1 Edition). New York: Routledge.

Bernard, R. M., Borokhovski, E., Schmid, R. F., Tamim, R. M., & Abrami, P. C. 2014. A meta-analysis of blended learning and technology use in higher education: From the general to the applied. ***Journal of Computing in Higher Education***, 26(1): 87–122.

Bhatia, A. K., & Levina, N. 2020. Diverse rationalities of entrepreneurship education: An epistemic stance perspective. ***Academy of Management Learning & Education***, 19(3): 323–344.

Blenker, P., Dreisler, P., Faergemann, H. M., & Kjeldsen, J. 2008. A framework for developing entrepreneurship education in a university context. ***International Journal of Entrepreneurship and Small Business***, 5(1): 45.

Bögenhold, D. (Ed.). 1999. ***Unternehmensgründung und Dezentralität: Renaissance der beruflichen Selbständigkeit in Europa?*** Opladen: Westdt. Verl.

Böhmert, V. 1897. ***Handelshochschulen Denkschrift zur Errichtung handelswissenschaftlicher Abteilungen an den technischen Hochschulen und Universitäten***. Dresden: Verlag von D. B. Böhmert.

Boore, J., & Porter, S. 2011. Education for entrepreneurship in nursing. ***Nurse Education Today***, 31(2): 184–191.

Bosman, L., & Fernhaber, S. 2018. Applying authentic learning through cultivation of the entrepreneurial mindset in the engineering classroom. ***Education Sciences***, 9(1): 1–18.

Bosman, L., Paterson, K., & Phillips, M. 2021. Integrating online discussions into engineering curriculum to endorse interdisciplinary viewpoints, promote authentic Learning, and Improve information literacy. ***International Journal of Engineering Education***, 37(1): 19–33.

Boud, D., Keogh, R., & Walker, D. 1985. ***Reflection: Turning experience into learning***. London : New York: Kogan Page ; Nichols Publishing.

Breugst, N., Patzelt, H., & Rathgeber, P. 2015. How should we divide the pie? Equity distribution and its impact on entrepreneurial teams. ***Journal of Business Venturing***, 30(1): 66–94.

Breugst, N., Patzelt, H., Shepherd, D. A., & Aguinis, H. 2012. Relationship Conflict Improves Team Performance Assessment Accuracy: Evidence From a Multilevel Study. ***Academy of Management Learning & Education***, 11(2): 187–206.

Breugst, N., Preller, R., Patzelt, H., & Shepherd, D. A. 2018. Information reliability and team reflection as contingencies of the relationship between information elaboration and team decision quality. ***Journal of Organizational Behavior***, 39(10): 1314–1329.

Brown, M. G. 2016. Blended instructional practice: A review of the empirical literature on instructors' adoption and use of online tools in face-to-face teaching. ***The Internet and Higher Education***, 31: 1–10.

Brush, C. G., Duhaime, I. M., Gartner, W. B., Stewart, A., Katz, J. A., et al. 2003. Doctoral Education in the Field of Entrepreneurship. ***Journal of Management***, 29(3): 309–331.

Calás, M. B., Smircich, L., & Bourne, K. A. 2009. Extending the boundaries: Reframing "Entrepreneurship as Social Change" through feminist perspectives. ***Academy of Management Review***, 34(3): 552–569.

Carland, J. W., Hoy, F., Boulton, W. R., & Carland, J. A. C. 1984. Differentiating entrepreneurs from small business owners: A conceptualization. ***The Academy of Management Review***, 9(2): 354–359.

Castro, R. 2019. Blended learning in higher education: Trends and capabilities. ***Education and Information Technologies***, 24(4): 2523–2546.

Chang, W.-L., & Lee, C.-Y. 2013. Trust as a learning facilitator that affects students' learning performance in the Facebook community: An investigation in a business planning writing course. ***Computers & Education***, 62: 320–327.

Chen, L., Ifenthaler, D., & Yau, J. Y.-K. 2021. Online and blended entrepreneurship education: A systematic review of applied educational technologies. ***Entrepreneurship Education***, 4(2): 191–232.

Colby, A., Ehrlich, T., Sullivan, W. M., & Dolle, J. R. (Eds.). 2011. ***Rethinking undergraduate business education: Liberal learning for the profession*** (1st ed). San Francisco, CA: Jossey-Bass.

Conn, S. 2019. ***Nothing succeeds like failure: The sad history of American business schools***. Ithaca, NY: Cornell University Press.

Cope, J. 2003. Entrepreneurial learning and critical reflection: Discontinuous events as triggers for 'higher-level' learning. ***Management Learning***, 34(4): 429–450.

Cope, J. 2005. Toward a Dynamic Learning Perspective of Entrepreneurship. ***Entrepreneurship Theory and Practice***, 29(4): 373–397.

Cope, J., & Watts, G. 2000. Learning by doing – An exploration of experience, critical incidents and reflection in entrepreneurial learning. ***International Journal of Entrepreneurial Behavior & Research***, 6(3): 104–124.

Corbin, J., & Strauss, A. 2008. ***Basics of Qualitative Research (3rd ed.): Techniques and Procedures for Developing Grounded Theory***. 2455 Teller Road, Thousand Oaks California 91320 United States: SAGE Publications, Inc.

Cusson, R. M. 2020. Educating the next generation of nurses to be innovators and change agents. ***Journal of Professional Nursing***, (36): 13–19.

Dana, L. P. 1992. Entrepreneurial education in Europe. ***Journal of Education for Business***, 68(2): 74–78.

Davidsson, P. 2015. ***ACE Research Vignette (044): Can entrepreneurship be taught (II)? Further Evidence***.

Deutsche Bank. 1981. Decision aid from Deutsche Bank for founders [Entscheidungshilfe der deutschen Bank für Gründer]. Box 788 Folder 2. ***Abt. 181 Deutscher Industrie- Und Handelskammertag***, Rheinisch-Westfälisches Wirtschaftsarchiv, Cologne, Germany.

Dewey, J. 1933. ***How we think—A restatement of the relation of reflective thinking in the educative process***. Lexington, MA: D.C. Heath and Company.

Dewey, J. 1938. ***Experience and Education***. New York: The Macmillan Company.

Dewey, J., & Tufts, J. H. 1906. ***Ethics***. New York, NY: Holt & Company.

Dewey, O. 1838. ***Moral views of commerce, society, and politics in twelve discourses***. London, UK: Charles Fox.

Dey, P., & Mason, C. 2018. Overcoming constraints of collective imagination: An inquiry into activist entrepreneuring, disruptive truth-telling and the creation of 'possible worlds.' ***Journal of Business Venturing***, 33(1): 84–99.

Dickfos, J., Cameron, C., & Hodgson, C. 2014. Blended learning: Making an impact on assessment and self-reflection in accounting education. ***Education + Training***, 56(2/3): 190–207.

Dimov, D. 2007. Beyond the Single-Person, Single-Insight Attribution in Understanding Entrepreneurial Opportunities. ***Entrepreneurship Theory and Practice***, 31(5): 713–731.

Dimov, D., & Pistrui, J. 2022. Entrepreneurship Education as a First-Person Transformation. ***Journal of Management Inquiry***, 31(1): 49–53.

Dodd, S., Lage-Arias, S., Berglund, K., Jack, S., Hytti, U., et al. 2022. Transforming enterprise education: Sustainable pedagogies of hope and social justice. ***Entrepreneurship & Regional Development***, 34(7–8): 686–700.

Durán-Sánchez, A., Del Río-Rama, M. de la C., Álvarez-García, J., & García-Vélez, D. F. 2019. Mapping of scientific coverage on education for Entrepreneurship in Higher Education. ***Journal of Enterprising Communities: People and Places in the Global Economy***, 13(1/2): 84–104.

Duval-Couetil, N. 2013. Assessing the Impact of Entrepreneurship Education Programs: Challenges and Approaches. ***Journal of Small Business Management***, 51(3): 394–409.

Dziuban, C., Graham, C. R., Moskal, P. D., Norberg, A., & Sicilia, N. 2018. Blended learning: The new normal and emerging technologies. ***International Journal of Educational Technology in Higher Education***, 15(1): 1–16.

Eastman Business College. 1866. ***The student's guide though the theoretical department of Eastman National Business College***. New York: John A. Gray & Green.

Eastman Business College. 1875. ***A brief history of Eastman Business College, from its earliest conception to the present time***. New York: Poughkeepsie.

Egholm, L. 2014. ***Philosophy of science: Perspectives on organisations and society***. Copenhagen: Hans Reitzels Forlag.

Ehrenberg, R. 1897. Presentation at the conference for merchant education on the first higher trade school in Leipzig, Germany [Präsentation “Die erste deutsche Handelshochschule zu Leipzig” gehalten auf dem Congresse des kaufmännischen Unterrichtswesen, 1897]. Box 63. ***HHS Sachakten***, Universitätsarchiv Leipzig, Germany.

Emminghaus, A. 1868. ***Allgemeine Gewerkslehre***. Berlin: Herbig.

Engwall, L. 2004. The Americanization of Nordic management education. ***Journal of Management Inquiry***, 13(2): 109–117.

Engwall, L., Kipping, M., & Üsdiken, B. 2016. ***Defining management: Business schools, consultants, media***. New York, NY: Routledge, Taylor & Francis Group.

Fayolle, A. 2013. Personal views on the future of entrepreneurship education. ***Entrepreneurship & Regional Development***, 25(7–8): 692–701.

Fayolle, A. (Ed.). 2018. ***A research agenda for entrepreneurship education***. Cheltenham, UK Northampton, MA, USA: Edward Elgar Publishing.

Fayolle, A., & Gailly, B. 2008. From craft to science: Teaching models and learning processes in entrepreneurship education. ***Journal of European Industrial Training***, 32(7): 569–593.

Fayolle, A., Verzat, C., & Wapshott, R. 2016. In quest of legitimacy: The theoretical and methodological foundations of entrepreneurship education research. ***International Small Business Journal***, 34(7): 895–904.

Fear, J. 1997. German Capitalism. In T. K. McCraw (Ed.), ***Creating modern capitalism: How entrepreneurs, companies, and countries triumphed in three industrial revolutions***: 135–182. Cambridge, MA: Harvard University Press.

Fenton, M., & Barry, A. 2014. Breathing space – Graduate entrepreneurs' perspectives of entrepreneurship education in higher education. ***Education + Training***, 56(8/9): 733–744.

Fiet, J. O. 2001. The theoretical side of teaching entrepreneurship. ***Journal of Business Venturing***, 16(1): 1–24.

Finkle, T. A., & Deeds, D. 2001. Trends in the market for entrepreneurship faculty, 1989—1998. ***Journal of Business Venturing***, 16(6): 613–630.

Fletcher, D. E. 2006. Entrepreneurial processes and the social construction of opportunity. ***Entrepreneurship and Regional Developement***, 18(5): 421–440.

Foley, E. P. 1965. The UCC and the Small Business Administration. ***Howard Law Journal***, 11(1): 1–7.

Fox, J., Pittaway, L., & Uzuegbunam, I. 2018. Simulations in Entrepreneurship Education: Serious Games and Learning Through Play. ***Entrepreneurship Education and Pedagogy***, 1(1): 61–89.

Franz, H. 1998. ***Zwischen Markt und Profession: Betriebswirte in Deutschland im Spannungsfeld von Bildungs- und Wirtschaftsbürgertum (1900-1945)***. Göttingen: Vandenhoeck & Ruprecht.

Gabrielsson, J., Hägg, G., Landström, H., & Politis, D. 2020. Connecting the past with the present: The development of research on pedagogy in entrepreneurial education. ***Education + Training***, 62(9): 1061–1086.

Gagliardi, P., & Czarniawska-Joerges, B. (Eds.). 2006. ***Management education and humanities***. Cheltenham, UK ; Northhampton, MA: Edward Elgar Pub.

Galvis, Á. H. 2018. Supporting decision-making processes on blended learning in higher education: Literature and good practices review. ***International Journal of Educational Technology in Higher Education***, 15(1): 1–38.

Garrison, D. R., & Vaughan, N. D. 2008. ***Blended learning in higher education: Framework, principles, and guidelines*** (1st ed). San Francisco: Jossey-Bass.

Giersch, H., Paqué, K.-H., & Schmieding, H. 1994. ***The Fading Miracle: Four Decades of Market economy in Germany***. Cambridge, UK: Cambridge University Press.

Gioia, D. A., Corley, K. G., & Hamilton, A. L. 2013. Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology. ***Organizational Research Methods***, 16(1): 15–31.

Godley, A. C., & Hamilton, S. 2020. Different expectations: A comparative history of structure, experience, and strategic alliances in the U.S. and U.K. poultry sectors, 1920–1990. ***Strategic Entrepreneurship Journal***, 14(1): 89–104.

Gorman, G., Hanlon, D., & King, W. 1997. Some research perspectives on entrepreneurship education, enterprise education and education for small business management: A ten-year literature review. ***International Small Business Journal***, 15(3): 56–77.

Graham, C. R. 2006. Blended learning systems: Definition, current trends, future directions. In C. J. Bonk & Charles Ray Graham (Eds.), ***The handbook of blended learning: Global perspectives, local designs*** (1st ed). San Francisco: Pfeiffer.

Gulski, N. T. 1973. A history of business education as seen by a Bryant College administrator. ***Retrieved from Digitalcommons.Bryant.Edu/Cgi/Viewcontent.Cgi?Article=1081&context=docu [19/11/2019]***.

Hägg, G. 2017. ***Experiential entrepreneurship education reflective thinking as a counterbalance to action for developing entrepreneurial knowledge***. Doctoral Disseration, Lund University, Lund, Sweden.

Hägg, G. 2018. The reflective novice entrepreneur: From habitual action to intelligent action using experience-based pedagogy as a vehicle for change. In A. Fayolle (Ed.), ***A Research Agenda for Entrepreneurship Education***: 189–223. Edward Elgar Publishing.

Hägg, G. 2021. The entrepreneurial diary – a reflective learning activity to enhance the judgmental abilities of student entrepreneurs. ***International Journal of Entrepreneurial Behavior & Research***, 27(5): 1142–1165.

Hägg, G., & Gabrielsson, J. 2020. A systematic literature review of the evolution of pedagogy in entrepreneurial education research. ***International Journal of Entrepreneurial Behavior & Research***, 26(5): 829–861.

Hägg, G., & Kurczewska, A. 2016. Connecting the dots: A discussion on key concepts in contemporary entrepreneurship education. ***Education + Training***, 58(7/8): 700–714.

Hägg, G., & Kurczewska, A. 2019. Who Is the Student Entrepreneur? Understanding the Emergent Adult through the Pedagogy and Andragogy Interplay. ***Journal of Small Business Management***, 57(sup1): 130–147.

Hägg, G., & Kurczewska, A. 2020a. Guiding the student entrepreneur – Considering the emergent adult within the pedagogy–andragogy continuum in entrepreneurship education. ***Education + Training***, 62(7/8): 759–777.

Hägg, G., & Kurczewska, A. 2020b. Towards a Learning Philosophy Based on Experience in Entrepreneurship Education. ***Entrepreneurship Education and Pedagogy***, 3(2): 129–153.

Hägg, G., & Kurczewska, A. 2021. ***Entrepreneurship education: Scholarly progress and future challenges***. New York, NY: Routledge.

Hägg, G., & Schölin, T. 2018. The policy influence on the development of entrepreneurship in higher education: A Swedish perspective. ***Education + Training***, 60(7/8): 656–673.

Handelshochschule Leipzig. 1898. Course catalog of the higher trade school Leipzig 1898/99—1904/05 [Vorlesungsverzeichnis Handelshochschule Leipzig 1898/99—1904/05]. Box 61. ***HHS Sachakten***, Universitätsarchiv Leipzig, Germany.

Handelshochschule Leipzig. 1914. Course catalog of the higher trade school Leipzig 1914—1930 [Vorlesungsverzeichnis Handelshochschule Leipzig 1914—1930]. Box 61. ***HHS Sachakten***, Universitätsarchiv Leipzig, Germany.

Hannon, P. D. 2018. On becoming and being an entrepreneurship educator: A personal reflection. ***Entrepreneurship & Regional Development***, 30(7–8): 698–721.

Harichandran, R. S., Erdil, N. O., Carnasciali, M.-I., & Nocito-Gobel, J. 2018. Developing an entrepreneurial mindset in engineering students using integrated e-learning modules. ***Advances in Engineering Education***, 7(1): 1–16.

Harima, A., Gießelmann, J., Göttsch, V., & Schlichting, L. 2021. Entrepreneurship? Let us do it later: Procrastination in the intention–behavior gap of student entrepreneurship. ***International Journal of Entrepreneurial Behavior & Research***, 27(5): 1189–1213.

Hasanah, H., & Malik, M. N. 2020. Blended learning in improving students' critical thinking and communication skills at university. ***Cypriot Journal of Educational Sciences***, 15(5): 1295–1306.

Haushofer, M. 1874. ***Der Industriebetrieb: Ein Handbuch für Industrielle, Kaufleute etc. Sowie zum Gebrauche an technischen Schulen***. Stuttgart: Julius Maier.

Hegarty, C. 2006. It's not an exact science: Teaching entrepreneurship in Northern Ireland. ***Education + Training***, 48(5): 322–335.

Hellmann, T., & Wasserman, N. 2017. The First Deal: The Division of Founder Equity in New Ventures. ***Management Science***, 63(8): 2647–2666.

Henry, C., Hill, F., & Leitch, C. 2005. Entrepreneurship education and training: Can entrepreneurship be taught? Part II. ***Education + Training***, 47(3): 158–169.

Hibbert, P. 2021. ***How to be a reflexive researcher***. Cheltenham, UK: Edward Elgar Publishing.

Hjorth, D. 2011. On provocation, education and entrepreneurship. ***Entrepreneurship & Regional Development***, 23(1–2): 49–63.

Hodges, J. 1887. Commercial education. ***The North American Review***, 144(366): 462–470.

Hua, S., & Ren, Z. 2020. "Online + offline" course teaching based on case teaching method: A case study of entrepreneurship education course. ***International Journal of Emerging Technologies in Learning***, 15(10): 69–85.

Hunt, F. (Ed.). 1854. ***Merchants' magazine and commercial review***, vol. 31. New York: Freeman Hunt.

Ilonen, S., & Heinonen, J. 2018. Understanding affective learning outcomes in entrepreneurship education. ***Industry and Higher Education***, 32(6): 391–404.

Jack, S. L., & Anderson, A. R. 1999. Entrepreneurship education within the enterprise culture: Producing reflective practitioners. ***International Journal of Entrepreneurial Behavior & Research***, 5(3): 110–125.

Johnsen, C. G., Olaison, L., & Sørensen, B. M. 2018. Conceptual activism: Entrepreneurship education as a philosophical project. ***Revitalizing Entrepreneurship Education***: 119–136. Routledge.

Johnsen, R., Skoglund, A., Statler, M., & Sullivan, W. M. 2021. Management learning and the unsettled humanities: Introduction to the special issue. ***Management Learning***, 52(2): 135–143.

Johnsen, R., Thaning, M. S., & Pedersen, M. 2016. Knowledge you can’t google: Teaching philosophy at the business school. ***The Routledge Companion to Reinventing Management Education***: 374–386. Routledge.

Jones, C. 2019. A signature pedagogy for entrepreneurship education. ***Journal of Small Business and Enterprise Development***, 26(2): 243–254.

Jones, C., Matlay, H., Penaluna, K., & Penaluna, A. 2014. Claiming the future of enterprise education. ***Education + Training***, 56(8/9): 764–775.

Jones, C., Penaluna, K., & Penaluna, A. 2019. The promise of andragogy, heutagogy and academagogy to enterprise and entrepreneurship education pedagogy. ***Education + Training***, 61(9): 1170–1186.

Jones, N., & Lau, A. M. S. 2010. Blending learning: Widening participation in higher education. ***Innovations in Education and Teaching International***, 47(4): 405–416.

Jones, P., Jones, A., Packham, G., Thomas, B., & Miller, C. 2007. It's all in the mix: The evolution of a blended e-learning model for an undergraduate degree. ***Journal of Systems and Information Technology***, 9(2): 124–142.

Karlsruhe Institute of Technology. 1999. Course catalog Technical University Karlsruhe 1999/2000 [Vorlesungsverzeichnis KIT WS 99/00]. Box 206. ***Universitätsbibliothek Karlsruhe (28914)***, KIT Archive, Karlsruhe, Germany.

Kassean, H., Vanevenhoven, J., Liguori, E., & Winkel, D. E. 2015. Entrepreneurship education: A need for reflection, real-world experience and action. ***International Journal of Entrepreneurial Behavior & Research***, 21(5): 690–708.

Katz, J. A. 2003. The chronology and intellectual trajectory of American entrepreneurship education. ***Journal of Business Venturing***, 18(2): 283–300.

Kaufmann und Fabrikant. 1856. ***Der Kaufmann - Zeitschrift Für Verbreitung Kaufmännischer Kenntnisse Unter Handlungsgehilfen Und Jungen Kaufleuten***, 1(5): 41–43.

Kazakeviciute, A., Urbone, R., & Petraite, M. 2016. Curriculum development for technology-based entrepreneurship education: A cross-disciplinary and cross-cultural approach. ***Industry and Higher Education***, 30(3): 202–214.

Khaire, M., & Wadhwani, R. D. 2010. Changing landscapes: The construction of meaning and value in a new market category—Modern Indian Art. ***Academy of Management Journal***, 53(6): 1281–1304.

Khurana, R. 2007. ***From higher aims to hired hands: The social transformation of American business schools and the unfulfilled promise of management as a profession***. Princeton, NJ: Princeton University Press.

Kickul, J., Janssen-Selvadurai, C., & Griffiths, M. D. 2012. A blended value framework for educating the next cadre of social entrepreneurs. ***Academy of Management Learning & Education***, 11(3): 479–493.

Kieser, A. 2004. The Americanization of academic management education in Germany. ***Journal of Management Inquiry***, 13(2): 90–97.

Kipping, M. 1998. The hidden business schools: Management training in Germany since 1945. In L. Engwall & V. Zamagni (Eds.), ***Management education in historical perspective***: 95–110. New York: Manchester University Press.

Kipping, M., Wadhwani, R. D., & Bucheli, M. 2013. Analyzing and interpreting historical sources: A basic methodology. In M. Bucheli & R. D. Wadhwani (Eds.), ***Organizations in Time***: 305–329. Oxford: Oxford University Press.

Kirby, D. A. 2007. Changing the entrepreneurship education paradigm. ***Handbook of research in entrepreneurship education***: 21–45. Edward Elgar.

Klandt, H. 2018. Überlegungen zu Entrepreneurship Research und Entrepreneurship Education. In G. Faltin (Ed.), ***Handbuch Entrepreneurship***: 55–70. Wiesbaden: Springer Fachmedien Wiesbaden.

Klapper, R. G., Feather, D., Refai, D., Thompson, J., & Fayolle, A. 2015. Special Issue: Innovative Pedagogy in Entrepreneurship: Introduction. ***Industry and Higher Education***, 29(5): 321–325.

Klein-Blenker, F., & Reiß, M. 1993. Geschichte der Betriebswirtschaftslehre. In W. Wittmann (Ed.), ***Handwörterbuch der Betriebswirtschaft***, vol. 5: 1417–1433. Stuttgart: Schäffer-Poeschel.

Klein-Blenkers, F. 1996. ***Courcelle-Seneuil, Emminghaus, Lindwurm als Vorläufer der neuen Betriebswirtschaftslehre in der zweiten Hälfte des 19. Jahrhunderts***. Cologne: Wirtschaftsverlag Bachem.

Knoblauch, H. 2009. Social constructivism and the three levels of video analysis. In U. Kissmann (Ed.), ***Video interaction analysis: Methods and methodology***: 181–198. Frankfurt am Main ; New York: Peter Lang.

Knoblauch, H., Schnettler, B., & Tuma, R. 2018. Videography. ***The SAGE Handbook of Qualitative Data Collection***: 362–377. 1 Oliver’s Yard, 55 City Road London EC1Y 1SP: SAGE Publications Ltd.

Knowles, M. S., Holton, E. F., & Swanson, R. A. 2015. ***The adult learner: The definitive classic in adult education and human resource development*** (Eighth edition). London ; New York: Routledge.

Kocka, J. 1975. ***Unternehmer in der deutschen Industrialisierung***. Göttingen: Vandenhoeck und Ruprecht.

Kolb, D. A. 2015. ***Experiental learning: Experience as the source of learning and development*** (Second edition). Upper Saddle River, NJ: Pearson Education.

König, W. 1990. Technische Hochschule und Industrie—Ein Überblick zur Geschichte des Technologietransfers. In H. J. Schuster (Ed.), ***Handbuch des Wissenschaftstransfers***: 29–41. Berlin, Heidelberg: Springer Berlin Heidelberg.

Korsgaard, S., & Anderson, A. R. 2011. Enacting entrepreneurship as social value creation. ***International Small Business Journal: Researching Entrepreneurship***, 29(2): 135–151.

Koselleck, R. 2017. ***Vergangene Zukunft: Zur Semantik geschichtlicher Zeiten*** (10. Auflage). Frankfurt am Main: Suhrkamp.

Koselleck, R., & Presner, T. S. 2002. ***The practice of conceptual history: Timing history, spacing concepts***. Stanford, CA: Stanford University Press.

Kuratko, D. F. 2005. The emergence of entrepreneurship education: Development, trends, and challenges. ***Entrepreneurship Theory and Practice***, 29(5): 577–598.

Kuratko, D. F., & Morris, M. H. 2018. Examining the future trajectory of entrepreneurship. ***Journal of Small Business Management***, 56(1): 11–23.

Kurczewska, A., Kyrö, P., Lagus, K., Kohonen, O., & Lindh-Knuutila, T. 2018. The interplay between cognitive, conative, and affective constructs along the entrepreneurial learning process. ***Education + Training***, 60(7/8): 891–908.

Kyrö, P. 2015. The conceptual contribution of education to research on entrepreneurship education. ***Entrepreneurship & Regional Development***, 27(9–10): 599–618.

Lackéus, M. 2017. Does entrepreneurial education trigger more or less neoliberalism in education? ***Education + Training***, 59(6): 635–650.

Lackéus, M., Lundqvist, M., & Middleton, K. W. 2016. Bridging the traditional-progressive education rift through entrepreneurship. ***International Journal of Entrepreneurial Behavior & Research***, 22(6): 777–803.

Laine, K. 2008. A Finnish concept for academic entrepreneurship: The case of Satakunta University of Applied Sciences. ***Industry and Higher Education***, 22(1): 19–28.

Laine, L., & Kibler, E. 2020. The social imaginary of emancipation in entrepreneurship. ***Entrepreneurship Theory and Practice***.

Landfester, U., & Metelmann, J. 2019. ***Transformative management education: The role of the humanities and social sciences***. New York, NY: Routledge, Taylor & Francis Group.

Landfester, U., & Metelmann, J. 2020. The Value of Doubt: Humanities-Based Literacy in Management Education. ***Humanistic Management Journal***, 5(2): 159–175.

Landström, H., Gabrielsson, J., Politis, D., Sørheim, R., & Djupdal, K. 2022. The Social Structure of Entrepreneurial Education as a Scientific Field. ***Academy of Management Learning & Education***, 21(1): 61–81.

Landström, H., & Harirchi, G. 2018. The social structure of entrepreneurship as a scientific field. ***Research Policy***, 47(3): 650–662.

Landström, H., Harirchi, G., & Åström, F. 2012. Entrepreneurship: Exploring the knowledge base. ***Research Policy***, 41(7): 1154–1181.

Larsen, I. B. 2022. Fostering an entrepreneurial mindset: A typology for aligning instructional strategies with three dominant entrepreneurial mindset conceptualizations. ***Industry and Higher Education***, 36(3): 236–251.

Lattacher, W., & Wdowiak, M. A. 2020. Entrepreneurial learning from failure. A systematic review. ***International Journal of Entrepreneurial Behavior & Research***, 26(5): 1093–1131.

le Roux, I., & Nagel, L. 2018. Seeking the best blend for deep learning in a flipped classroom – Viewing student perceptions through the community of inquiry lens. ***International Journal of Educational Technology in Higher Education***, 15(1): 1–28.

Legg, C., & Hookway, C. 2021. Pragmatism. (E. N. Zalta, Ed.)***Stanford Encyclopedia of Philosophy***. https://plato.stanford.edu/archives/sum2021/entries/pragmatism.

Liao, Y., & Liu, Z. 2015. Meta synthesis design for entrepreneur engineering education using flipped classroom based on m-learning. ***World Transactions on Engineering and Technology Education***, 13(4): 603–608.

Liguori, E. W., Winkler, C., Neck, H. M., & Terjesen, S. 2019. Editorial: Special Issue on Entrepreneurship Education. ***Journal of Small Business Management***, 57(sup1): 4–5.

Liguori, E., & Winkler, C. 2020. From offline to online: Challenges and opportunities for entrepreneurship education following the COVID-19 pandemic. ***Entrepreneurship Education and Pedagogy***, 3(4): 346–351.

Lindenfeld, D. F. 1990. The professionalization of applied economics: German counterparts to business administration. In G. Cocks & K. H. Jarausch (Eds.), ***German professions, 1800-1950***: 213–231. New York, NY: Oxford University Press.

Lindh, I. 2017. Entrepreneurial development and the different aspects of reflection. ***The International Journal of Management Education***, 15(1): 26–38.

Lindh, I., & Thorgren, S. 2016. Critical event recognition: An extended view of reflective learning. ***Management Learning***, 47(5): 525–542.

Liu, Q., Peng, W., Zhang, F., Hu, R., Li, Y., et al. 2016. The effectiveness of blended learning in health professions: Systematic review and meta-analysis. ***Journal of Medical Internet Research***, 18(1): 1–19.

Löbler, H. 2006. Learning entrepreneurship from a constructivist perspective. ***Technology Analysis & Strategic Management***, 18(1): 19–38.

Locke, R. R. 1984. ***The end of the practical man: Entrepreneurship and higher education in Germany, France, and Great Britain, 1880-1940***. Greenwich, CT: JAI Press.

Locke, R. R. 1985. Business education in Germany: Past systems and current practice. ***Business History Review***, 59(2): 232–253.

Locke, R. R. 2008. Comparing the German and American systems. ***Business History Review***, 82(2): 336–342.

Loi, M., Castriotta, M., & Di Guardo, M. C. 2016. The theoretical foundations of entrepreneurship education: How co-citations are shaping the field. ***International Small Business Journal***, 34(7): 948–971.

Loi, M., & Fayolle, A. 2022. Rethinking and reconceptualising entrepreneurship education a legacy from Alistair Anderson. ***Entrepreneurship & Regional Development***, 1–21.

Loi, M., Fayolle, A., van Gelderen, M., Riot, E., Refai, D., et al. 2022. Entrepreneurship Education at the Crossroads: Challenging Taken-for-Granted Assumptions and Opening New Perspectives. ***Journal of Management Inquiry***, 31(2): 123–134.

Loos, I. A. 1903. The Ann Arbor Conference on the higher commercial education. ***Journal of Political Economy***, 11(3): 457–466.

Lubinski, C. 2022. Dynamische Fähigkeiten: Die Sparkassen und das Geschäft mit dem Mittelstand. In G. Schulz & T. Wehber (Eds.), ***Die Entstehung der modernen Sparkasse in der Nachkriegszeit: Von der „Ersparnisanstalt" zur modernen Sparkasse (1950er bis frühe 1980er Jahre***. Bonn: Deutscher Sparkassen- und Giroverband e.V.

Lubinski, C., & Viebig, C. 2020a. Business Model Challenges: The Electric Vehicle Company. ***Harvard Business School Publishing***.

Lubinski, C., & Viebig, C. 2020b. IP-Management im Start-up Lebenszyklus. In S. Golkowsky (Ed.), ***IP-Strategien für Start-ups: Grundlagen, Aufbau und Umsetzung von Schutzrechten*** (1. Auflage): 177–200. Stuttgart [Freiburg]: Schäffer-Poeschel Verlag.

Lubinski, C., & Viebig, C. 2022. IP management in the startup lifecyle. In S. Golkowsky (Ed.), ***Intellectual Property Strategies for Start-ups: A Practical Guide***: 191–214. Cheltenham, UK: Edward Elgar Publishing.

Lubinski, C., Wadhwani, R. D., & Giacomin, V. 2020, April 1. ***Module Note Historical Entrepreneurship***. United States: USC-Marshall/Lloyd Greif Center for Entrepreneurial Studies.

Luchsinger, L. L., & Luchsinger, V. 1977. New trends in educational programs oriented towards small businesses. ***Journal of Small Business Management***, 15(1): 43–47.

Lundmark, E., Tayar, M., Qin, K., & Bilsland, C. 2019. Does Reflection Help Students to Develop Entrepreneurial Capabilities? ***Journal of Small Business Management***, 57(3): 1157–1171.

Lyons, T. S., Hamlin, R. E., & Hamlin, A. 2018. ***Using entrepreneurship and social innovation to mitigate wealth inequality***. Boston: De Gruyter.

Maarop, A. H., & Embi, M. A. 2016. Implementation of blended learning in higher learning institutions: A review of literature. ***International Education Studies***, 9(3): 41–52.

Madsbjerg, C. 2019. ***Sensemaking: The power of the humanities in the age of the algorithm*** (Paperback edition). London: Abacus.

Maritz, A., Brown, C., & Jen, C. 2010. A blended learning approach to entrepreneurship education. ***Actual Problems of Economics***, 13(115): 83–93.

Maritz, A., & Brown, C. R. 2013. Illuminating the black box of entrepreneurship education programs. ***Education + Training***, 55(3): 234–252.

Maritz, A., & Waal, G. A. D. 2014. Educating engineers: A postgraduate entrepreneurship and innovation perspective. ***International Journal of Engineering Education***, 30(2): 291–301.

Martínez, L., & Muñoz, J. 2021. Are andragogy and heutagogy the secret recipe for transdisciplinary entrepreneurship education? ***European Business Review***, 33(6): 957–974.

Mason, J. 2018. Entrepreneurship in knowledge-based services: Opportunity and challenges for new venture, economic, and workforce development. ***Journal of Business Venturing Insights***, 10: e00092.

McKenna, S. 2007. Deconstructing a personal “academic”/“practitioner” narrative through self-reflexivity. ***Qualitative Research in Organizations and Management: An International Journal***, 2(2): 144–160.

McMullen, J. S. 2019. A wakeup call for the field of entrepreneurship and its evaluators. ***Journal of Business Venturing***, 34(3): 413–417.

Means, B., Yukie, T., Murphy, R., & Baki, M. 2013. The effectiveness of online and blended learning: A meta-analysis of the empirical literature. ***Teachers College Record***, 115: 1–47.

Menkhoff, T., & Bengtsson, M. L. 2012. Engaging students in higher education through mobile learning: Lessons learnt in a Chinese entrepreneurship course. ***Educational Research for Policy and Practice***, 11(3): 225–242.

Meyer, H.-D. 1998. The German Handelshochschulen, 1898—1933: A new departure in management education and why it failed. In L. Engwall & V. Zamagni (Eds.), ***Management education in historical perspective***: 19–33. New York, NY: Manchester University Press.

Mezirow, J. 1991. ***Transformative dimensions of adult learning*** (1st ed). San Francisco: Jossey-Bass.

Mieck, I. 1965. ***Preussische Gewerbepolitik in Berlin 1806 - 1844: Staatshilfe und Privatinitiative zwischen Merkantilismus und Liberalismus***. Berlin: Walter de Gruyter & Co.

Miller, R. 2018. ***Transforming the Future: Anticipation in the 21st Century***. Routledge.

Minniti, M., & Bygrave, W. 2001. A Dynamic Model of Entrepreneurial Learning. ***Entrepreneurship Theory and Practice***, 25(3): 5–16.

Mitchell, P. C., & McKeown, A. E. 2004. Importance of peer support and tutor involvement in entrepreneurship education for overseas Bioscience students. ***Bioscience Education***, 3(1): 1–19.

Mittermaier, A. 2019. ***Doing well by doing good: A study of entrepreneurial action for the well-being of others***. Doctoral Disseration, Technical University Munich, Munich.

Morris, M. H., & Liguori, E. 2016. Preface: Teaching reason and the unreasonable. ***Annals of entrepreneurship education and pedagogy–2016***: xiv–xxii. Edward Elgar Publishing.

Müller, C., Poandl, E. M., & Glinik, M. 2019. Developing a viable business model for start-ups at the Gruendungsgarage. ***Journal of Business Models***, 7(3): 47–56.

Muñoz, P., & Cohen, B. 2018. Sustainable Entrepreneurship Research: Taking Stock and looking ahead: Sustainable Entrepreneurship Research. ***Business Strategy and the Environment***, 27(3): 300–322.

Nabi, G., Liñán, F., Fayolle, A., Krueger, N., & Walmsley, A. 2017. The impact of entrepreneurship education in higher education: A systematic review and research agenda. ***Academy of Management Learning & Education***, 16(2): 277–299.

Naujoks, W. 1978. Letter from Dr. Naujoks to H. Pütz regarding creation and support of SMEs [Brief von Dr. Naujoks an H. Putz bezüglich Schaffung und Förderung von mittelständischen Existenzen]. Box 787 Folder 3. ***Abt. 181 Deutscher Industrie- Und Handelskammertag***, Rheinisch-Westfälisches Wirtschaftsarchiv, Cologne, Germany.

Neck, H. M., & Corbett, A. C. 2018. The Scholarship of teaching and learning entrepreneurship. ***Entrepreneurship Education and Pedagogy***, 1(1): 8–41.

Neck, H. M., & Greene, P. G. 2011. Entrepreneurship education: Known worlds and new frontiers. ***Journal of Small Business Management***, 49(1): 55–70.

Neck, H. M., Greene, P. G., & Brush, C. G. 2014. ***Teaching entrepreneurship: A practice-based approach***. Cheltenham, UK Northampton, MA, USA: Edward Elgar.

Neergaard, H., & Christensen, D. R. 2017. Breaking the waves: Routines and rituals in entrepreneurship education. ***Industry and Higher Education***, 31(2): 90–100.

Neergaard, H., Robinson, S., & Jones, S. 2020. Transformative learning in the entrepreneurship education process: The role of pedagogical nudging and reflection. ***International Journal of Entrepreneurial Behavior & Research***, 27(1): 251–277.

Noraini, N., Ramayah, T., Jaya, P., & Noor, S. M. 2020. Handling massive enrollment for achieving results: A flipped classroom approach. ***International Journal of Online Pedagogy and Course Design***, 10(4): 45–58.

Nortvig, A.-M., Petersen, A. K., & Balle, S. H. 2018. A literature review of the factors influencing e-learning and blended learning in relation to learning outcome, student satisfaction and engagement. ***The Electronic Journal of E-Learning***, 16(1): 46–55.

O’Connor, A. 2013. A conceptual framework for entrepreneurship education policy: Meeting government and economic purposes. ***Journal of Business Venturing***, 28(4): 546–563.

Olokundun, M., Moses, C. L., Iyiola, O., Ibidunni, S., Ogbari, M., et al. 2018. The effect of non traditional teaching methods in entrepreneurship education on students entrepreneurial interest and business startups_ A data article. ***Data in Brief***, 19: 16–20.

O'Neill, J. 2016. Social imaginaries: An overview. In M. A. Peters (Ed.), ***Encyclopedia of Educational Philosophy and Theory***: 1–6. Singapore: Springer Singapore.

Pache, A.-C., & Chowdhury, I. 2012. Social entrepreneurs as institutionally embedded entrepreneurs: Toward a new model of social entrepreneurship education. ***Academy of Management Learning & Education***, 11(3): 494–510.

Passant, A. J.-G. 2016. Issues in European business education in the mid-nineteenth century: A comparative perspective. ***Business History***, 58(7): 1118–1145.

Passant, A. J.-G. 2019. The early emergence of European commercial education in the nineteenth century: Insights from higher engineering schools. ***Business History***, 61(6): 1051–1082.

Pearson, M., & Smith, D. 1985. Debriefing in experience-based learning. In D. Boud, R. Keogh, & D. Walker (Eds.), ***Reflection: Turning experience into learning***. London: Kogan Page ; Nichols Pub.

Pepin, M. 2012. Enterprise education: A Deweyan perspective. (H. Matlay, Ed.)***Education + Training***, 54(8/9): 801–812.

Piperopoulos, P., & Dimov, D. 2015. Burst Bubbles or Build Steam? Entrepreneurship Education, Entrepreneurial Self-Efficacy, and

Entrepreneurial Intentions. ***Journal of Small Business Management***, 53(4): 970–985.

Pisoni, G. 2019. Strategies for Pan-European implementation of blended learning for innovation and entrepreneurship (I&E) education. ***Education Sciences***, 9(2): 124.

Pittaway, L., & Cope, J. 2007a. Entrepreneurship education: A systematic review of the evidence. ***International Small Business Journal***, 25(5): 479–510.

Pittaway, L., & Cope, J. 2007b. Simulating Entrepreneurial Learning: Integrating Experiential and Collaborative Approaches to Learning. ***Management Learning***, 38(2): 211–233.

Plaschka, G. R., & Welsch, H. P. 1990. Emerging structures in entrepreneurship education: Curricular designs and strategies. ***Entrepreneurship Theory and Practice***, 14(3): 55–71.

Pocock, J. G. A. 1972. Virtue and commerce in the eighteenth century. ***Journal of Interdisciplinary History***, 3(1): 119–134.

Politis, D. 2005. The Process of Entrepreneurial Learning: A Conceptual Framework. ***Entrepreneurship Theory and Practice***, 29(4): 399–424.

Polytechnische Hochschule Karlsruhe. 1832. Course catalog of the higher polytechnical school Karlsruhe 1832/33 [Programm der großherzoglich badischen polytechnischen Schule zu Carlsruhe 1832/33]. Microfilm IV

0.1—0.27. ***Universitätsbibliothek Karlsruhe (92299001)***, KIT Archive, Karlsruhe, Germany.

Polytechnische Hochschule Karlsruhe. 1865. Course catalog of the higher polytechnical school Karlsruhe 1865/66—1873/74 [Programm der großherzoglich badischen polytechnischen Schule zu Carlsruhe 1865/66—1873/74]. Microfilm IV 0.28—12. ***Universitätsbibliothek Karlsruhe (92299001)***, KIT Archive, Karlsruhe, Germany.

Pontikes, E. G., & Rindova, V. P. 2020. Shaping markets through temporal, constructive, and interactive agency. ***Strategy Science***, 5(3): 149–159.

Pratt, M. G., Kaplan, S., & Whittington, R. 2020. Editorial Essay: The Tumult over Transparency: Decoupling Transparency from Replication in Establishing Trustworthy Qualitative Research. ***Administrative Science Quarterly***, 65(1): 1–19.

Ramsgaard, M. B., & Christensen, M. E. 2018. Interplay of entrepreneurial learning forms: A case study of experiential learning settings. ***Innovations in Education and Teaching International***, 55(1): 55–64.

Rasmussen, E. A., & Sørheim, R. 2006. Action-based entrepreneurship education. ***Technovation***, 26(2): 185–194.

Ratten, V., & Jones, P. 2020. Covid-19 and entrepreneurship education: Implications for advancing research and practice. ***The International Journal of Management Education***, 100432.

Ratten, V., & Usmanij, P. 2021. Entrepreneurship education: Time for a change in research direction? ***The International Journal of Management Education***, 19(1): 100367.

Redlich, F. 1957. Academic education for business: Its development and the contribution of Ignaz Jastrow (1856–1937): In commemoration of the hundredth anniversary of Jastrow's birth. ***Business History Review***, 31(1): 35–91.

Reinert, S. A. 2015. The way to wealth around the world: Benjamin Franklin and the globalization of American capitalism. ***American Historical Review***, 120(1): 61–97.

Reuben, J. A. 1996. ***The making of the modern university: Intellectual transformation and the marginalization of morality***. Chicago, IL: University of Chicago Press.

Rideout, E. C., & Gray, D. O. 2013. Does Entrepreneurship Education Really Work? A Review and Methodological Critique of the Empirical Literature on the Effects of University-Based Entrepreneurship Education. ***Journal of Small Business Management***, 51(3): 329–351.

Ries, E. 2011. ***The Lean Startup: How today's entrepreneurs use continuous innovation to create radically successful businesses***. Crown Publishing Group.

Rindova, V., Barry, D., & Ketchen, D. J. 2009. Entrepreneuring as emancipation. ***Academy of Management Review***, 34(3): 477–491.

Robinson, S., Neergaard, H., Tanggaard, L., & Krueger, N. F. 2016. New horizons in entrepreneurship education: From teacher-led to student-centered learning. ***Education + Training***, 58(7/8): 661–683.

Rodgers, C. 2002. Defining reflection: Another look at John Dewey and reflective thinking. ***Teachers College Record***, 104(4): 842–866.

Roffe, I. 2010. Sustainability of curriculum development for enterprise education: Observations on cases from Wales. ***Education + Training***, 52(2): 140–164.

Rorabaugh, W. J. 1986. ***The craft apprentice: From Franklin to the machine age in America***. New York, NY: Oxford University Press.

Rosellen, H.-P. 1984. Letter from the Magazine "Die Bunte" [Brief der Zeitschrift die Bunte vom 9.4.1984]. Box 788 Folder 3. ***Abt. 181 Deutscher Industrie-Und Handelskammertag***, Rheinisch-Westfälisches Wirtschaftsarchiv, Cologne, Germany.

Rowlinson, M., Hassard, J., & Decker, S. 2014. Research strategies for organizational history: A dialogue between historical theory and organization theory. ***Academy of Management Review***, 39(3): 250–274.

Ruef, M. 2020. The household as a source of labor for entrepreneurs: Evidence from New York City during industrialization. ***Strategic Entrepreneurship Journal***, 14(1): 20–42.

Rüegg, W. (Ed.). 2004. ***Universities in the nineteenth and early twentieth centuries (1800-1945)***. Cambridge: Cambridge University Press.

Rusko, R. 2017. Interactive online learning: Solution to learn entrepreneurship in sparsely populated areas? ***International Journal of Online Pedagogy and Course Design***, 7(3): 54–69.

Sandel, M. J. 2013. Market reasoning as moral reasoning: Why economists should re-engage with political philosophy. ***Journal of Economic Perspectives***, 27(4): 121–140.

Sass, S. A. 1982. ***The pragmatic imagination: A history of the Wharton School, 1881-1981***. Philadelphia, PA: University of Pennsylvania Press.

Schmalenbach, E. 1920. Findeisen-Großmann Grundriß der Handelswissenschaften. ***Zeitschrift Für Handelswissenschaftliche Forschung***, 14: 106.

Schoen, E. Jr. 1957. The Small Business Administration. ***Maryland Law Review***, 17(1): 30–42.

Schön, D. A. 1983. ***The reflective practitioner: How professionals think in action***. New York: Basic Books.

Schumpeter, J. 1934. ***The theory of economic development***. Cambridge, MA: Harvard University Press.

Schwandt, T. A. 1994. Constructivist, interpretivist approaches to human inquiry. (N. K. Denzin & Y. S. Lincoln, Eds.)***Handbook of Qualitative Research***, 1(1994): 118–137.

Schwartz-Shea, P., & Yanow, D. 2012. ***Interpretive research design: Concepts and processes***. New York, NY: Routledge.

Scott, J. M., Penaluna, A., & Thompson, J. L. 2016. A critical perspective on learning outcomes and the effectiveness of experiential approaches in entrepreneurship education: Do we innovate or implement? ***Education + Training***, 58(1): 82–93.

Secundo, G., Mele, G., Vecchio, P. D., Elia, G., Margherita, A., et al. 2021. Threat or opportunity? A case study of digital-enabled redesign of entrepreneurship education in the COVID-19 emergency. ***Technological Forecasting and Social Change***, 166: 1–13.

Shane, S., & Venkataraman, S. 2000. The promise of entrepreneurship as a field of research. ***Academy of Management Review***, 25(1): 217–226.

Shurville, S., & Rospigliosi, A. 2009. Implementing blended self-managed action learning for digital entrepreneurs in higher education. ***Action Learning: Research and Practice***, 6(1): 53–61.

Sinkovics, R. R., Bell, J., & Deans, K. R. 2004. Using information communication technology to develop international entrepreneurship competencies. ***Journal of International Entrepreneurship***, 2(1/2): 125–137.

Smith, K. 2007. Supporting e-learning in enterprise: The TE3 project. ***Education + Training***, 49(8/9): 656–671.

Smith, K., & Hill, J. 2019. Defining the nature of blended learning through its depiction in current research. ***Higher Education Research & Development***, 38(2): 383–397.

Sole, D., & Edmondson, A. 2002. Situated knowledge and learning in dispersed teams. ***British Journal of Management***, 13(2): 17–34.

Solomon, G. T., & Carney, M. 1985. United States Small Business Administration’s role in small business training. ***International Small Business Journal***, 4(1): 25–33.

Solomon, G. T., & Fernald, L. W. 1991. Trends in small business management and entrepreneurship education in the United States. ***Entrepreneurship Theory and Practice***, 15(3): 25–40.

Statler, M., & de Monthoux, P. G. 2015. Background: A Paradigm in Question. ***Journal of Management Education***, 39(1): 3–15.

Stefanic, I., Campbell, R. K., Russ, J. S., & Stefanic, E. 2020. Evaluation of a blended learning approach for cross-cultural entrepreneurial education. ***Innovations in Education and Teaching International***, 57(2): 242–254.

Stewart, D., & Pepper, M. B. 2011. Close encounters: Lessons from an indigenous MBA program. ***Journal of Management Education***, 35(1): 66–83.

Steyaert, C., Beyes, T., & Parker, M. (Eds.). 2016. ***The Routledge companion to reinventing management education***. London ; New York: Routledge, Taylor & Francis Group.

Stutz, C., & Sachs, S. 2018. Facing the normative challenges: The potential of reflexive historical research. ***Business & Society***, 57(1): 98–130.

Swedberg, R. 2006. Social entrepreneurship: The view of the young Schumpeter. In C. Steyaert & D. Hjorth (Eds.), ***Entrepreneurship as social change***: 21–34. Cheltenham UK ; Northampton, MA, USA: Edward Elgar.

Szyperski, N. 1980. Project proposal for the PUNIS project [Projektantrag des Projekts PUNIS]. Box 788 Folder 2 p. 6. ***Abt. 181 Deutscher Industrie- Und***

Handelskammertag, Rheinisch-Westfälisches Wirtschaftsarchiv, Cologne, Germany.

Taylor, C. 2004. ***Modern social imaginaries***. Durham, NC: Duke University Press.

Thanasi-Boçe, M. 2020. Enhancing students' entrepreneurial capacity through marketing simulation games. ***Education + Training***, 62(9): 999–1013.

Thieß, K. 1914. Hochschulbildung für Unternehmer. In G. Schmoller (Ed.), ***Schmollers Jahrbuch für Gesetzgebung, Verwaltung und Volkswirtschaft im Deutschen Reiche***: 43–114. München; Leipzig: Dunker & Humblot.

Thomassen, M. L., Williams Middleton, K., Ramsgaard, M. B., Neergaard, H., & Warren, L. 2019. Conceptualizing context in entrepreneurship education: A literature review. ***International Journal of Entrepreneurial Behavior & Research***, 26(5): 863–886.

Thompson, N. A., & Illes, E. 2021. Entrepreneurial learning as practice: A video-ethnographic analysis. ***International Journal of Entrepreneurial Behavior & Research***, 27(3): 579–599.

Tranfield, D., Denyer, D., & Smart, P. 2003. Towards a methodology for developing evidence-informed management knowledge by means of systematic review. ***British Journal of Management***, 14(3): 207–222.

Treanor, L., Noke, H., Marlow, S., & Mosey, S. 2020. Developing entrepreneurial competences in biotechnology early career researchers to support long-term entrepreneurial career outcomes. ***Technological Forecasting and Social Change***, (164): 1–12.

Tribe, K. 1994. Business education at the Mannheim Handelshochschule, 1907-1933. ***Minerva***, 32(2): 158–185.

Tunstall, R., & Lynch, M. 2010. The role of simulation case studies in enterprise education. ***Education + Training***, 52(8/9): 624–642.

Uni- und Berufswahl. 1981. Article in the Magazin Uni- und Berufswahl with the title ’new subject “founding a company” at the university college Saarland [Artikel im Magazin Uni- und Berufswahl mit dem Titel: ’Neues Fach mit dem Titel Unternehmensgründung an der Fachhochschule des Saarlands]. Box 3085 Folder 2. ***Abt. 181 Deutscher Industrie- Und Handelskammertag***, Rheinisch-Westfälisches Wirtschaftsarchiv, Cologne, Germany.

Vadnjal, J. 2017. Video-lectures: An effective complementary teaching method at business college. ***Serbian Journal of Management***, 12(1): 107–120.

van Gelderen, M. 2010. Autonomy as the guiding aim of entrepreneurship education. ***Education + Training***, 52(8/9): 710–721.

Viebig, C. 2018, May 28. ***Re-imagining Entrepreneurship Education: A Teaching Tool for Integrating Platform Businesses into Entrepreneurship Education***. Master Thesis, Copenhagen Business School, Copenhagen.

Viebig, C. 2020. Nothing succeeds liked failure: The sad history of american business schools: By steven conn, cornell university press, 2019, 277 pp, £27.99 (hardback), ISBN 978-1501742071. ***Business History***, 1–3.

Viebig, C. 2022. Blended learning in entrepreneurship education: A systematic literature review. ***Education + Training***, 64(4): 533–558.

Vogel. 1979. Overview on the first founder seminar at the chamber of industry and commerce Hamburg [Übersicht über Gründungsseminar der Industrie und Handelskammer Hamburg]. Box 1027 Folder 3. ***Abt. 181 Deutscher Industrie- Und Handelskammertag***, Rheinisch-Westfälisches Wirtschaftsarchiv, Cologne, Germany.

von Saldern, A. 1979. ***Mittelstand im "Dritten Reich": Handwerker, Einzelhändler, Bauern***. Frankfurt am Main/ New York: Campus Verlag.

Wadhwani, R. D. 2012. How entrepreneurship forgot capitalism: Entrepreneurship teaching and research in business schools. ***Society***, 49(3): 223–229.

Wadhwani, R. D., & Decker, S. 2018. Clio's toolkit: The practice of historical methods in organization studies. In R. Mir & S. Jain (Eds.), ***Routledge Companion To Qualitative Research in Organization Studies***: 113–127. Routledge.

Wadhwani, R. D., Kirsch, D., Welter, F., Gartner, W. B., & Jones, G. G. 2020. Context, time, and change: Historical approaches to entrepreneurship research. ***Strategic Entrepreneurship Journal***, 14(1): 3–19.

Wadhwani, R. D., & Viebig, C. 2021. Social imaginaries of entrepreneurship education: The United States and Germany, 1800–2020. ***Academy of Management Learning & Education***, 20(3): 342–360.

Waghid, Z., & Oliver, H. 2017. Cultivating social entrepreneurial capacities in students through film: Implications for social entrepreneurship education. ***Educational Research for Social Change***, 6(2): 76–100.

Wakefield, A. 2009. ***The disordered police state: German cameralism as science and practice***. Chicago: University of Chicago Press.

Warhuus, J. P., Günzel-Jensen, F., Robinson, S., & Neergaard, H. 2021. Teaming up in entrepreneurship education: Does the team formation mode matter? ***International Journal of Entrepreneurial Behavior & Research***, 27(8): 1913–1935.

Wasserman, N. 2012. ***The founder's dilemmas: Anticipating and avoiding the pitfalls that can sink a startup***. Princeton, NJ: Princeton University Press.

Wasserman, N., & Malhotra, D. 2012. Negotiating equity splits at UpDown. ***Harvard Business School Publishing***, 9-809–020: 1–13.

Watts, C. A., & Wray, K. 2012. Using toolkits to achieve STEM enterprise learning outcomes. ***Education + Training***, 54(4): 259–277.

Welter, F. 2011. Contextualizing entrepreneurship-conceptual challenges and ways forward. ***Entrepreneurship Theory and Practice***, 35(1): 165–184.

Welter, F. 2018. The Mittelstand: A Specific Entrepreneurial Profile of the Social Market Economy. ***Journal for Markets and Ethics***, 6(1): 99–106.

Welter, F., Baker, T., & Wirsching, K. 2019. Three waves and counting: The rising tide of contextualization in entrepreneurship research. ***Small Business Economics***, 52(2): 319–330.

Wilentz, S. 2004. ***Chants democratic: New York City and the rise of the American working class, 1788-1850***. London, UK ; New York, NY: Oxford University Press.

Williams, D. 2015. The impact of SimVenture on the development of entrepreneurial skills in management students. ***Industry and Higher Education***, 29(5): 379–395.

Wineburg, S. S. 2001. ***Historical thinking and other unnatural acts: Charting the future of teaching the past***. Philadelphia: Temple University Press.

Winkler, C., Fust, A., & Jenert, T. 2021. From entrepreneurial experience to expertise: A self-regulated learning perspective. ***Journal of Small Business Management***, 1–26.

Wong, T. A., & Cheah, W. C. 2022. Triple-blend of classroom instruction, online facilitation and external exposure: Outcomes and challenges. ***Industry and Higher Education***, 36(2): 151–162.

Wong, W.-C. 2017. Empowering students to actively learn systems analysis and design: The success of an entrepreneurial-inspired project in a hybrid learning. ***Information Systems Education Journal***, 15(5): 68–83.

Woolard, N. A. 2016. 3D-dream it, design it, develop it: A venture development competition with a co-curricular option. ***Journal of Business & Entrepreneurship***, 27(2): 47–65.

Wraae, B., Tigerstedt, C., & Walmsley, A. 2021. Using reflective videos to enhance entrepreneurial learning. ***Entrepreneurship Education and Pedagogy***, 4(4): 740–761.

Yates, W. R. 1987. ***Joseph Wharton: Quaker Industrial Pioneer***. Bethlehem, PA: Lehigh University Press.

Zinke, G., Ferdinand, J.-P., Groß, W., Möring, J. L., Nögel, P., et al. 2018. ***Trends in der Unterstützungslandschaft von Start-ups – Inkubatoren, Akzeleratoren und andere***. Berlin: Institut für Innovation und Technik.

APPENDIX

Appendix 1

Boolean Search Terms Used

("entrepreneurship education" AND "computer-assisted");
("entrepreneurship education" AND "computer-supported");
("entrepreneurship education" AND "computer-based");
("entrepreneurship education" AND "blended");
("entrepreneurship education" AND "distance learning");
("entrepreneurship education" AND "distributed learning");
("entrepreneurship education" AND "e-learning");
("entrepreneurship education" AND "flipped");
("entrepreneurship education" AND "flexible learning);
("entrepreneurship education" AND "hybrid");
("entrepreneurship education" AND "mobile");
("entrepreneurship education" AND "open learning");
("entrepreneurship education" AND "technology-enhanced");
("entrepreneurship education" AND "technology-supported");
("entrepreneurship education" AND "web-based");
("entrepreneurship" AND "computer-assisted learning");
("entrepreneurship" AND "computer-supported learning");
("entrepreneurship" AND "computer-based learning");
("entrepreneurship" AND "blended learning");
("entrepreneurship" AND "distance learning");
("entrepreneurship" AND "distributed learning");
("entrepreneurship" AND "e-learning");
("entrepreneurship" AND "flipped classroom");
("entrepreneurship" AND "flexible learning);
("entrepreneurship " AND "hybrid learning");
("entrepreneurship" AND "mobile learning");
("entrepreneurship" AND "open learning");
("entrepreneurship" AND "technology-enhanced learning");
("entrepreneurship education" AND "technology-supported learning");
("entrepreneurship education" AND "web-based learning");

Appendix 2

Articles on Blended Learning in Entrepreneurship Education

Year	Author(s)	Title	Journal
2004	Kilbane, C.; Theroux, J.; Sulej, J.; Bisson, B.; Hay, D.; Boyer, D.	The real-time case method: Description and analysis of the first implementation	Innovative Higher Education
2004	Sinkovics, R.; Bell, J.; Deans, K.	Using information communication technology to develop international entrepreneurship competencies	Journal of International Entrepreneurship
2004	Jones, C.; English, J.	A contemporary approach to entrepreneurship education	Education + Training
2004	Mitchell, P.C.; McKeown, A.	Importance of peer support and tutor involvement in entrepreneurship education for overseas Bioscience students	Bioscience Education
2006	Kotey B.; Anderson, P.	Performance of distance learning students in a small business management course	Education + Training
2006	Heesen, B.	Entrepreneurship at universities	Industry and Higher Education
2006	Hegarty, C.	It's not an exact science: Teaching entrepreneurship in Northern Ireland	Education + Training
2007	Smith, K.	Supporting e-learning in enterprise: The TE3 project	Education + Training
2007	Jones, P.; Jones, A.; Packham, G.; Thomas, B.; Miller, C.	It's all in the mix: The evolution of a blended e-learning model for an undergraduate degree	Journal of Systems and Information Technology
2008	Jones, P.; Jones, A.; Packham, G.; Miller, C.	Student attitudes towards enterprise education in Poland: A positive impact	Education + Training
2008	Laine, K.	A Finnish concept for academic entrepreneurship: The case of Satakunta University of Applied Sciences	Industry and Higher Education

2009	Shurville, S.; Rospigliosi, A.	Implementing blended self-managed action learning for digital entrepreneurs in higher education	Action Learning: Research and Practice
2009	Carey, C.; Smith, K.; Martin, L.	Cross-university enterprise education collaboration as a community of practice	Education + Training
2010	Jones, N.; Lau, A.	Blending learning: Widening participation in higher education	Innovations in Education and Teaching International
2010	Roffe, I.	Sustainability of curriculum development for enterprise education: Observations on cases from Wales	Education + Training
2010	Tunstall, R.; Lynch M.	The role of simulation case studies in enterprise education	Education + Training
2010	Arbaugh, B.; Desai A.; Rau, B.; Sridhar, B.	A review of research on online and blended learning in the management disciplines: 1994–2009	Organization Management Journal
2010	Maritz, A.; Brown, C.; Jen, C.	A blended learning approach to entrepreneurship education	Actual Problems of Economics
2011	Stewart, D.; Pepper, M.	Close encounters: Lessons from an indigenous MBA program	Journal of Management Learning
2011	Boore J.; Porter, S.	Education for entrepreneurship in nursing	Nurse Education Today
2011	Fenton, M.; Barry, A.	The efficacy of entrepreneurship education: Perspectives of Irish graduate entrepreneurs	Industry and Higher Education
2012	Menkhoff, T.; Bengtsson, M.	Engaging students in higher education through mobile learning: Lessons learnt in a Chinese entrepreneurship course	Educational Research for Policy and Practice
2012	Watts, C.; Wray, K.	Using toolkits to achieve STEM enterprise learning outcomes	Education + Training
2012	O'Connor, J.; Fenton, M.; Barry, A.;	Entrepreneurship Education: Ireland's Solution to Economic Regeneration?	Industry and Higher Education
2013	Williams, P.; Fenton, M.	Towards a good practice model for an entrepreneurial HEI: Perspectives of academics, enterprise enablers and graduate entrepreneurs	Industry and Higher Education
2013	Maritz, A; Brown, C	Illuminating the black box of entrepreneurship education programs	Education + Training

2014	Maritz, A.; de Waal, A.; Buse, S.; Herstatt, C.; Lassen, A.; Maclachlan, R.	Innovation education programs: Toward a conceptual framework	European Journal of Innovation Management
2014	Bellotti, F.; Betra, R.; De Gloria, A.; Lavagnino, E.; Antonaci, A.; Dagnino, F.; Ott, M.; Romero, M.; Usart, M.; Mayer, I.	Serious games and the development of an entrepreneurial mindset in higher education engineering students	Entertainment Computing
2014	Maritz A.; Waal G.	Educating engineers: A postgraduate entrepreneurship and innovation perspective	Journal of Engineering Education
2014	Fenton, M.; Barry, A.	Breathing space – Graduate entrepreneurs' perspectives of entrepreneurship education in higher education	Education + Training
2014	Dickfos, J.; Cameron C.; Hodgson, C.	Blended learning: Making an impact on assessment and self-reflection in accounting education	Education + Training
2015	Liao Y.; Liu Z.	Meta synthesis design for entrepreneur engineering education using flipped classroom based on m-learning	World Transactions on Engineering and Technology Education
2015	Antonaci, A.; Dagnino, F.; Ott, M.; Bellotti, F.; Betra, R.; De Gloria, A.; Lavagnino, E.; Romero, M.; Usart, M.; Mayer, I.	A gamified collaborative course in entrepreneurship: Focus on objectives and tools	Computers in Human Behavior
2015	Williams, D.	The impact of SimVenture on the development of entrepreneurial skills in management students	Industry and Higher Education
2015	Maritz, A.; Donovan, J.	Entrepreneurship and innovation: Setting an agenda for greater discipline contextualisation	Education + Training
2015	Maritz A.; Jones C.; Shwetzer, C.	The status of entrepreneurship education in Australian universities	Education + Training
2016	Nasirun N.; Noor, S.; Yusoff, R.; Othman, A.	A predictive "quality of use" model in blended learning	International Review of Management and Marketing
2016	Kazakeviciute, A.; Urbone R.; Petraite M.	Curriculum development for technology-based entrepreneurship education: A cross-disciplinary and cross-cultural approach	Industry and Higher Education
2017	Wong, W.	Empowering students to actively learn systems analysis and design: The success of an entrepreneurial-inspired project in a hybrid learning	Information Systems Education Journal

2017	Vadnjal, K.	Video-lectures: An effective complementary teaching method at business college	Serbian Journal of Management
2017	Rusko, R.	Interactive online learning: Solution to learn entrepreneurship in sparsely populated areas?	International Journal of Online Pedagogy and Course Design
2017	Maritz, A.	Illuminating the black box of entrepreneurship education programmes: Part 2	Education + Training
2017	Neergaard, H.; Christensen, D.	Breaking the waves: Routines and rituals in entrepreneurship education	Industry and Higher Education
2018	Harichandran, R.; Erdil, N.; Carnasciali, M.; Nocito-Gobel, J.	Developing an Entrepreneurial mindset in engineering students using integrated e-learning modules	Advances in Engineering Education
2018	Bosman, L.; Fernhaber, S.	Applying authentic learning through cultivation of the entrepreneurial mindset in the engineering classroom	Education Sciences
2018	Bandera, C.; Collins, R.; Passeini, K.	Risky business: Experiential learning, information and communications technology, and risk-taking attitudes in entrepreneurship education	The International Journal of Management Education
2018	Tupe, N.	Blended learning model for enhancing entrepreneurial skills among women	Journal of Pedagogical Research
2018	le Roux, I.; Nagel, L.	Seeking the best blend for deep learning in a flipped classroom – Viewing student perceptions through the community of inquiry lens	International Journal of Educational Technology in Higher Education
2018	Papa, B.; Demo, E.	Universities and entrepreneurship: An overview of Albanian public HEI-s on entrepreneurial university model aspects	Academic Journal of Interdisciplinary Studies
2019	Sousa, M.; Carmo, M.; Gonçalves, A.; Martins, J.	Creating knowledge and entrepreneurial capacity for HE students with digital education methodologies: Differences in the perceptions of students and entrepreneurs	Journal of Business Research
2019	Maxwell, R.; Armellini, A.	Identity, employability and entrepreneurship: The ChANGE framework of graduate attributes	Higher Education, Skills and Work-Based Learning
2019	Müller C.; Poandl, E.; Glinik, M.	Developing a viable business model for start-ups at the Gruendungsgarage	Journal of Business Models
2019	Vinogradova, M.; Konstantinov, V.; Prasolov, V.	Level entrepreneurship-role in the digital economy, tendencies of improvement of the information support system	Journal of Entrepreneurship Education

2019	Pisoni, G.	Strategies for Pan-European implementation of blended learning for innovation and entrepreneurship (I&E) education	Education Sciences
2020	Cusson, R.	Educating the next generation of nurses to be innovators and change agents	Journal of Professional Nursing
2020	Yakymchuk, B.; Chystiak, O.; Padalka, R.; Moskalyk, H.; Denha, N.	Fostering cognitive and creative thinking styles using educational tools aimed at the “creative economy” model in the process of vocational education and training	Psychology and Education (2020)
2020	Thanasi-Boçe, M.	Enhancing students' entrepreneurial capacity through marketing simulation games	Education + Training
2020	Wraae, B.; Tigerstedt, C.; Walmsley, A.	Using reflective videos to enhance entrepreneurial learning	Entrepreneurship Education & Pedagogy
2020	Noraini, N.; Ramayah, T.; Jaya, P.; Noor, S.	Handling massive enrollment for achieving results: A flipped classroom approach	International Journal of Online Pedagogy and Course Design
2020	Treanor, L.; Noke, H.; Marlow, S.; Moesey, S.	Developing entrepreneurial competences in biotechnology early career researchers to support long-term entrepreneurial career outcomes	Technological Forecasting and Social Change
2020	Hasanah, H.; Malik M.	Blended learning in improving students’ critical thinking and communication skills at university	Cypriot Journal of Educational Sciences
2020	Hua S.; Ren, Z.	“Online + offline” course teaching based on case teaching method: A case study of entrepreneurship education course	International Journal of Emerging Technologies in Learning
2020	Curtis, V.; Moon, R.; Penaluna, A.	Active entrepreneurship education and the impact on approaches to learning: Mixed methods evidence from a six-year study into one entrepreneurship educator’s classroom	Industry and Higher Education
2020	Tupe, N.	A study of the effectiveness of blended learning program for enhancing entrepreneurial skills among women in Maharashtra	Journal of Education
2020	Stefanic, I.; Campbell, R.; Russ, J.; Stefanic, E.	Evaluation of a blended learning approach for cross-cultural entrepreneurial education	Innovations in Education and Teaching International

Appendix 3

Journals with Publications on Blended Learning in Entrepreneurship Education

Name of Journal	Number of relevant articles
Education + Training	17
Industry and Higher Education	11
Education Sciences	2
Innovations in Education and Teaching International	2
International Journal of Online Pedagogy and Course Design	2
Technological Forecasting and Social Change	2
Academic Journal of Interdisciplinary Studies	1
Action Learning: Research and Practice	1
Actual Problems of Economics	1
Advances in Engineering Education	1
Bioscience Education	1
Computers and Education	1
Computers and Electrical Engineering	1
Computers in Human Behavior	1
Cypriot Journal of Educational Sciences	1
Educational Research for Policy and Practice	1

Educational Research for Social Change	1
Entertainment Computing	1
Entrepreneurship Education	1
Entrepreneurship Education & Pedagogy	1
European Journal of Innovation Management	1
Higher Education, Skills and Work-Based Learning	1
Information Systems Education Journal	1
Innovative Higher Education	1
International Journal of Educational Technology in Higher Education	1
International Journal of Emerging Technologies in Learning	1
International Journal of Engineering Education	1
International Journal of Entrepreneurial Behaviour and Research	1
International Review of Management and Marketing	1
Journal of Business Models	1
Journal of Business Research	1
Journal of Education	1
Journal of Engineering Education	1
Journal of Entrepreneurship Education	1
Journal of International Entrepreneurship	1
Journal of Management Learning	1
Journal of Pedagogical Research	1

Journal of Professional Nursing	1
Journal of Systems and Information Technology	1
Nurse Education Today	1
Organization Management Journal	1
Psychology and Education	1
Serbian Journal of Management	1
The International Journal of Management Education	1
World Transactions on Engineering and Technology Education	1
Total	**75**

Appendix 4:

The Reflection Manual

Equity Split Reflection Manual

In this part of the section you will reflect your experiences with your group. This semi-structured reflection-manual will help you to structure your discussion and guide you through the reflection process. Please read the instruction texts of each section, before you start with your reflective discussion. Do not forget to record your reflection with at least one computer (video + voice) and one phone (voice).

Section A: (8 Minutes)

Instruction: In this section, you should discuss the following questions. Please make sure that every member of the group has the possibility to say his/her perspective to all the questions.

- Which decisions did you find difficult and why?
- What were critical moments or incidents for you during the negotiation?
- What made these moments or incidents critical?
- What phases can you identify in your negotiation? Please try to find names for the phases you identified.

Section B: (7 Minutes)

Instruction: In this section, you should discuss the following questions. Please make sure that every group member has the possibility to voice his or her perspective to all questions. You can ask clarification questions. However, remember that this is a learning experience so try not to be judgmental.

- How would you describe your feelings before the negotiation?
- How would you describe your feelings during the negotiation?
- How would you describe your feelings after the negotiation?
- If your feelings have changed, why was that?

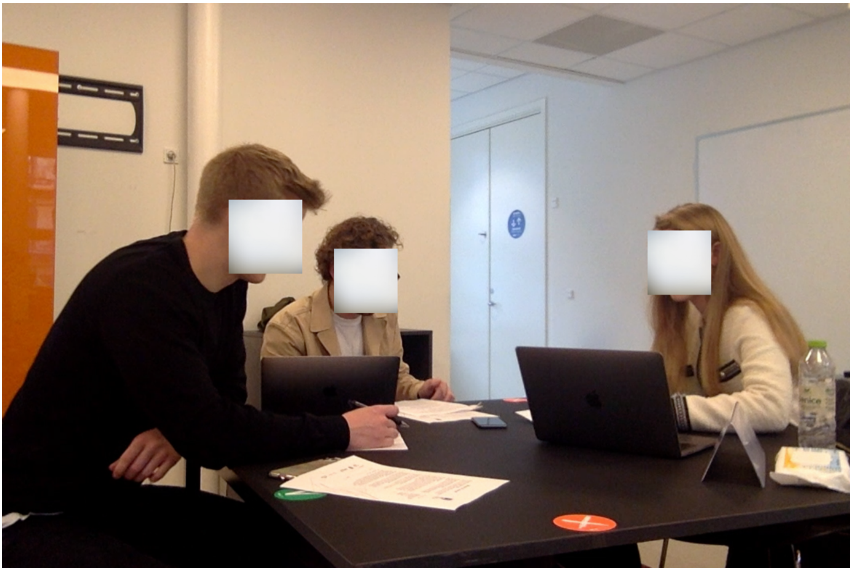
Section C: (27 Minutes)

Instruction: This section has a different format. Every team member appoints one interviewer and one note taker for his/herself. The interviewer has 9 minutes to ask the following questions. While the interviewer can ask open follow-up questions, make sure that all questions are covered. The note-taker will take notes, overlook the time but remain silent for the 9 minutes. Then you switch. You have 27 minutes (9 minutes per person) to go thought this process for all three team members. After the session the note takers will hand over their notes to the interviewed person.

- Hearing your team members' description of the negotiation and their feelings, what surprised you about that?
- Looking at your own experience in the negotiation and your feelings, what surprised you about yourself?
- What would you do differently in another equity split negotiation?
- What feedback would you give to your team members? What did they do well, where could they improve?
- What did you take away for your studies at CBS, your professional career and your personal development?
- What did you learn about yourself?
- What did you learn about your team members?

Appendix 5

Freeze-frame Group Reflection Setting (UG12)



Appendix 6

Proposed Actions: Selected Evidence

Second-Order Codes	**Selected Evidence on First-Order Codes**
Broad Re-Orientation	<u>*Code: Show more or less emotions*</u> “We were good at trying to retain yourself in a way like having some sort of bottom-line agreement, but not being too pushy or anything, but maybe we were lacking the emotional aspect? Maybe there was something? And that could have been improved” **(G9_S3_32:46).** “We talked for quite a long time about feelings in the beginning and how we're feeling, and […] also looked at myself and was like, ‘OK, maybe prepare in a different way with less emotions and then just kind of cut it out’ like, "OK, so this is the situation, what do we need, let’s take this logical. What does the company need to succeed? […] Even though I'm not sure it is possible because there will always be many feelings. But I think I try to do that. **(G6_S3_31:35).** <u>*Code: Be more or less pushy, aggressive or assertive*</u>

	“I would definitely push a bit harder. But. Okay. I know I would be a bit more stubborn in the beginning, […] just put your nose up and like hold just that little bit more” **(G7_S3_42:16).** “I know myself that I am a very emotional person, so I get very aggressive sometimes when it comes to negotiations and arguments. So, I wasn't really surprised because I was expecting it, but I wasn't expecting it for a class. I thought I could take it more in a cool light. [Next time I would] try to stay calm and be the one watching. And then maybe I feel like it's better that you like, sit and like you're watching and then just put like small words like you did and just be like, ‘Yeah, ok, we can do that now.’ Yeah, like, be the cool guy. I want to do that for my next one” **(G2_S2_39:59).** *<u>Code: Balance one’s own and other’s interests</u>* “[One should be] compromising and understanding also [towards] other positions, finding common solution. And also, somehow finding the balance between your own interests and the group members' interest so that you have a good foundation to work together” **(G4_S1_24:32).** “Also see it from both, all the three sides. Because right now, I think I was very focused on my own side, and I didn't really

	think much about your arguments that much. We were very self-centered in some way. So, be more aware of the others and their reasoning" **(G8_S3_43:03).** *<u>Code: Prepare more</u>* "But that's just overall, I think I […] compromised so quickly. So better prepare more better for the next time" **(G19_3_29:12).** "Also, what else? Just have more time and maybe also be prepared a bit better. In general, I mean, I only read these two pages in 10 minutes, and that's it" (G1_2_33:44)
Actionable Guidelines	*<u>Code: Steps to prepare for an equity split</u>* "I guess preparing for the negotiation is extremely important. So, I think this is something that I would try to do for my own negotiations in the future, that I sit down and really put down on paper my goals as well as the minimum amount of equity that I expect. And if I don't get it, I have to walk away. I guess that's a good approach. [In addition], before the negotiation, trying to put myself into the shoes of each other member--- co-founder to try to understand why they want --- what are their arguments for more equity? Because in the discussion when you all pointed out your arguments, I was like, 'Oh yeah, they

	are absolutely right. I see their points'. So, the next time I would try to make this before and writing down their arguments. So just I'm prepared in a better way" **(G10_S2_29:06).** "One thing I would do another time is that, I would do a lot more sort of research and preparation before going into an equity split negotiation, and I would also meet a partner or at least have a discussion with someone who has been in the situation before, possibly a lawyer, possibly some adviser, and then also try and get a proposal in advance, just not on the day, but maybe weeks in advance and then also have continued negotiation" **(G12_S4_40:46).** *<u>Code: What to do when negotiating an equity split</u>* "And also very important, [when] we do a negotiation like [the] equity split. I think it's very important to have these small breaks between […] each of the question we wanted to negotiate. I mean, because it's very important that you kind of reflect and think about tactics. You know, how to continue. Because otherwise, if you have all the four biggest negotiation questions in one conversation, it's like a bulk of conversation. You don't even have time and space to think about your thing. What do you feel? What's right and what's wrong? […] I mean, I think it's very important to have this reflection

	between all the agreements as well. So you can actually agree" (**G18_S2_35:07**). "I think also, like I thought afterwards, if this would have been the real company think I would have been more careful of--- because I think we were sometimes on the brink of like unrepairable damage of like--- if you accuse --- like we were very friendly with each other, but think in reality, if you would accuse someone of not doing enough for the company or not being committed, that would way earlier lead to someone walking away because you put so much into it. And I think we all basically said to each other: 'Yeah, you don't deserve this', which is, then I think that's a bit difficult." (G6_S2_01:12). *<u>Code: What to do when negotiating more generally</u>* "I think really playing through tough negotiations a couple of times and making sure that you spend at least twice as much time on preparing a negotiation than being in the actual negotiation, especially when it's emotional, like doing it four times even that it's because you're in a clear advantage if you practice. It's an enormous opportunity and never go into a negotiation again without knowing exactly where you want to be and what your bottom line is. Then rather say can we move this to next week or next month" (G13_S2_32:16).

	“And also don't shoot your arguments too fast because one thing that I did was: take two arguments and I set them up: ‘guys. But I have two arguments Bam. Bam.’ It's f***** stupid. Keep it big: say the weakest before and then wait, and then put your second argument at the end to just not waste everything at once and make the better coherent argument more maybe. And the whole negotiation can be used for everything” **(G1_S2_35:52).**

Appendix 7

Perspective Change: Selected Evidence

Second-Order Codes	**Selected Evidence on First-Order Codes**
Change of Self-Perspective	<u>*Code: Discovery of new aspects regarding the self-concept*</u> “What I learnt about myself that [is] that I don't feel very comfortable with these very formal ways of negotiating, and that, this way that we were kind of set up against each other and that I that I don't really feel comfortable around that. So maybe instead trying, working or making it informal, would be important for me” **(G3_S2_46:30).** “I think maybe it was really nice to see that I was able to kind of take on a leadership role in the situation. That's something I struggle with sometimes. So that was really nice to see that. And also that I enjoyed it. I think that was also surprising to me that it was fun to negotiate” (G8_S1_38:34). <u>*Code: Shift of Self-Concept*</u> “I think I can be very insistent sometimes I don't know. I didn't feel like I was able to persuade you guys, I think it was a really difficult standpoint to persuade you guys from as well. But I would have wanted to persuade you and then convince you.

	You know, like, I wanted you guys to feel like, ‘Oh yeah, of course, we should have some more.’ you know? But that was kind of impossible in this situation also because I didn't really have the arguments. But maybe I should work on my persuasion skills” **(G3_S3_36:50).** “I learned that I can negotiate […]. I think sometimes in situations like that, when I know the people personally, I think maybe you tend to shy away a little bit from confrontation. But during this exercise it's kind of showed that I can be confrontational. Also, that I can argue and get points across that I want to get across without saying the wrong thing or forgetting to say something” (G16_S2_17:50).
Change of Concept-Perspective	<u>*Code: Discovery of new aspect regarding an existent concept*</u> “I think that when it comes to equity split and money, I realized how much the emotional side plays a big role. Like, I realize really how feelings in the end, just drive decisions and make people agree or disagree, and I was feeling, Yeah, like that emotions were just really there and I cannot detach myself from it. That's what I learned. My biggest learning about equity split and feelings” **(G3_S1_49:34).** “Everyone is like always carrying stuff with them, but that is something I didn't think about. And that always plays a big

	role. If you get into this sort of thing like be very aware of that, other people might come from another point of view that they might have experienced something” (G6_S2_47:14). *<u>Code: Shift of concept</u>* „Perhaps looking at the score sheet, I would have, considered how we as a team could have gotten a higher point. As our team points with lower than average. Whereas mine individual was higher than average. so. Yeah, I didn't even consider team points. So perhaps I would do that the next time. Because negotiations to me, I mean, that's always been, how do you put yourself in the best position, but also obviously on the basis of what's best for the company. But perhaps equally, you especially in start-ups where you need to work together afterwards, you need to consider how do I put my teammates in the best position they can be afterwards“ (G7_S1_34:08). “Maybe that confrontation is something good if you do it right. So. usually we have the stigma around confrontations. Like, everyone seems to be pretty scared of. But it can be something good as well. At the end of the day, we were all happier because I got what I my character wanted. You got it as well. And [the CEO of the startup] got to keep his team members. So maybe it's always good to to be honest and to just say how you feel. And if you are with the right people, then they will

	understand” (G16_S3_22:30).

Appendix 8

Sample Transcript Copycat Effect (G2)

Context: Three students participated in the equity split negotiation (S1, S2, S3). The transcript consists of three rows. The first row entails the timestamp and the speaker. The second row shows students' comments. The third row entails comments and codes made by the researcher to illustrate the interpretations. To make the document more readable, most comments and codes that do not relate to the copycat effect have been removed.

Copycat effect: This group is a great example of both facets of the copycat effect. First, S2 takes her observation of the behavior of S1 and her ability to stay calm during a heated negotiation and suggests copying that for herself in future behaviors. Second, S3 then copies the proposed action of staying calmer from S2, suggesting that he would also like to behave that way in similar future situations. S2 early on shows that - in the light of how the negotiation went – she would have wanted to stay calmer (12:32) and shows signs of admiration of S1, who managed to stay calm throughout the entire equity split negotiation (14:18). During the framing phase, S1 frames her behavior during the negotiation as calm and argues why this is beneficial in negotiations generally (27:58; 31:08). She even praises herself for her ability to do so (33:45). S2 then confirms the framing of S1 and suggests personally copying her behavior for future negotiations (proposed action) (40:00). She then recapitulates why such a behavior is beneficial (41:00) and continues repeating her new learning (42:33 – 43:38). Second, S3 copies this proposed action suggesting that he also would like to stay calmer – even though his simultaneously voiced other proposed action suggests the opposite which is to be pushier (45:59). He then goes on explaining again why staying calm is so important (46:58) and praising S1 for doing a great job on that (49:35).

TIME	STUDENT DISCUSSION	Comment/Code
00:00:00 S1 (Michael)	The following question: please make sure that every member of the group has the possibility to say his or her perspective to the questions. So what decisions did you	

	find difficult and why?	
00:00:14 S2 (Georg)	And then we're going to have to take notes. Hey! Were you muted?	
00:00:29 S2 (Georg)	It's just you rarely spoke for the last few minutes.	
00:00:33 S3 (Phuc)	Yeah, no, sorry, I was getting my charger. OK, so which decisions did you find difficult and why?	
00:00:41 S2 (Georg)	Well, I think I think there's a mistake in the spreadsheet anyways, so because Michael got more, like his a equity percentage, so...	
00:00:58 S1 (Michael)	It only equals to 99, so now. Yeah. So anyways... [not understandable]... Great weather today.	
00:01:11 S3 (Phuc)	Yeah, looks looks great.	
00:01:14 S1 (Michael)	[Country Name’s] weather's very different, so it could look bad from your part and good from mine... We'll start then. So, who's going to be the interviewer, interviewee and the note taker?	
00:01:30 S3 (Phuc)	Well, it's not until later in the discussion. Section A is were we're supposed to discuss.	

00:01:37 S2 (Georg)	But we have to take notes right?	
00:01:37 S1 (Michael)	We don't have to/want to.	
00:01:47 S2 (Georg)	Great. OK, so which decisions did you find difficult and why? For me, it was probably getting: what's his name again, Wold? [other correct her to Warren] because both of you were like: " No, I don't like the idea." So, it's pretty awkward for someone to try and get someone in a team when the other two are like against it. So, I think that was one of my biggest struggles. Yeah.	
00:02:22 S3 (Phuc)	But yeah, and then every every decision affected another kind of... [others concur] Which made it very difficult sometimes.	
00:02:34 S2 (Georg)	Yeah.	
00:02:39 S3 (Phuc)	Uhm, Yeah, I agree with that Warren, and he … he really was just annoying to have him there. And it didn't--- Well, you carried his say in the negotiations.	
00:02:54 S2 (Georg)	So yeah, so that was that was the hard part.	

00:02:57 S3 (Phuc)	It was like, yeah, it was like negotiating against two people with you and Warren.	
00:03:03 S1 (Michael)	But like the thing is, it shouldn't have affected us so much because he only had like 1% equity and then 2% of its equity, so it's really not that much compared to the whole picture.	
00:03:19 S2 (Georg)	And even so, even though my like my … my report [role note] that it was like one of the smallest issues.	
00:03:24 S3 (Phuc)	Yeah, same for me. But I feel like we spent the most time on that.	
00:03:29 S2 (Georg)	Yeah, yeah. I feel like so too. And like it's not like it's the easier part, but like one of my issues, it says that Phuc was going to raise my salary, but you didn't go that hard into it, so that was easier than I expected, because I would think that that was one that would be one of the hard discussions.	
00:03:52 S3 (Phuc)	Yeah, I think I probably could have been a bit more assertive on the on the salary but then I had to raise my equity instead. Oh sorry, either or: go for equity myself and then the salary.	Comment: S3 formulates something he could have done differently retrospectively. He is on his way to formulate a broad re-orientation (to be more assertive in a future (equity)

		negotiation). However, at this point it is only directed to the past experience.
00:04:09 S2 (Georg)	What about you?	
00:04:11 S1 (Michael)	It was like, I sort of let you do the discussions at some point and then you just went from one spot. We'll see. Let me just like went from one to the other and discussing, and I was like: "OK, just do your thing." But yeah,	
00:04:38 S3 (Phuc)	You got the most power.	
00:04:40 S1 (Michael)	Yeah, you got the most power. But sometimes I could actually be the easiest way to go through things like if someone else is like being the bossy one, just stand back and like, watch it, easy, do the easy role.	
00:04:51 S1 (Michael)	The funny thing is that I like my idea was that I didn't want to go down in equity. But it didn't suggest anything about going up in equities, so there was actually a win for me. I just I just let you discuss and then just actually end up with more equity than I was worth.	

00:05:13 S2 (Georg)	Whaaat? Oh my god. S3--- Phuc should have taken it!	
00:05:20 S3 (Phuc)	I mean, but … but the question is going into it, whether you have a mindset where you want to win or get as much from it as possible, or if you go into within with the mindset where you want to come to an agreement where everyone stays. [the others concur] I think that it probably would have been quite easy to figure something out where we would all stay. And I thought we did so in the end as well.	Comment: S3 taps on a central point in equity splits and negotiations generally. However, there is no learning in this because the statement concerns the experience and no change in future behavior can be assumed from this statement.
00:05:49 S1 (Michael)	Yeah, I thought so too, but I didn't know that that one thing would have said that would have made you leave. So if we had said that, we agreed on that. I don't even remember what it was. OK, I'm curious. I think it was, wasn't it the seed equity?	
00:06:06 S3 (Phuc)	Yeah, maybe that's what we never agreed on.	
00:06:09 S2 (Georg)	and then we said that you were going to get 10 percent? [the others concur] Yeah. Yeah, I think, OK, if we had agreed on that, I don't think it doesn't say anything --- So Michael proposes--- divides in the ... yeah, in the seed equity--- and doesn't really say that I go out if I miss--- if I don't have any, so I mean... I just want to	

	minimize the seed equity that is given to Phuc. I think you could--- I think, OK, if we say that we had agreed on it, then I think we would all be like …. Mm hmm. Say that you got 10 percent, and then us Michael and George got ---- I can't even do my math right now 40... Yeah. OK. OK. So with that, so our negotiation was great. OK? …. Well, what was the critical moments or incidents? What were they?	
00:07:17 S1 (Michael)	I think it was quite critical that Phuc was very short of leaving like it didn't take that much before, like he was going to decide to go away. Like, I think Michael was going to get like 220 minus points if he was going to go out of the deal, but so like, he was very flexible, but Phuc didn't have that much flexibility in.	
00:07:45 S3 (Phuc)	No, no, I didn't. Yeah, I could not go any further any reduction in equity. And I needed that increase in seed equity. But yeah, I didn't really get a lot of points for a lot of things. I think it would have needed to go up in salary.	
00:08:18 S2 (Georg)	You know you've had increased it a lot more because we had this maximum point.	
00:08:25 S3 (Phuc)	Yeah, but you ---- I don't know. I felt like it was not so much compromising from----	
00:08:31	---No but because we weren't allowed. I	

S2 (Georg)	don't know, mine said that I wasn't allowed to increase your equity at all.	
00:08:40 S3 (Phuc)	Yeah. So then, yeah,	
00:08:44 S2 (Georg)	Because then that was like if you want to increase your ground equity, if you can't do anything with your salary because we're not allowed to increase it at all.	
00:08:53 S3 (Phuc)	Wait, so if I was not at----	
00:08:55 S2 (Georg)	Wait, I think like one percent, maybe. Yeah. No, whatever.	
00:09:01 S1 (Michael)	Mine said that if Phuc increased in salary, then you would have to go down in equity. And then you and Michael would suggest	
00:09:13 S2 (Georg)	time I get minus, like if I lose my ground equity, like one percent, I would lose like twenty five points. Which is a lot. So I was like: "wow OK". And I had to give Warren like I could give him maximum 2. If I give him 2, then its minus 50 points. Yeah. So. That was my critical thing in the negotiation not to give any of my founder or equity to anyone.	
00:09:53 S1 (Michael)	You were still the one who ended up giving both to Warren and to me	

00:10:01 S2 (Georg)	Yeah, I even gave to you, I didn't need to give any to you	
00:10:07 S3 (Phuc)	but you happily took it.	
00:10:16 S1 (Michael)	What phases can you identify in the negotiation? Please try to find names for that, for the phases you identified. Did any of you like go through the recording thing?	
00:10:27 S3 (Phuc)	No, I did not have the opportunity to... no. But I felt like everything was all over the place until very late and then we felt like everything was, kind of all of them together somehow. [others concur] It didn't feel super structured.	
00:10:50 S1 (Michael)	No, I think that might have confused, I don't know, maybe like Georg because everything was so confusing. Then you just have like: "equity equity". Yeah.	
00:11:10 S2 (Georg)	Yeah, I got confused. That's maybe why I gave some to Michael, because I never had to. [others concur] If I actually had to, then I should have given it to Phuc probably. But because Phuc was so like: "I want I want" I was like: " No, I'm never going to give you any like, you get salary, man." Anyway.	
00:11:30 S3 (Phuc)	Shall we start with Section B?	

SECTION B		
00:11:35 S2 (Georg)	after the second.	
00:11:40 S3 (Phuc)	Okay, so it's just same concept as before: "describe your feelings before the negotiation."	
00:11:46 S1 (Michael)	We don't have to take notes for this right?	
00:11:52 S3 (Phuc)	No, but, I was I was pretty excited for the negotiation. I thought it was going to be fun. I haven't really done it before and I've heard so--- like It's one of my roommates on exchange took negotiation class and we really enjoyed it. And yeah, I think it's fun. It's going to be it's going to be fun and some, some good practice because I mean, you negotiate a lot during your lifetime regardless of what you end up doing, right? So I think it's really good practice to do some, so I was, I was quite excited for it. How about you guys?	
00:12:32 S2 (Georg)	I've negotiated before for the increase in salary, but it was so smooth and easy, so I wasn't expecting it to be such an argumental thing, but I guess it doesn't --- I don't know if it does in reality, because does it? Like it's kind of like an argument at some point because you don't want to	Copycat Effect: S2 brings up the notion of being calm in a negotiation and also mentions that

	agree on something, but someone else really wants to agree on? And it doesn't go the way you want it to. So you kind of feel upset, especially if you were in that true position, I think it was like, I don't know. It could have been emotional if everyone was like: " No, not Warren, not Warren." And it was like, "No, Warren is my best friend, don't say that!" Like, I feel it would have been very emotional. So I don't know. Yeah, OK. Before I was excited, I was expecting it to be more calm, maybe, than it was in our discussion. Yeah. What about you, Michael?	she had thought of being more calm retrospectively.
00:13:36 S1 (Michael)	Well, I don't know Michael, but I was. I was also excited about it. I had a negotiation class, my bachelors, which was also pretty fun, and we did some class discussions as well where we like had roles as well. So I like I knew sort of what I like --- well, I didn't know what we were going to do, but I knew that l ike: "how do you get to an agreement? Like you can compromise some things and you can add other things. But, yeah, like	
00:14:18 S2 (Georg)	, was that why you were so calm? We Was that you were like so calm during the negotiation? I mean, Phuc and I were like, no, yes.	Copycat Effect: S2 brings up again the theme of "being calm" in a negotiation and shows that she was impressed by S1 and her ability to

		be calm
00:14:25 S3 (Phuc)	We were just going at it.	
00:14:31 S1 (Michael)	Probably.	
00:14:35 S2 (Georg)	Okay. What about your feelings during the negotiation, Phuc?	
00:14:46 S3 (Phuc)	I thought it was fun. It got a bit hectic at some points, but I mean, I'm sure that he would like you said it would probably have been a lot more hectic if this was really needed because it is just a simulation. It's it's kind of easy to put your emotions aside a bit more, of course. So I thought it was it was quite fun, but it was it was hard. I also thought it was going to be easier because everyone had a lot of different requirements, and not only that, you wanted to maximize your own benefits, but also parts for this was not even going to be a deal if this is not increased per whatever. So, I probably thought that there would be a bit more room for more flexibility because---.	
00:15:52 S1 (Michael)	I feel like it was if it was a real life negotiation, we would obviously know more about ourselves, our roles, like if we were actually Michael and Georg and Phuc, we would know a lot more about the situation and our skills and what we	

	have and what we can offer and all of that. So we might have been able to maybe sort of expand the pie because we could offer like other things as well.	
00:16:23 S3 (Phuc)	I think it would have helped us well, in to (instructor name), that we would have gotten the roles a bit earlier so we could read up on the more our requirements. [concurs] or like what we got points from and how much etc because having to negotiate and at the same time going through this word document: "OK, what is it that I need? or how much do I get?"	
00:16:52 S1 (Michael)	Yeah and to be able to like read it thoroughly and take some notes that this is what I want to reach? And that was nice. … And yeah, during the negotiation it was--- it did get quite an intensive at some points but I thought we ended up with some nice ….. moves … so like S2?	
00:17:38 S2 (Georg)	I think Georg was very selfish. He wanted everything. He wanted an increase in everything and he didn't want to give anything to Phuc. I don't know, maybe in reality, if there were better friends? I don't know if--- I also feel like it's how close their friendship or like, you know, how close there are with each other. I feel like it could be more cold to someone you're not related to as much. And be more like simplified and find, whatever the word is, than someone who's like, you know, you are related, so you probably had shared more if I knew you better, like as Georg	

	and Phuc. I think that was something big, and then I don't know from my reading, I just felt that Michael and Georg were better connected because they worked on it before, so I think they knew each other longer. So I was like, Well, then I probably give my equity. I don't know. I don't even know how I did it. I was like, "OK, I'll just give that to him, and then he will solve the rest with Phuc." Yeah. I think emotional connections and stuff like that, that is very important, and I don't know, I think it affects the negotiations.	
00:18:59 S1 (Michael)	At this point, it does affect the negotiation. Also, if we're too close with someone who might---	
00:19:07 S2 (Georg)	Thats what happened with Warren, right? Because I needed to do that, apparently: give him at least one --- or I have to leave the--- I don't even know--- I would just miss a lot of points on it. So yeah. and it was the small part of the negotiation, but it became big because it was something I had emotional connection to. Apparently. Yeah. So what, that exactly explains that feeling part? Oh, after after the negotiation, OK, what was your sense after the negotiation, Phuc?	
00:19:40 S3 (Phuc)	Well, I thought we managed to actually reach an agreement where everyone stayed.	
00:19:44 S1	We did. We did. You guys sent me the mail and I was like: "Oh, OK, we didnt?	

(Michael)	OK, sure we didn't."	
00:19:54 S3 (Phuc)	Yes, I was quite satisfied. I thought we did a good job.	
00:19:59 S1 (Michael)	Yes, we did. Yeah, I think it was a good one.	
00:20:05 S3 (Phuc)	But now apparently we didn't...	Comment: The group did not reach an agreement because some crossed their minimal requirements for reaching a deal outlined in their role description.
00:20:07 S2 (Georg)	No we did! We did! We will tell them that we will change the spreadsheet, I think we reached the agreement. Yeah. I wasn't expecting us to use it here today, so I was just like, all right, we should be there within reason. "Yes i won" no that was my template. Yeah, we did reach agreement, I think. Yes. But what do you think about it, Michael?	
00:20:34 S1 (Michael)	I was pretty satisfied as well was that I ended up with more equity than I ask for it initially. And so that was a good addition and I didn't compromise too much. I think, you know, with warren and all that, I was pretty firm that he wasn't going to get any more than 1.5. And then,	

	yeah, I think it says in my text that I think it's fair that Georg received more equity than Phuc because he had been in the business for a longer time, but then you just ended up talking and discussing and end up with the same thing. Like you gave me some ---	
00:21:31 S2 (Georg)	I thought that I could like calm things down. But no, I shouldn't have done it.	Copycat Effect: S2 brings again up the idea of being calm
00:21:34 S1 (Michael)	No, like you ended up giving Michael one percent more. and for Phuc to stay I was like: "OK, you can have my half a percentage because I'm already an additional, you know. I was actually pretty satisfied with with the outcome. It was- we didn't compromise too much. And I think it ended up being pretty much the same as Michael's initial proposal.	
00:22:09 S3 (Phuc)	Yeah. If Warren deserves--- OK, so I just wanted to check the seed thing because on my thing, the seed thing was pretty complicated, I couldn't really get what I wanted to. So I prefer that Michael propose.... So. OK, so, yeah, OK, I didn't want any seed for him, yes, I wanted zero for Phuc. I didn't I only want I didn't want to give apparently you any equity, so it would have been good for me if you didn't get it. But now, OK, if we say that you did, it would help. But it was still have been an OK agreement. I think because I gave one one point five and I just really apparently wanted to increase founder's	

	equity. I just and I also in [unclear word] because I didn't want to increase Phuc's salary that much and he didn't go for it. So we kept it within the minimal, I think. And so that was pretty good. And the founders equity, yes, I actually lost 50 points for it. So I don't think it was a good thing for me there. But overall, I think it was OK.	
00:23:23 S3 (Phuc)	If you thought you lost 50 points, if I would have gotten any equity?	
00:23:28 S2 (Georg)	No, I already gave already gave Michael and Warren some of my equity. So that was already minus 50 percent. OK. I mean, minus 50 points. So i mean if you had increased yours even more thasn like zero point five then I would have been out. Yeah, yeah. It was OK, I guess, but it also depends on the seed equity, if it was there, if we agree on it or not. If we do, then I would have been like, [shakes head] if not, then I would be like, woop woop! So it kind of becomes there, too. But after-offer feelings after negotiation: satisfied. I think Warren made me satisfied. Yeah, I think.	
00:24:15 S1 (Michael)	The thing is in like most of the in issue two, three and four, I wouldn't lose that many points like in any of them, like only six points of 10 points. So if you got 10 point and the seed equity and we would go down to four or five each was I would only lose 10 10 points.	

00:24:36 S3 (Phuc)	OK. It was--- You were very resistant to getting any any seed equity.	
00:24:47 S2 (Georg)	Yeah, you gave him zero percent.	
00:24:51 S3 (Phuc) Section C	OK, so C? So there's one interviewer and one note taker.	
00:25:01 S2 (Georg)	Is this about, is this about how Georg feels or how S2 feels?	
00:25:17 S1 (Michael)	Ask for help in that one.	
00:25:20 S3 (Phuc)	It's how we feel.	
00:25:24 S1 (Michael)	Yeah.	
00:25:28 S3 (Phuc)	No, wait, so is the one who is not answering to the questions is taking the notes.	
00:25:39 S2 (Georg)	Got it. Should I take the notes to begin with, then?	

00:25:43 S3 (Phuc)	OK, then I'll start interviewing S1. OK, so hearing your team members descriptions, description of the negotiation and their feelings, what surprised you about that?	
00:25:59 S1 (Michael)	Once again, like either with Michael or S1 I was surprised when we got into negotiation that you like both of you---	
00:26:11 S2 (Georg)	Wait, wait, wait. I'm not able to use another account. I can't write on it. What can I write on it? OK, wait I'm going to paste it.	
00:26:23 S1 (Michael)	Otherwise, you can just write in any other document, just copy them. I could do that too.	
00:26:30 S2 (Georg)	the Fact Checker.	
00:26:34 S1 (Michael)	I was quite surprised that both of you were like, you were supposed to not get that many points. This is my gross go away point was 220, so I thought both of you might have some that was that high, too. So when you both started saying that: "if this is not going to happen, then I'm out." With how many points are you going to have? Yeah. So that we had different deal breakers and deal breaker points.	
00:27:21 S3 (Phuc)	Well, it's a bit, but this is description. So I read the descriptions we have given now of our feelings about the negotiation.	

	Yeah?	
00:27:33 S1 (Michael)	But I feel like we all sort of agree on the feelings we had before, during and after.	
00:27:41 S3 (Phuc)	It was not very much surprising elements: looking at your own experience in the negotiation and your feelings. What surprised you about yourself? … oh some pretty tough questions.	
00:27:58 S1 (Michael)	I don't know if I was surprised, but like that I could see myself, you know, remain calm. Some of the discussions were pretty heated, so I was like, OK, someone needs to stay calm and take the lead and just, OK, now we're just moving on. Like, what is the agreement? And all that. But then again, like Michael is the CEO, so he's got some leadership skills, I guess. You don't experience it was quite fun to do it given the course I already had in negotiation Even though it's been two years, I think something like that, it's quite fun that I still remember some of the things we talked about then. Hmm.	Copycat Effect: S1 frames her experience as one in which she stayed calm and argues why this is important referencing prior learnings from a negotiation course
00:28:56 S3 (Phuc)	Did you feel like you could use any of the techniques or draw blood from that first course? Things you remember?	
00:29:07 S1 (Michael)	Yeah, definitely. It's more about like not only thinking about what do we have right now and more like how can we add other things to that sort of thing? How can we get to an agreement where everybody's happy and satisfied and be compromising,	Comment: S1 shares some insights from her prior experience.

	but it doesn't have to be a compromise that if you go up in something, then I would have to go down with something. But more like: what can we do to expand the pie like: "If you go up in this, then we have to do something else as well."	
00:29:51 S3 (Phuc)	Yeah. So what would you do differently in another equity split negotiation?	
00:30:03 S1 (Michael)	I would maybe try to think maybe on like beyond what we got into that year. But I heard some people who actually like made up facts as well ,and I don't know what they would say about that, but to think beyond like the things we actually have. So if if you didn't go up in salary, then we could find something else within the business that do it.	Broad Reorientation: S1 has not managed to follow her prior learnings as expressed in the comment before and formulated that she would think more long-term in a future negotiation to "expand the pie".
00:30:44 S3 (Phuc)	Yeah, get a title or something. Yeah. What feedback would you give to to us and what did we do well and where could we improve?	
00:31:08 S1 (Michael)	Maybe not like be so aggressive, and stay calm because we are all in this situation, we are sitting at the table trying to, you know, obviously help ourselves but help the team and the business as well.	Copycat Effect: Now S1 brings up the importance of being calm and not

	Because if something happens and we disagree about something in the equity split, then that might affect our relationship to move further within the business. So if you ended up being like completely enemies within the equity split, then that would affect the whole business and how we could develop the business further so that everyone would sort of be open to the others and compromise. But also think about what you want for yourself and also what do they want and how can we agree on something together because they're on a team together?	aggressive in negotiations and suggest that for the other students to do in the future. She also suggests that that would help to keep up a good relationship as potential cofounders.
00:32:18 S3 (Phuc)	Yes. So. What oh, what did you take away for your studies at [UNIVERSITY], professional career and your personal development?	
00:32:36 S1 (Michael)	Like, what can I use this negotiation for?	
00:32:39 S3 (Phuc)	Yeah, yeah, I guess. Or did you take away from it and help you in school?	
00:32:46 S1 (Michael)	Well, it's important to open up about and talk about the equity split and not just keep it in a box, as in it's something we don't talk about. Yeah, it's going to open up. Because if you talk about it, then it becomes more casual to discuss, and it might help the team members agree more easily if it's something we talk about frequently. Also in like professional	Actionable Guideline: Concrete suggestions for what to do -> When in a startup team talk about equity splits early on and and

	career, you know, you always have something that you want to end up with, but so does the person on the other side of the table like they want something out of it as well. Yeah basically.	frequently
00:33:42 S3 (Phuc)	What did you learn about yourself?	
00:33:45 S1 (Michael)	Well, now I don't know. I didn't learn anything that I didn't know beforehand. Yeah, and I am great at keeping calm in those heated situations, getting what I want .yeah.	Copycat Effect: S1 praises herself for her ability to stay calm
00:34:13 S3 (Phuc)	Learnt that we're not so good at that._What did you learn about the team members?	
00:34:19 S1 (Michael)	That it needs to be--- it's that we practice it here, so we know what it's like to be in a situation like this.	
00:34:37 S3 (Phuc)	Mm-Hmm.	
00:34:38 S1 (Michael)	So we don't like go out and then have a real life equity split and we haven't tried anything. So that's good. And we tried it out. I learnt that little things can tick you off, especially S2 you? Yeah, I guess that would somewhat part of Georg's role that he was really determined to get.	
00:35:10 S3 (Phuc)	Yeah, it's exhausting. Mm hmm. Not a lot of leeway from his side. Cool. So did you. Did you get any notes, did you?	

00:35:24 S1 (Michael)	Yeah, I did. I'm just curious how you write it into the word document. He'd say it was because I can't write on it. Can you guys write on the document?	
00:35:38 S3 (Phuc)	[insert issues with docs]	
00:37:12 S1 (Michael)	Anyway, should we move on to the next one, we're going to figure that out, maybe later. Should I do the interviewing on S2 then? [concurs] What was the thing that surprised you about the team members description and the negotiation.	
00:37:40 S2 (Georg)	Well, yeah, of course I was surprised about Phuc that, that he would leave, you know, there was a low minimum or whatever it required. There's like a requirement for him that that he had and it was so easy for him to leave. Yeah, that was maybe one of the most surprising aspects. Yeah.	
00:38:05 S1 (Michael)	What about about like us, like S1 and S3?	
00:38:10 S2 (Georg)	as people or what? Team members description of the negotiation and their feeling	
00:38:18 S1 (Michael)	, So what we just talked about, S3 and I. Is there anything that we said that surprised you?	

00:38:24 S2 (Georg)	Oh, would you say that? Yeah. So that? But you guys said, well, that S3 had to leave, very easily, I don't know. Yeah. Yeah, and Michael, not really, because he was just calm and didn't really talk that much. Maybe that oh, maybe that he was so supportive with Phuc and like with the Warren situation. Yeah, I think. Is that what the questions about?	Copycat Effect: S2 confirms that S1 was calm but gives it a slightly more critical note.
00:38:53 S1 (Michael)	Well, what we think? Is there anything that S3 and and S1 said that?	
00:39:01 S3 (Phuc)	Section A. and B, what we've done now, if there was anything that we---.	
00:39:08 S2 (Georg)	Ohhhh section A. and B.	
00:39:11 S1 (Michael)	What we talked about that surprised you about the negotiation.	
00:39:17 S2 (Georg)	No, not really.	
00:39:17 S3 (Phuc)	You made my work easy.	
00:39:26 S1 (Michael)	So like maybe about your own experience in the negotiation and your feelings. Is there anything that you were surprised	

	about yourself?	
00:39:36 S2 (Georg)	No, I think so, like literally it was just Phuc leaving so easily, like that he was so on George the whole time. But like, I don't know if that's the answer. I haven't been. No, nothing's really surprised me.	
00:39:53 S1 (Michael)	There's more, you know, and such can be when described how you were feeling before, during and after the negotiating call	
00:39:59 S2 (Georg)	. I didn't think it was going to be so emotional. But I know myself that I am a very emotional person, so I get very aggressive sometimes when it comes to negotiations and arguments. So I wasn't really surprised because I was expecting it, but I wasn't expecting it for a class. I thought I could take it more in a cool light. Like what Michael did or what S1 did to like, just chill and be like, "Yeah, guys." I think it was also because of what my, well, my role was, I guess, maybe I I think I would have done the same for if I was in Phuc's situation.	Copycat Effect: S2 says she would have liked to be calmer
00:40:42 S1 (Michael)	Is there anything that you would do differently in another equity split negotiation?	
00:40:48 S2 (Georg)	Try to stay calm and be the one watching? And then maybe I feel like it's better that you like, sit and like you're watching and then just put like small words like you did S1 and just be like, "Yeah, OK, we can do that now." Yeah, like, be the cool guy. I	Copycat Effect: S2 now copies what she has observed of S1 (and praised) during the negotiation and

	want to do that for my next one. Yeah.	heard here during the reflection. Broad Reorientation: Stay calm in negotiations
00:41:14 S1 (Michael)	What feedback would you give to your team members, what did they do well, could they improve?	
00:41:19 S2 (Georg)	Well, S1, you were great at during the calm cool guy you know? I think that was well and for Phuc, I think you were great at keeping it flexible. I think you're very flexible at some parts, but you were doing it, you were taking what you wanted, like, oh, you didn't get at the end, but you would have if I had said yes. So like, I think you had you had gotten to the seed equity as well as I think you've got what you wanted and you were flexible where you had to be flexible. Yeah.	Comment: S2 repeats her praise and explains again how nice it is to be the calm "cool" guy in a negotiation
00:41:57 S1 (Michael)	Did that affect you? Like, did it do anything to to to your role? Like that opening act the way we did	
00:42:11 S2 (Georg)	Phuc heating himself up, up and getting what he wanted made me aggressive as well. So I think when S1 was calm--- What? Make sure you move on to the final question, OK? Next question.	

00:42:28 S1 (Michael)	What did you take away from your studies at (UNIVERSITY) and professional career?	
00:42:32 S2 (Georg)	Takeaways? Stay calm.	Affirming Broad Reorientation: Stay calm
00:42:35 S1 (Michael)	What did you learn about yourself? Did you learn anything?	
00:42:43 S2 (Georg)	Always be conscious, think straight and think before you talk. OK.	Broad Reorientation: Think before you talk
00:42:49 S1 (Michael)	What did you learn about your team members?	
00:42:56 S2 (Georg)	There always has to be someone supportive. There has to be a calm person that leads the negotiation, but that is not really about team members. Yeah, about myself is stay calm and things where you talk. And what I learned about team members is it's good to have a variation of people in a group. So. OK, your turn.	Comment: S2 bring up again the importance of staying calm Affirming Broad Reorientation: Stay calm
00:43:31 S3 (Phuc)	Wait, what would you say about what did you take away for your studies and your career?	

00:43:38 S2 (Georg)	Stay calm.	Affirming Broad Reorientation: Stay calm
00:43:40 S3 (Phuc)	Oh, so same. OK.	
00:43:42 S2 (Georg)	Yeah, yeah. OK. OK, now we're on the last person group on track, so I'll answer the questions. Are you ready? S1? OK, so then it's hearing your team members description of the negotiation and their feelings. What surprised you about that?	
00:44:07 S3 (Phuc)	Just not so much. I feel like we all had quite similar feelings about the negotiation. Oh, I'm sorry. It's just it's the coffee. No, I wasn't really surprised by anything we said in the first two sections, I feel like we all had quite similar views on it. I can barely remember what it was in the first section anymore. But yeah, no, I wasn't really surprised you could say. Yeah. And then second question:	
00:44:59 S2 (Georg)	now, look at your own experience in the negotiation and your feelings. What surprised you about yourself?	
00:45:06 S3 (Phuc)	Maybe I mean, I know that I'm quite competitive. I was going in with into the negotiation, with the mindset where we didn't aim to find an agreement that would make all of us stay and be quite satisfied. But then once you're in it, it's easy to get into the role. I guess that's also surprised me that the ease of of getting into the role	

	and putting yourself in Phuc's shoes. That kind of got me more emotionally invested than I maybe thought I would be.	
00:45:51 S2 (Georg)	OK. What would you do differently in another equity split negotiation?	
00:45:59 S3 (Phuc)	Probably push a bit harder on the things that mattered. And trying to steer focus away from the things that did not matter to me, like Warren's part didn't really matter to me. But despite that, we spent a lot of time on it because I thought it mattered to you guys. But then it turned out it didn't really matter for you, either. So that was a waste of time, probably. So, yeah, also probably stay calmer, but at the same time push. Still push for the things that matter.	Copycat Effect: S3 proposed two actions here, first he suggests to push harder for the things that matter. However, he also suggests to stay calm which is almost contradictionary to what he says before but which seems something he wants to copy from his colleagues. Broad Reorientation Push harder and focus on things that matter while staying calm
00:46:48 S2	Yeah, yeah. And then what feedback would you give your team members? What did they do well and where could	

(Georg)	they improve?	
00:46:58 S3 (Phuc)	Mhm. Well, I think that they could did it well like this, taking the leader roles - Michael's role here. With that being said, I think that because it seemed as if you had quite a lot of flexibility. Maybe you could be a bit more invested in trying to mediate a bit more between Georg and Phuc, and to kind of calm us down and S2 probably, you know, try to compromise a bit better. Yeah, yeah, I think. But also this, like you said, we kind of got each other heated up. Like when you're both emotionally invested, then we're both kind of at some point like: "no I'm gonna win".	Copycat Effect: S3 is again hinting at the importance of being calm in negotiations
00:47:55 S2 (Georg)	Yeah, yeah, I love. I like winning. So, you know, it's difficult to lose those on arguments. Yeah.	
00:48:07 S3 (Phuc)	what did what did you take away from your studies at (UNIVERSITY), your professional career and your personal development?	
00:48:16 S3 (Phuc)	Yeah, probably that negotiation is a two way communication, and that it includes both putting forward what you want, but also actively listening to what the other party wants. I guess that's the the main takeaway.	Changed Perspective: Change of concept: Negotiation is a reciprocal interaction
00:48:39 S2 (Georg)	OK. What did you learn about yourself?	

00:48:47 S3 (Phuc)	Yeah, I mean, I guess that I still have to learn to put my competitive side away, sometimes for the benefit of myself. Yeah, because I thought, especially now when it was just a simulation, that I could kind of put that side away and rather focus on on reaching an agreement that is favorable for all of us. But it was more difficult than I than I thought it would be.	Broad Reorientation: Be less competitive and more compromising
00:49:30 S2 (Georg)	<u>*And what did you learn about your team members?*</u>	
00:49:35 S3 (Phuc)	Yeah, I learned like I mentioned before, the S2 was it's quite competitive. I was also going to say I mean, there are people in the class that I know better than you too, but I thought it was quite fun to do it with with people that I don't know very well going in without any kind of preconceived ideas of you two. And and yeah, S1 was calm and--- Yeah, like you said, did a good job in listening, but I think, with the flexibility that that you had as Michael, probably could have been a bit more active in steering the negotiation to things that mattered, I guess. Yeah. Yes, that's what I what I have to say	Copycat Effect: S3 is again highlighting what a great job the "calm" student did
00:50:46 S1 (Michael)	OK, so where do we have no notes in? I think you might say so in when we get back. Did you hand in the video from last time.	

	[end of transcript]	

Appendix 9

Sample Transcript Focus Effect (UG9)

Context: While three students participated in the equity split exercise, only two of these students were present during the reflection session (S1 and S3). The transcript consists of three rows. The first row entails the timestamp, and the second row shows the speaker and the original comments made by the students. The third row entails comments and codes made by the researcher to illustrate the interpretation. To make the transcript more readable, all codes irrelevant to show the focus effect have been removed. Please note that this transcript consists of four sections because the students stopped their recordings after each section of the reflection manual.

Focus Effect: The two students start off by framing their experience as a challenge between finding compromise and being assertive (Section1_00:06; Section1_00:33). Throughout their entire reflection process, they come back to this framework without focusing much on any other aspects of their negotiation experience. Even when they are talking about feelings, they use this frame as a guide. In consequence, almost all their insights – apart from a broad re-orientation they copy from one another on being better prepared – are about acting more assertive and making others compromise (Section3_03:53). S1 even shifts his self-perspective from a person who is not assertive to someone that is (Section4_01:20).

TIME	STUDENT DISCUSSION	Comment/Code
00:00:02	S1 (Michael): So which decisions did you find difficult and why?	
00:00:06	S3 (Phuc): Decisions that I found difficult were decisions where I had to like most definitely compromise. But I wasn't sure up to what point I should compromise, and I wasn't sure which was a	Focus Effect: S3 starts the framing with a focus on compromise as something he found difficult to do.

	priority. Yeah, in a sense. So I don't know. At first, I had trouble like organizing my priorities and making sure that they were met I guess	
00:00:33	S1(Michael): Yeah, I think it's the same like well in terms like the issues for me with the role I had it was especially the equity distribution, because the points thing that was the point where, where you know I compromised the most in terms of points and it was like I think that it was very hard to sort of be assertive and say, this is what I can't do, this is what I demand and this is what I want. And there's nothing you can do about it, you know. So be very assertive in terms of concerns of the things that you really wanted to, you know, get through. You know, that's what I found the most difficult. Yes.	Focus Effect: S1 picks up on this framing and adds a dichotomy of compromise and assertiveness. Those two concepts will frame and dominate the entire reflection.
00:01:21	S1 (Michael): Let me just take two as well. What were critical moments or incidents for you during the negotiation?	
00:01:30	S3 (Phuc): A critical moment for me was when.. like during the equity split, you guys were like hmm..and I was like, oh, I have to compromise on this because of the salary that was [unclear word].	Focus Effect: S3 frames the experience again around the concept of compromise

	Yeah. So then I thought that that was a critical thing because I also like sort of could set the tone for the rest of the negotiations. So I mean, I thought that was the most critical part. And also it was like the most important part.	
00:01:59	S1 (Michael): Yeah, yeah. Same for me. I mean, the equity I think also because the whole ... the whole negotiation started with the Michael role demanding nine percent more. So, it was definitely the most, the one I think we spent the most time on. Yeah. And also, you know, it was definitely what, depending on how well you negotiated in that, it definitely changed the outcomes in the subsequent issues as well.	
00:02:35	S1 (Michael): What made these moments or incidents?.. You know, it set the tone for the rest. And it, you know, it was the most that was at risk or there was.. there were a lot of things that, it was..it was like.. it was like a big issue.	Comment: Also a typical pattern of the focus effect is the unclarity around other things that happened. Here they remain quite on a surface level.
00:02:54	S3 (Phuc): Yeah. It would set up like the whole company would function ...[some mumbling] ... Then what made these moments critical? .. I mean I guess also it was like the first time that we were actually speaking to each other ...	

	so it was like ... I don't know...	
00:03:14	S1 (Michaell): We had to sort of like, you know.. check the vibe..	
00:03:18	S3 (Phuc):...match the vibe..	
00:03:19	S1 (Michael): Exactly..I think it was fine (pause).. What phases can you identify in the negotiation? Please try to find names for the phases you identified? Well, I haven't written notes, but I mean, we did it pretty like one, two, three, four.	
00:03:43	S3 (Phuc): Yeah it was like just the issues and [mumbling].	
00:03:46	S1 (Michael): Yeah, right. We we had to make some of them together. Yeah. But then we, you know, we were pretty good at saying, OK, let's take that later on, let's just quickly discuss this til the end and then continue with the next one. So I'm not sure how much. Well issue one, issue two, issue three, issue four.	Comment: Again very surface level on "what happened"
00:04:07	S3 (Phuc): I guess …I don't know because I was thinking you can name it by whichever person had the most interest in the issue.	
00:04:17	S1 (Michael): Oh..	
00:04:17	S3 (Phuc): Maybe, but there were four issues and there's only three people and now we would be two	

	people.	
00:04:24	S1 (Michael): Yeah. Well I mean … I think maybe the first one would probably be Michael's. That was where I spent a lot of time. Yours was...	
00:04:32	S3 (Phuc): ..second one.	
00:04:33	S1 (Michael): Yeah. That was salary. That was purely your.. like salary. And the third one was..that was..oh the seed capital. That was like all of us.	
00:04:44	S3 (Phuc): And the last one was just Warren.	
00:04:46	S1 (Michael): Yeah. But with [S2] or he was George or Georg or whatever, like spoke his case, you fought for his case as well.	
00:04:59	S3 (Phuc): Each section sort of represents what one of us wants and why?	
00:05:00	S1 (Michael): Yeah definitely. And I think, yeah, yeah, one and two. So maybe three, three was where all of us were at play, where each of the other ones were like. They're key to a task or a case.. Let's just pass this one to take the next one..	

Section B: The students started a new recording

00:00:01	S1 (Michael): Section B, feelings. You can just start (directing question at S3). How how would you describe your feelings before the negotiation?	
00:00:08	S3 (Phuc): Oh, my feelings before the negotiation … Guess I was excited.	
00:00:12	S1 (Michael): Yeah.	
00:00:13	S3 (Phuc): And I really like obviously like movies and [unclear word], you're, like, excited for negotiations. You're always wondering how are you going to do it? You know, it's always going to be, oh, do I want to be the alpha guy that just comes in? You know, and then you're like maybe not. So I don't know, I was just excited to see how it played out.	
00:00:29	S1 (Michael): Yeah.	
00:00:30	S3 (Phuc): Yeah. I wasn't really nervous because it is just a game you know.	
00:00:32 Speaker 1	S1 (Michael): Yeah, yeah, yeah. I don't know. I was I was like I think I wrote like excited and I think kind of nervous because I don't.. personally I don't like negotiating. I just, you know, sort of like I'm always agnostic and a lot of things	

	because I don't want to waste time on it unless it's very important. But, you know, excited. And I think, like I think I wrote, like, fit for fight or some shit. Yeah. I don't know, because because like, you know, you can be nervous. But also I know even though it's a game, but, you know, if you were to to translate it into like a real negotiation situation, I think I would be like, I will probably be nervous, of course, one thing and then excited to see, you know, what what what other things, what they want and then, of course, be able to where you fit to speak my mind, you know, speak for my case. Yeah....[pause]... And then how how are you feeling during the negotiation?	
00:01:31	S3 (Phuc): During the negotiation? Um, at times I was a little like stressed. Not stressed, but I was like, conflicted because, um, there's like a lot of things going on. You want something and then, you know, Gustav or Georg wanting another thing. And there was it was kind of like conflicting because things would not go your way for a little bit and then you would have to like think about how to like, best fit my proposal so that it also benefits the other two persons, you	Focus Effect: Even when asked about feelings S3 brings in his focus frame of compromise and assertiveness.

	know.	
00:02:03	S1 (Michael): There are a lot of balls in the air.	
00:02:04	S3 (Phuc): Yeah. There's definitely a lot of balls in the air. So yeah, it's definitely not a very pleasant situation to be l ike. It's not like you're calm and like enjoying yourself, you know..	
00:02:14	S1 (Michael): You're like on your toes.	
00:02:16	S3 (Phuc): Yeah. Yeah. Definitely.	
00:02:16	S1 (Michael): You walk on eggshells, too. I'm totally agreeing with that one. I also think like at some like the points where two people agree on one thing. Yeah. That was like, that was like in a way OK now you can take a breath. Because, because I think I remember with the last one, with the percent change of Warren.	
00:02:36	S3 (Phuc): I was like, yeah.	
00:02:37	S1 (Michael): I'm agreeing with you, you know. And then and then OK, now, now we're now we can be like, yeah it's easier for us to get our way. And then I think the opposite side was like, I don't know. I think you and two others of	

	the roles had like one, two another thing they agreed upon. And then it was like, OK, that then you really have to, you know..	
00:03:02	S3 (Phuc): ..compromise.	Focus Effect: S3 again bringing in his compromise framework; he is really forcing this theme onto the reflection
00:03:02	S1 (Michael): Yeah. And and either compromise or get your case through and be able to speak your case properly. So it's was like, you know, sometimes you could relax in a way like a bit and other times most of the time it's like on your toes and everything.	Focus Effect: S1 picks it up and again frames the experience around compromise and assertiveness
00:03:18 Speaker 2	S3 (Phuc): I would feel a little frustrated when I couldn't get like my words out exactly that I wanted when I couldn't present my case, you know, in the best way. I think that's very important because if you don't really like, it's just sort of sounds like nonsense to the other people.	Focus Effect: Again framing every aspect of the experience on compromise vs. assertiveness Notice the students were supposed to talk about their emotions here
00:03:34	S1 (Michael): Yeah also..also if you.. if you say something and then you change your your what you said or what you want like a minute or two afterwards, it also sends the wrong signal either way. So if you say I demand this, I'm not going any further down and then one or two minutes later you say, OK, I	Focus Effect: Again S1 brings up the compromise vs assertivness challenge suggesting that stating a position first and the compromising may send a problematic signal

	can go one like you know, and that's kind of hard, you know, the balance between that. So you don't sound like well, like you're just chicken out in a way.. (pause).. And then, uh, how would you describe after the negotiation?	
00:04:12	S3 (Phuc): Um, after the negotiation. Well, I was pretty pleased. Yeah. I mean I thought it went alright. I mean I wasn't like super disappointed with myself or like super happy either. I think I did OK. I mean I got above the required whatever.	
00:04:32	S1 (Michael): Yeah. In terms of points? I think I got that too.	
00:04:37	S3 (Phuc): So, so yeah. And I think everyone compromised and everyone sort of like we all like. I mean I think, I think at least that's what I think. I don't know like you guys' scores. But I mean I was pleased with myself.	Focus effect: S3 bringing up his compromise framework again
00:04:49	S1 (Michael): Yeah. Same with me. I was, I was like reveal like OK now it is done. And now we're, now we're good. And also I think like all right. You know, I think I did fine. I was I think personally, I was like, I think like I got minus one hundred and two points or	Focus effect: S1 frames the experience using his compromise vs. assertiveness framework

	something, so I was far away from the rejection. It wasn't like I just compromised on everything and like the assertiveness sort of made like some of them were like, if you didn't if you didn't stand your ground in a way, you would have gotten worse or something like that. Yeah. So I think it was I was it wasn't like I was euphoric. It was just it was all good, even though it's like fucking..I t's just fantasy but.. it's funny how like you get really into it when you talk about it.	
00:05:42	S3 (Phuc): Towards the end we were like yeah I was, it was fun. It was definitely fun.	
00:05:47	S1 (Michael): It was a lot of fun. OK, so how if your feelings have changed - why was that? (mumbles another question)	
00:05:56	S3 (Phuc): Yeah. Because the after class poll we did. So I think it's referring to that.	
00:06:02	S1 (Michael): Oh well yeah. OK, well they changed a bit then didn't they. Like if you're like nervous or excited and then afterwards revealed.	
00:06:13	S3 (Phuc): Oh I see. Yeah. Well I guess. Yeah I guess. Yeah. Yeah. The nervousness I guess sort of faded. Yeah. And I mean what else.	

00:06:23	S1 (Michael): Bit like..yeah. Like they were. Well if you're nervous before and then reveal..revealed afterwards. I'm not sure. I think, I think we kinda talked about it like before and after. I think if you say before you were like this and after they were like that. So they did change.	
00:06:43	S3 (Phuc): Yeah.	
00:06:44	S1 (Michael): I think the answer is yes.	
00:06:45	S3 (Michael): Yeah. How are we going. Are we, are we good?	
00:06:48	S1 (Michael): Yeah we're good.	

Section C: The students started a new recording

00:00:01	S1 (Michael): OK, so Section C, so should I just read out the questions and then we just answer. OK, so hearing your teammates, teammate, member, member's description of the negotiation and their feelings, what surprised you about that?	
00:00:20	S3 (Phuc): Um, well, I guess I was surprised that.. I guess our feelings were pretty, pretty similar going into the negotiation during and after, um.. I guess. it's it surprises me because it provides me with a perspective that everyone walks into a negotiation	Focus effect: S3 is again pointing to the importance of being assertive

	with all like the same feelings I guess. So you could assume that there is like a solid almost of like an equal platform for everyone in a certain sense. So I enjoyed that it's normal to feel I don't know anxious and.. and to wonder if you're being assertive enough and to like, I'm sure you like wonder what your role should be like.	
00:01:19	S1 (Michael): Yeah. OK, so similar feelings equal platform before a negotiation.	
00:01:27	S3 (Phuc): Yeah it's y eah l ike emotional platform. Not really like [unclear word]..	
00:01:32	S1 (Michael): And then uh like it's alright to have some feelings or you know before and, and, and in the negotiation because the others probably have it too (taking notes simultaneously) or to be nervous or so..(writing pause)...So looking at your own experience in a negotiation and your feelings, what surprised you about yourself?	
00:02:09	S3 (Phuc): What surprised me about myself..(thinking)..I guess what surprised me about myself was... if I was, I don't know, how I was surprised, I guess, how flexible I was at certain points, because at the beginning I didn't start off as assertive as I wanted to, especially	Focus effect: S3 is surprised how he was willing to compromise and let go of his assertiveness and then how he developed more assertiveness again

	with the equity discussion, because you guys were much more involved in that. And you guys put up a pretty assertive stance during that. But then I think I sort of bounced back during the.. I became a little more assertive as the negation came over. So I think I surprised at myself and being able to tune up someone to examine the circumstances and maybe improve within them. Even if I I didn't start off from the [unclear word] in the best way I was able to like, to realize if I had messed up, what would be the next best thing to do. And just sort of like go for that. Yeah think that was it.	
00:03:22	S1 (Michael): So, yeah, flexibility and then more assertive later on, examine the surface circumstances as negotiation went on. And then. Yeah, well, great. Yeah, perfect. Next one. What would you what would you do differently in another equity split negotiation?	Focus effect: Again putting their frame of assertiveness and compromise (flexibility) out
00:03:53	S3 (Phuc): I would format everything so that I have better access to all the information. Oh, I would be prepared beforehand and I would like to know what everyone else wants out of the negotiation. So that I know like how to approach and how to like present my arguments so that it benefits other people as well. Um, what else? I would like to... to	Broad Reorientation: Format your information before a negotiation in a way that is easily accessible Broad Reorientation: Be better prepared for negotiations

	be more assertive and I would also like to be able to get others to compromise every once in a while.	Broad Reorientation: Be more assertive in negotiations (and get others to compromise) Focus Effect: He frames all his broad reorientations around one single goal, which is to be more assertive in a future negotiation.
00:04:36	S1 (Michael): So like push them to compromise as well.	Focus effect: S1 picking up on the idea to push them (be assertive) to make others compromise
00:04:39	S3 (Phuc): To change your mind I guess.	
00:04:44	S1 (Michael): (Repeating what he wrote). You know what the others want beforehand and be prepared beforehand. That kind of goes hand in hand. At first more assertive and then influence the others to compromise more... Next one. What feedback would you give your teammates? What did they do well and what could they improve?	Focus effect: S1 repeating the idea to push people (be assertive) to make others compromise in negotations
00:05:27	S3 (Phuc): (Thinking pause) I think right off the bat. Well, you were pretty assertive first thing. You did well there. I think my only critique	Focus Effect: Again giving feedback almost exclusively on assertiveness

	of you would be probably. That you might have.. you might have repeated a couple of arguments. Yeah. You know, like when we would ask you something that you would repeat the argument.	
00:06:05	S1 (Michael): Like keep the keep the drill going.	
00:06:08	S3 (Phuc): Yeah, yeah, yeah. But it's also kind of difficult because we were giving like our reasons for stuff, you know, so it's kind of like hard to step out of that. But um, I guess that would be one of my critique of yours. And of Georg's, I guess I would have liked him to compromise a little bit more, even just with communicating, because he was a little bit like...he would distance himself from from the conversation a little bit. He wouldn't he wouldn't really, or I felt that he wouldn't really consider other people's circumstances as much	Focus Effect: Now also giving some feedback on the lack of compromise of the other two
00:06:43	S1 (Michael): (Taking notes)..lack of compromise. Yeah, he didn't listen like or he was like primarily focused on his own.. (little thinking break)..Arguments were used like you kept like this. I can't like the same thing going. Yeah. Which I also paid attention to and then lack of compromise from Georg's (?) side and then what you did well	Focus Effect: S1 now framing it again as a lack of compromise and its relation to assertiveness

	was..Assertiveness.. (Pause).. What did you take away for your studies at (UNIVERSITY), your professional career. What did you take away?	
00:07:58	S3 (Phuc): Um, I took away.. what did I take away. Well I took away that negotiations are fun. It's definitely an environment I would like to be more within. And I would like to be able to like get better at it, practice at it and do more exercises because I feel like it can also translate to many other... Yeah.	
00:08:28	S1 (Michael): Everything in lives, is in a way, a negotiation, right?	
00:08:30	S3 (Phuc): Yeah, definitely, some.	
00:08:31	S1 (Michael): So we have to get a way in and etc.	
00:08:33	S3 (Phuc): And yeah, it's not even just for networking and just for, you know, making solid relations with people and stuff for sure. I think you should you should be able..you should be good at recognizing what others want as well as what you want and try to find harmony somewhere in between there. So I think that's what I took away from.. from this exercise.	Focus Effect: Even this statement is a rephrasing of assertiveness vs. compromise
00:08:56	S1 (Michael): What did you learn about yourself?	
00:08:59	S3 (Phuc): What did I learn about	

	myself...I learned about myself that I can start off something bad and bounce back and not..what else.., you know, and then I could..	
00:09:30	S1 (Michael): ..bounce back?	
00:09:35	S3 (Phuc): Yeah.	
00:09:35	ASo, you know, maybe even though you had a bad start, you can still get back in the game.	
00:09:41	S1 (Michael): Yeah, yeah. So like, yeah. I don't know, I don't know if there's a word for that	
00:09:47	S1 (Michael): ..bounce back? (laughing)	
00:09:48	S1 (Michael): Yeah. I don't know. I think that's probably the best one too. Yeah. So your team members, what would did you learn there?	
00:09:55	S3 (Phuc): What I learned about my team members..let's see. Well, I learned that everyone is going to be primarily focused with their own, with their own priorities, and I think (thinking pause).. I guess I also learned that people would rather be better off themselves and have other people better off.	
00:10:36	S1 (Michael): So like a zero sum game in a way.	
00:10:38	S3 (Phuc): Yeah, yeah.	

00:00:03	S3 (Phuc): Hearing your team's member's description of the negotiation and your feelings, what surprised you about that?	
00:00:09	S1 (Michael): Yeah, I think it's alongside what you said. Like the people or the parties come in with more or less the same feelings, or at least they're closely related. And also that I ...yeah, you know, that that that the feelings that you yourself feel and like you're oftentimes maybe also in other like walks of life [mumbling], like feel damn, I'm the only one who feels like this or something like that. I think it's wrong. I think most people more or less feel the same things. Some are just better off, better at keeping them hidden or, you know, handling them, like keep them in check than others. So that's definitely a surprise as well.	
00:01:06	S3 (Phuc): Ok..next one. Looking at your own experience in the negotiation and your feelings. What surprised you about yourself?	
00:01:20	S1 (Michael): Well, I personally	Focus Effect: S1 again uses the

	don't perceive myself as being a very assertive person. So the assertiveness that I well displayed in the negotiation was definitely surprised substantially. And also that depending I think on, like..like compared to when you're prepared or just slightly prepared compared to when you're not prepared at all. I think I am able to be more assertive if I know what I want and if I know what we're talking about compared to like, you know, if you just if it's just like on the run or on the fly that you have to be assertive is not by nature, doesn't by nature, but like you can be prepared for it. Yeah. Kind of like, you know, some people are very nervous when they speak in public. But if you're prepared for it, it's not as nerve wracking. So that definitely surprised me. That I was able to display that type of assertiveness.	assertiveness – compromising frame Changed Perspective: Self Concept -I thought of myself as a non-assertive person but I am actually assertive (in some situations)
00:02:26	S3 (Phuc): Next.	
00:02:27	S1 (Michael): Yeah. What would I do different in another equity split negotiation. Yeah..Well, definitely do my homework. Uh, know what the other people also. What... I mean..see things from their point of view, know for sure what they want and then either use it as like either as an advantage to myself, depending on what they want or as a way of	Broad-Reorientation: Be better prepared

	maybe. Yeah, well, use it in the negotiation in the sense that if a person wants more equity or something like that, you can say, well, I mean, if if a person works hard in a company and they want a higher salary, you can like start with the like, say you're really good and, you know, like compliment them and then maybe to some advantage or to negotiate on what you want, maybe use what they want in advantage. Well, to your benefit, it's hard to, but definitely just yeah..	
00:03:40	S3 (Phuc): I get it..	
00:03:40	S1 (Michael): I think just the most important thing is to know exactly what they want and know exactly what you want, as well.	
00:03:49	S3 (Phuc): What feedback would you give your team members? What did they do well, what can they improve?	
00:03:58	S1 (Michael): Um, well, I think I'll start with what you could improve. Oh, sorry. What you did w ell... I think yeah. If I remember correctly. Well, you definitely like I explained that I think I'm worth more. You know, when you said, like, I think am I, is my work like worth in the role [unclear word] but like to be able to say, well, don't you think that I'm worth this is like a really, you	Focus effect: Again this is about being assertive – S3 is recommending to his fellow students to be more assertive and arguing that ”assertiveness is very important in negotiations”

	know, great card in the negotiation. Because then you can't you can't either get a yes or no. So that's like also like a bit on the edge, like a like a heart. It's a dangerous one to pull. But but definitely that that you laid out like purely logical. Well I work this much, you know, say I do this. Therefore, I think I'm worth this. I think and also for Georg I think, he was very, he was definitely assertive as well. Yeah, his assertiveness was definitely hard for me at least to try and convince him to do otherwise. If in some constructive criticism, I think maybe more assertiveness on your part. As I think that you wanted to I think I would definitely be even better because..yeah.. Assertiveness is very important in a negotiation. You shouldn't I mean, you know, you should never just let people, like, stomp on you right.	
00:05:43	S3 (Phuc): Yeah, definitely.	
00:05:44	S1 (Michael): So so, you know, know your play, stand your ground. Not that you didn't do that at all, but more of it would definitely be only..only good. And then for Georg, again, I think maybe compromise, you know, be able to...	Focus Effect: S1 repeats the frame and suggests to find the right balance between assertiveness and compromise
00:06:01	S3 (Phuc): Yeah not just blind assertiveness.	

00:06:03	S1 (Michael): Yeah, definitely. Yeah, yeah, yeah, yeah. Blind assertiveness is a bad one. It's like a...like fine line between doing this. You can be assertive and compromise on the..yeah.	Focus Effect: S1 making another point about assertiveness
00:06:15	S3 (Phuc): OK. So what did you take away for your studies at (UNIVERSITY) or professional career and your personal development?	
00:06:22	S1 (Michael): Well I learned..That definitely assertiveness is an important thing in a negotiation. Kind of what I learned about myself also, that it..that it is important to...to speak your..be able to speak your case. Otherwise people won't take you seriously. And kind of in the same.. kind the same line as, you know, you have to know exactly what you want, otherwise it is not really a negotiation. And also that it's important to do your homework when it comes to.. Yeah, know exactly. So just know what the parties want is very important in any negotiation, and I think so what I will take away is compromising assertiveness is important. Also...Yeah, well.. be precise in your speech. Just be very clear. Yeah. What did I learn about myself? Again. That I can sort of maybe turn on my assertiveness depending on	Focus effect: Almost all S1 learned is about being assertive and compromising. The only other insights concern preparation.

	the situation and what, what we're discussing or negotiating...T hat and what else? (thinking)...I think I'm OK at negotiating.	
00:08:10	S3 (Phuc): OK.	
00:08:11	S1 (Michael): Like I think.. I think.. Ithink well, I'm not completely, you know..	
00:08:15	S3 (Phuc): ...like a lost cause?	
00:08:16	S1 (Michael): Yeah, exactly. Like, I know I, I kind of know how to how to speak my piece or come up with arguments, but maybe not just reuse the same arguments, but like the whole negotiation process, I don't think I was too bad. And then, you know, come up with arguments on the fly. And what did I learn about my teammates? Well, kind of... I think maybe a lot of it is the same as like especially for Gustav. He...he was more assertive than I would have anticipated.	
00:08:59	S3 (Phuc): Yeah. And I think maybe you were very logical. Yeah. Took like logical sort of methodological process and say like I'm worth this where I do this. And, you know, the I think you said also like we wouldn't have a product if I wasn't there because of the technical things. So like convince the other negotiators that you're worth what	

	you're doing, like, you know, come up with arguments like logical arguments. I think that's what I definitely learned about you other guys.	

Appendix 10

Sample Transcript Build-Up Effect (G1)

Context: Three students participated in the equity split negotiation (S1, S2, S3). Student SX did not participate in the equity split negotiation and was added to the group reflection by the instructor. The transcript consists of three rows. The first row entails the timestamp and speaker, the second row shows the original comments made by the students. The third row entails comments and codes made by the researcher to illustrate their interpretation. *Changed perspectives though the build up effect:* In this group, two students change perspectives during the group reflection process. Both build-up on their own and others' insights during the reflection process. Below you will find a short summary of the two build-up processes in this group with time stamps. The below transcript shows how the student constructs this insight by building upon what they and others have said. In order to make this more readable, I have removed all other codes focusing exclusively on the build-up of the changed perspectives and related proposed actions. S3 discovered about himself that he is more impatient than he thought, especially in negotiation situations (29:54). He builds this perspective change on two components. First, he uses the observations about his behavior as being too strong and forceful in the negotiation made by S2 (9:22 and 18:34) to analyze his own behavior realizing that his behavior/approach to the negotiation was unusual to him (26:12). From this he develops a proposed action concerning how he would avoid such a behavior in future negotiation (26:57). He framed this first as an actionable guideline suggesting asking more questions instead of making statements in future negotiation situations. Later he repeats this insight but reframed it more broadly as a broad reorientation of behavior concerning interactions with others where he suggested: “listen first, then talk” (29:05). Building upon the framing of S2, and his own analysis as well as his proposed actions he develops a changed perspective about himself that is connected to those other insights when saying that he discovered about himself that he is more impatient than he had thought, especially in negotiation situations (29:54). While this is directly linked to changes in his future behavior (through the proposed actions), this also holds the potential to change his frame of reference about himself more broadly. S1 develops a changed perspective on the meaning of personal benefit in team-based situations. Instead of seeing her own benefit alone, she understands that her own benefits increases when the other team members are happy as well (49:26). The build-up of this changed perspective begins with S1 outlining her position on the matter early on and expressing that every team member is responsible for their own benefits in a team negotiation (15:52). Her viewpoint get challenged by the other team members. First, S3 expresses quite emotionally his frustrations and raises the question, why S3 did not compromise more and offered benefits for the other team members (25:06), ultimately suggesting that in startup teams it is about making everyone happy not just some people in the team (27:51). Second S2 points out that S1 has partnered up with her against S3 but she was quite uninvolved and that S1 was too strong and unapologetic toward S3 (32:50; 34:59). S2 summarizes these point recalling her argument of S3 being too strong and reemphasizing that S3 was very frustrated (38:07). S1, who goes last with her analysis, struggles to take this critique in, showing that she feels and sees the frustration but also defending her position (39:29; 41:00). One can see from her statements that she is slowly realizing that she did not perform well in the negotiation and that a real team would have broken up. She then openly admits her mistakes and suggested proposed actions to avoid those in the future (42:00). Now S2 questions her again on her initial framing that each team member needs to think about themselves and argues their own case (43:00). S1 questions her own behavior again and comes rephrases her proposed actions a bit taking into account that she should also think about others interests if they do not fight as much for their own interests as she does. Finally, she sees that her initial perspective on personal benefits in team-based situations does no longer make sense and she shifts from a perspective on individual gains alone to a perspective that the gains of other team members matter a lot as well because they ultimately impact her own gains as well. (49:26)

TIME	STUDENT DISCUSSION	Comment/Codes
00:00:01 SX	I mean, I just started recording now. I don't know whether you can see it or not. I am. I should. [they concur]. Ok. The score sheet first, and you can see if you agree or not agreed.	
00:00:27 S2 (George)	but "walks away" Yeah "Phuc great".	
00:00:32 S1 (Michael)	Yeah, that's what I'm saying, I thought we agreed on the deal.	
00:00:34 SX	Wait, which group are you? No. Oh, we were number one. But I mean, we are under number four.	
00:00:43 S2 (George)	OK, here we are. Four. So, uh, so but I think the other numbers like forty five, twenty seven, twenty six, that all makes sense, I think.	
00:00:58 S1 (Michael)	Yeah, yeah. I mean, to be fair, when I was filling those Michael scores, like I was like, Shit, what did we agree on? But I think, like, I said it correctly, right? But we agreed on 10 percent salaries?	
00:01:10 S2 (George)	It also makes sense. Yeah. So yeah, it makes total sense. I think, however, what doesn't make sense, is that Phuc walked away. But the rest is fine, and compared to the others you were. Yeah, I think, S1, you were pretty well. The average was, yeah, we were both ---- You were so	

	much above average! [laughs]	
00:01:37 SX	So S1, you were Michael, who was George?	
00:01:45 S2 (George)	I was George. I was also above average. And Phuc was fucking me. But S1, did you fill in the right number?	
00:01:54 S3(Phuc)	But wait I cannot be... But how is it possible that I am -22?	
00:02:03 S1 (Michael)	I mean, it says that you walked away, did you walk away or did you say you	
00:02:10 S3(Phuc)	Yes I stayed.	
00:02:10 S1 (Michael)	Exactly, then this question is wrong because on the scoresheet, it says that you walked out.	
00:02:21 S2 (George)	Haven't they made just one mistake?	
00:02:23 SX	I think maybe this is from what they analysed from your data in the world, Phuc would have walked away.	
00:02:35 S1 (Michael)	I don't think so.	
00:02:36	wait, you see, you didn't put one point.	

S3(Phuc)	And you also --- you see that here. You just put me like the 10 percent of the seat, but you didn't put one more equity here	
00:02:52 S1 (Michael)	because we didn't agree on one more equity.	
00:02:54 S2 (George)	No, no, we did. We did. I did one less and we got to go.	
00:02:59 S1 (Michael)	OK, OK. OK. Anyways, but that's my mistake? The rest is right?	
00:03:07 S2 (George)	All your mistake, S1.	
00:03:11 S1 (Michael)	So then George, you have 26.6 and Phuc has 27.4, right?	
00:03:17 S3(Phuc)	Yup	
00:03:18 S2 (George)	OK, i don't know, just 1 less.	
00:03:25 S3(Phuc)	OK. But we just have to maybe---	
00:03:29	we just kind of like letting them know	

S1 (Michael)	and correct this... [mumbles something]	
00:03:39 S3(Phuc)	So if I think all, the following will change.	
00:03:46 S1 (Michael)	Not all of them.	
00:03:47 S3(Phuc)	Let's try to see to see if other people did it as we did... ...This is very good, I think. This one is what we wanted to do and [unclear]	
00:04:09 S1 (Michael)	It's quite funny how in Group A Michael got 46, you know, like that's that's interesting.	
00:04:17 S3(Phuc)	No, that's impossible.	
00:04:18 S2 (George)	Yeah, even more if I...	
00:04:21 S3(Phuc)	Maybe it was the Warren one. Yeah. Warren zero.	
00:04:25 S2 (George)	Yeah yeah, because Warren has zero	
00:04:27 SX	Who represented Warren in this case?	

00:04:29 S2 (George)	No one	
00:04:31 S1 (Michael)	But like it doesn'nt make sense because Michael wanted to have one question for Warren anyways.	
00:04:35 SX	No. Michael always wanted Warren out of the team.	
00:04:40 S1 (Michael)	Yeah. No. I mean, but in the guide that we got, it says that Warren has to stay at one percent.	
00:04:48 SX	Oh, really? I mean, I didn't do the exercise, so I don't know.	
00:04:52 S1 (Michael)	But that's why I was arguing. It's a sad one for [unclear word].	
00:04:57 SX	But then it's so interesting that some groups even gave him more equity, like 1.5 or 1.25. Yeah, because I mean,	
00:05:05 S1 (Michael)	Phuc and George -- no i mean S2 wanted this as well to increase his equity.	
00:05:13 S2 (George)	Yeah, he's my best buddy.	
00:05:16	He's your buuuuddy [sings]	

SX		
00:05:16 S1 (Michael)	would you get more points if he gets equity	
00:05:22 S2 (George)	Yeah, sure. But I can compromise, guys. No problem. But shall we talk about the reflection questions because [interjecting concurring agreement] ---- so eight minutes? So what's on the table? You going to take the time maybe?	
00:05:38 SX	Yeah, I can take the time, but I think we don't really have eight minutes left.	
00:05:42 S2 (George)	So OK, then question one, which decisions did you find difficult and why?	
00:05:48 S1 (Michael)	To give away the seed because I doesn't feel like Phuc should be fighting us because he wasn't there at the beginning.	
00:05:58 S2 (George)	Yeah, I think so, too. And also, I thought not the decision, but for me, it was difficult to argument like to push, no, that's not a decision ---- No, forget what I said from me.	
00:06:15 SX	For the next question, maybe where critical moments are incidents for you during the negotiation.	
00:06:22 S2	Yeah, so in the last question where I wanted to argument from Warren, it was difficult because you were both so clearly	

(George)	against me, so I had no chance. Kind of. And also, I had no, no good arguments for why Warren would have to get more active because it only said that he made some important contributions. And that's it. I don't even know why and what he did, and he was also not there. So I did not myself really believe in this argument, that was weird.	
00:06:49 S1 (Michael)	Yeah, I mean like, to be fair, like I would give that person [incomprehensible] I would more happily to Phuc than to Warren. I mean to give anything extra to Warren I would, I would rather give it to Phuc [S2 concurrs] Because he is still in the business. Warren is out. I mean he wasn't even there to negotiate.	
00:07:10 S2 (George)	And you?	
00:07:11 S3(Phuc)	Yeah, for me, it was difficult because I had to like, my point of view was against two point of views that were quite strong. And, you were already aligned on some topics, for example: my salary and also the seed. So, for me a really creative situation where you were able to rediscuss your judgment was not so easy at all. Until the end I had to leverage on the deal breaker. So, to say, OK. Or like that. And I also accept the worst scenario for me. So, I just did the deal with the worst possible stuff to just make the deal.	

	So yeah	
00:08:06 S2 (George)	What phases can you identify in your negotiation? try to find names for the faces you identified.	
00:08:20 S1 (Michael)	Nah. I mean, I put some notes for the session before to say that there was like an introduction where we sort of discussed why we should get that much equity and so on; basically done by me. Then that was -- I put Phuc's irritation [laughter] about his equity and seeing the salary and everything and how you're going to go away and find another job in the markets and so on. And then as sort of like trying to bring him back to the business. And then in the last 60 seconds, we basically agreed on the deal.	
00:09:04 SX	Really? Oh, wow.	
00:09:07 S1 (Michael)	That's how I see it haha. because I mean, like, we were like arguing arguing, and then like we talked, we went straight to the point.	
00:09:16 SX	Okay, how long did you had in total for the whole thing?	
00:09:21 S1 (Michael)	45 minutes.	
00:09:22	But it felt like 20 minutes, to be honest, super quick. I think one important point	Comment:

S2 (George)	also from the phases was when in the beginning I felt like everybody just started to put out their feelings and just smash around arguments. And then we said, OK, let's talk more about numbers. And I felt like from that moment on, it became a bit more efficient because then you it's not only about emotions anymore, it's about, OK, what can you do? What can I get? And I think that was the turning point. Yeah. And yeah, in the end, you know, we just argumented all the time and it felt like Phuc was leading very strong every topic sooo Yeah. So yeah, in the end, we came to conclusion. I think that we wouldn't have come to this conclusion in reality, to be honest, because I mean this experiment, it's just an experiment. And in reality, I wouldn't have forced this just in two minutes to get to the result, I would have waited more and documented more. Yeah, but it's also quite interesting to see that you actually can get to a to a result under time pressure, even though it's complicated.	S2 states that S3 was leading the latter points of the negotiation indicating that he was too strong on his points. Build-Up 1: S3 uses this statement later to analyse his own behavior and realizes not only why he behaved that way but also what that reveals about him.
00:10:38 SX	So, I just know, I took down: If we had to, if you had to split it up in four phases, you would go for 4x one's introduction. Then the second phase is feelings/getting hurt where everyone mentions that point of views. Then the third one is the hard facts about talking about numbers and the fourth one, is the deal?	
00:10:59	Nice. Yeah.	

S1 (Michael)		
00:11:00 S3(Phuc)	Yeah. But you know that you don't have to take notes for this.	
00:11:03 SX	I know, I know. It's just for me to kind of understand what you've done and also make a bit sense of this exercise because otherwise, I mean, you know, it doesn't really help me that much.	
00:11:18 S2 (George)	In this section, you should discuss the following question... you can ask clarifying questions... How would you describe your feelings before the negotiation?	
00:11:33 S2 (George)	Excited. [singing voice]	
00:11:35 S3(Phuc)	It was quite chilled, I didn't expect to be in a position where I have to kind of become aggressive or try to, in all my possibilities, to reach something. I was more with the idea that will be: "OK. You need this. I will give you this." Instead, it was super hard to get. i didn't expect it to be so hard to get. [laughter] And I also thought it was not the kind of emotional thinking but more super rational. And instead, the description that they gave us, and at the end we we talk a lot about emotional or like statement like ---- yeah, but they ---- for example, the 5000. [stutters] I have a dream tonight	

	about that, i t's ridiculous that 5000 seed. [laughter] That is a super --- You say, "no, it's all the money we had at that time." Why? And so yeah, it gets difficult because it gets more emotional already.	
00:12:46 S2 (George)	More heated too	
00:13:01 S3(Phuc)	Yeah. But it was funny.	
00:13:05 S1 (Michael)	Yeah, I agree. I mean, I was super excited before the negotiation as well. Yeah.	
00:13:12 S2 (George)	Excited or not?	
00:13:14 S1 (Michael)	Yeah, yeah, I was excited. I mean, I haven't put that words in the pool as well. [general saying from foreign language to english?]	
00:13:21 S2 (George)	Oh, okay. No, for me. Oh, I didn't think so much about it before. I just saw that we have to read all these text. I'm sorry. OK, now I have to really focus and understand my my role. It was feeling, but in general, I was just interested, and I was actually skeptical because it's such a theoretical experiment. And I just, I don't know. Of course, we tried our best to put ourselves into the place of someone who	

	actually has this discussion now. But still, it's I don't know, I was a bit skeptical. But then during the negotiation, I felt like it was super helpful to have this detailed role description and especially this. It was the best actually to have the scorecards so we can really see in this section I can go minus two percent and then this has these points, and that's also what the academy talked about. It's super important to have this to be prepared, to prepare before you go to this discussion and then you are so safe because you exactly know what you can do and where you have to put arguments and where you can step back. And that was the best feeling to have that during the negotiation because yeah	
00:14:32 S2	but then read the role descriptions then - I can send it to you SX then you can see it	
00:14:32 S1 (Michael)	we also have a whatsapp group if you want to see them.	
00:14:43 S3(Phuc)	I believe that without a table, we will never reach a deal. Because for me, I knew where was the deal breaker and I say, Okay, this is what I can accept and I cannot go below. And thats why ---	
00:14:58 S1 (Michael)	yeah, at some point I felt like for you, a deal breaker was if you wouldn't get any parts of the seed money. So I was OK ---	

00:15:09 S3(Phuc)	I had like two or maybe three deal breakers. One was the seed. One was the at least one point of equity more. And maybe there was another one. No, it was just these two.	
00:15:31 S2 (George)	Yeah, I had zero deal breakers	
00:15:37 S3(Phuc)	And did you have deal breakers S1?	
00:15:39 S1 (Michael)	Yeah. Uh, I know. I don't think so. I mean, I don't remember. It's something I had. But I mean, I sort of had to think about ---	
00:15:48 S3(Phuc)	a lot of more than one, why didnt you just want ---	
00:15:52 S1 (Michael)	OK, honestly, I have an answer to it. And also the thing that surprised me a lot during the negotiation because none of you asked me to decrease my equity. Like, none of you suggested, even that I could have a lower equity.	Build up 2: S1 frames the experience in a way that nobody asked her about reducing her equity. Over the course of the reflection both students disagree with that. Moreover, this statement is important as it shows her current understanding of a negotiation as being something where everyone is in it for him or herself. She will change this perspective

		at the end of the reflection
00:16:06 S2 (George)	I said that. I said that I remember my role in the beginning was like, what it was written, said I in general agree to what you wrote. And I can be pretty relaxed, kind of. And also: I said that? No?	
00:16:26 S1 (Michael)	it to be honest, I don't remember. And if you did, I mean, you didn't argue it so then it like didn't impact me.	
00:16:35 S3(Phuc)	I mean, yeah, that's also an emotional part. But actually hiding my table that I had to get more equity of George. So that's why I was trying to get the equity from her. But yeah, we didn't talk a lot about to reduce the Michael equity actually.	
00:16:57 S1 (Michael)	I was surprised about it because I mean, like, I didn't really have that many. I mean, I do have deal breakers from what I can remember, but I had sort of like the point. So if I would get less than a certain amount of points, then it would be a deal breaker for me. But I mean, that level of points was really, really high. So I mean, I could think about reducing my equity as well, but I mean, I felt that some of you actually argued for it that much. I mean, we more we argue more about the seed money and for you for you Phuc, getting more than George. It's also interesting because maybe, you know, in your role, in your role description, it didn't say that	

	you had to get me to decrease my equity or whatever. You know, we didn't like directly refer to it, but for example, because I mean, you, we kind of said that you had to have higher equity than George, right? Yeah. [Phuc agrees] I mean, was there something about my equity or about my role?	
00:18:16 S3(Phuc)	No, its saying that you agree that Michael is doing --- he's putting effort, so it's it's OK that he has more equity, but it was not stated like how much or yeah.	
00:18:34 S2 (George)	I could have done that, but I didn't really think so much about it because I think I was too focused on Phuc because he was so present---- [laughter].	Comment: S2 again mentions that S3 was very or even too strong with his points. Build-Up 1: S3 uses this statement later to analyse his own behavior and realizes not only why he behaved that way but also what that reveals about him.
00:18:43 S3(Phuc)	But if you see the the results of other groups, they did like that and it works. If you decrease Michael equity and you share it both with George and Phuc its the best way to do that.	

00:19:03 S2 (George)	Yeah, what is the best I mean for each individual?	
00:19:06 S3(Phuc)	The best --- Yeah, if you check which [incomprehensible] the bigger --- this one is super high ---- That's the best-	
00:19:16 SX	can one of you maybe explain this point system to me? I don't really understand that in the table. like this points above "walk away" ---- in the table. [agreement on the scoresheet being the paper discussed] Yeah, yeah, sorry.	
00:19:36 S1 (Michael)	I mean, the points above "walk away"?.	
00:19:39 SX	Yeah, like how how do these points calculate like what do they mean?	
00:19:44 S1 (Michael)	, for example, I mean, I had I think it was 240 points. I mean, if I would be be on minus 200 see, then I would have to walk away, right? So I mean, the fact that I have 210 means that I gave up sort of the 30 points. So I mean, I think it was because of the equity stakes and somebody else as well. But I have to sort of change it from my from my proposal, right? So then like whatever changes there was, I was getting like minus points. OK, so it's minus 240, then I would have to "walk away", right? And if I have 210 here, which means, for example, "walk away", that means that I	

	only got minus 30. So I had two 210 points to sort out this [mumbling] OK? Did you understand that? [concurs] So basically this point was all these points were given to you at the beginning, and from there on, you had to negotiate.	
00:20:53 S2 (George)	We had everything we had for sections and then we said, OK, this is your goal, and if you reach it, not at all, then you lose a lot of points. And if you reach a little bit less, then you lose less points and your goal is, of course, to get better in that. And then we could kind of calculate the limit ourselves. But I'm thinking ---	
00:21:10 S1 (Michael)	you know what it's also interesting because I mean, I remember that we were arguing for your salary, Phuc, remember? [concurs] I mean, I think we are grateful like eighty five thousand. But like then in the end, you were lowering your salary down to get equity.	
00:21:25 S3(Phuc)	Yeah, because the salary was not a deal breaker.	
00:21:30 S1 (Michael)	[incomprehensible]	
00:21:35 S3(Phuc)	[laughs] Don't remind this stuff. I cannot know. OK?	
00:21:43	OK, so we're moving like from --- Yeah, we are going from equity like seeds and	

S1 (Michael)	we're like doing this in parts and you know, moving away from salary to seeds. And I think we already agreed on the salary. And then when we are negotiating the seeds, you were like, OK: You want parts of seed, then you can have 70000. It was like, OK, fine.	
00:22:10 S2 (George)	But one question I in the scoresheet is there this total ---- Where's the total of all the points? We only have one for each of the four sections, right?	
00:22:20 S3(Phuc)	There is no there's not a total of them.	
00:22:23 S1 (Michael)	But your team is above the average in total, I think, from the points.	
00:22:29 S2 (George)	Which points?	
00:22:31 SX	The points to walk away - your 273 and the average is 272.5.,	
00:22:41 S2 (George)	Ah yes thats slightly better than average.	
00:22:45 SX	okay, There is a total.	
00:22:50	Yeah. Yeah. But still, this is not correct because we agree on one.	

S3(Phuc)		
00:22:56 S1 (Michael)	You know, there's something wrong with this, but that's because of me because I fucked up the numbers.	
00:23:04 SX	OK. I mean, should we, we have 17 minutes. We talk now, but we also started a bit earlier. I don't know. Do we want to move to the third section? Now, do you still have the feeling that you want to discuss something from the second questions about your feelings. Let's go through your	
00:23:24 S2 (George)	So many feelings. [laughs] And so one person has to be the interviewer, one person is to take notes and one person has to be interviewed.	
00:23:40 SX	The three of us, you should all like, do the role thing and me, I'm just going to listen throughout everything and just going to take notes. Yeah, and I'll check the time.	
00:23:54	so I can note thingy first, if someone wants to-- if you guys want to interview yourselves.	
00:24:10 S1 (Michael)	So there are 7 questions. If it's nine minutes per person, then around one minute per question.	
00:24:20 S2 (George)	OK, so S1 you take notes, right? Okay S3i will ask you a couple questions.	

00:24:27 SX	OK, and I'll I'll have the time, and after a minute, I say a minute, it's over and then you can move to the next one.	
00:24:33 S2 (George)	OK after one minute. Okay, that's pretty good.	
00:24:36 S1 (Michael)	And we have nine minutes in total, so I guess it's quite good if we give us one minute.	
00:24:41 S2 (George)	Great. Nice. So I don't have to take the time. Okay are you ready?	
00:24:48 SX	One, two three.	
00:24:52 S2 (George)	You're muted so I will ask Riccardo: hearing your team members description of the negotiation and their feelings, what surprised you about that?	
00:25:06 S3(Phuc)	Yeah, I was surprised that S1 was able to just --- I think I think every one of us has a deal breaker, and I didn't expect that I was the only one that has this. So now I don't understand why you were not willing to give more just to get everyone want to put something on the table and say, OK, I can reduce my stuff just to have the optimal position for the team to start up and working again, and everyone's happy. My goal was us, everyone.	Comment: S3 shares his frustrations and questions the approach of S1, who was very focused on her own gain. In addition, he raises the idea that working in a startup team requires to include all team members' interests

		Build-up 2: Another important moment in the reflection. The strong frustration of S3 about the uncompromising behavior of S1 will be integrated later on in her perspective change!
00:26:02 S1 (Michael)	One minute it's over.	
00:26:05 S2 (George)	Looking at your own experience in the negotiation and your feelings, what surprised you about yourself?	
00:26:12 S3(Phuc)	yeah. You also stated that I was talking a lot, and usually I don't. This is not how I usually go into a discussion but it was really important that I could get the deal. So I was trying, maybe too much, to convince you of my statements and stuff like that.	Comment: S3 shared his views on his role in the discussion as being one that argued a lot and tried to convince Build-Up 1: S3 integrates the statements about having been too strong made by S2 two times in the framing

		phase (09:22, 18:34) but adding to that his own surprise about his behavior. Build-Up 1: S3 builds upon this statement about unusual behavior and from here develops a changed perspective (29:54)
00:26:49 S1 (Michael)	OK. Two minutes.	
00:26:52 S2 (George)	And what would you do differently in another equity split negotiation?	
00:26:57 S3(Phuc)	Maybe I will try first to make more questions than just statements to see if you have deal breakers or how much you can give away. And then I will try to get what I want. So do more research on how much you can be willing to reduce and then start asking, OK, I need this, this this. Because if you already know what I want, I was in, you know, fragile position because you were just putting me on the on the limit and coming back. OK.	Actionable Guideline: Ask more questions instead of making statements in future negotiations Broad Re-orientation: Do more research and get a better understanding of your own position in future

		negotiations
00:27:41 S2 (George)	What feedback would you give to your team members, what did they do well, what could they improve?	
00:27:51 S3(Phuc)	They do super well because I was --- like for their position, they they made the best deal. I think they had --- If you took the point, you had super high point above the average, so you did great. But if we are talking about a team and that's a real start up, you are not making feeling comfortable one person of the team. And that's very bad for starting a business all together because already the motivation of a person is super low. After that, it was a fake game, but I was feeling super frustrated. So I think it's very important to make --- to be willing to discuss and to make an agreement that feel everyone happy at least.	Comment: S3 again critiques that the other two students had the wrong focus. They did well for their own interests but forgot about the fact that negotiations in startups is about the team and making everyone satisfied. Build-up 2: Another important moment in the build-up of S1's perspective change. S3 is clearly stating that she has a wrong frame of reference when it comes to her understanding of what matters in startup teams. Broad Reorientation One should take a team perspective on

		negotiations in startup teams and not solely focus on one’s own interest.
00:28:46 S1 (Michael)	<u>four minutes, out.</u>	
00:28:52 S2 (George)	What did you take away for your studies at [the university], your professional career and your personal development?	
00:29:05 S3(Phuc)	Yeah, well, I think what I already said on the second: First, ask. And see what the other people are thinking. So listen first, then talk. And but also another important thing that we already discussed is, come to the meeting super prepared. We've already kind of an idea of what you can accept and what you cannot and talk about numbers as soon as possible because the discussion is going to get more clear.	Comment: S3 repeats his earlier proposed actions. However, he is changing his actionable guideline for negotiation situations to a broad-reorientation for actions at the university in general. Actionable Guideline: He now adds a new actionable guideline suggesting to start early on talking about numbers. Broad Re-orientations: Ask questions about what the other's want

		before stating what you want Broad Re-orientation: Come well-prepared to an equity split negotiation Actionable Guideline: Talk about numbers early on in an equity split
00:29:47 S1 (Michael)	OK, five minutes.	
00:29:49 S2 (George)	What did you learn about yourself?	
00:29:54 S3(Phuc)	Um, yeah, that maybe like I just want to reach the deal too fast, and so that's why I try to go like: "let's go like here, here, here, here, here" because for me was super clear what I have to my goals and so I just want to reach it in the fastest way and just make my opinion be the one that have to be accepted instead of trying with time to get to my goals.	Changed Perspective on Self: I discovered about myself that I am impatient and expect other's to accept my opinion quickly Build-up Effect 1: S3 builds this upon his

		own framing of the experience as being frustrating and unusual for him (S3_26:12). S3 abstracts from that concrete experience into general perspectives about him using now present tense.
00:30:34 S2 (George)	*What did you learn about your team members?*	
00:30:40 S3(Phuc)	I've learned that I know they also want to reach their goal and as soon as you show what is your deal breaker, they just say: "OK, perfect, let's do that then" for me, it's OK, so I don't know. Yeah, but I think I also will act like that in that in your position, so yeah.	
00:31:09 S1 (Michael)	OK, we have six minutes and 22 seconds now, so we have some time left. If you want to add anything for any questions.	
00:31:21 S3(Phuc)	No, I feel OK.	

00:31:26 S2 (George) Section C:2	OK, so switch. S1, do you want to ask me, and S3takes notes? [concurs]	
00:31:41 S1 (Michael)	Are you taking time, Laura? [concurs] Perfect. Thank you. OK. Question number 1: your team members description of the negotiation and the feelings., what surprised you about that?	
00:31:58 S2 (George)	It surprised me that you, Michael, said that we didn't talk about reducing your equity at all because like for me, I don't know. I felt like we did that. But at the same time, I realized that I don't know we should have done it much more, and I don't understand why we haven't done this actually [laughter]. Yeah. But I think it was because of Phuc strong "everything". So that's also a learning. Maybe. Um, also what surprised me? Yeah, I don't know. That's it.	
00:32:39 SX	One minute is over.	
00:32:41 S1 (Michael)	OK, question number two, hearing your team's experience in the negotiation and your feelings, what surprised you about yourself?	
00:32:50 S2 (George)	I was more calm I think than normally. But it was --- normally I would be more present and be more strong, but also I was a bit sick, but also in my description,	Build-up 2: S2 comes in and frames the experience as a two

	it said that I am pretty fine with you. And also, I saw that you, Michael, you were already super strong. So I didn't see the need to be super strong myself. So I could just always join you because most of the time I agreed with you and you did it yourself, kind of. And you pushed Phuc down already, which was automatically good for me. So Yeah, I don't know. That was good. Um.	against one situation.
00:33:34 S1 (Michael)	OK. Number three, what would you do differently in another equity split negotiation?	
00:33:44 S2 (George)	I would just not be if someone is very present in the in the negotiation and talks about topics that I have to say something to as well, I would just try to say what I have to say and not wait, because I had also a few more arguments, which I didn't say at all. So, yeah, just push more for that. I can say something, but in a nice way obviously. Also, what else? Just have more time and maybe also be prepared a bit better. In general, I mean, I only read these two pages in 10 minutes, and that's it.	Actionable Guideline: When in a negotiation, do not wait and say all your arguments Broad Reorientation: Be better prepared
00:34:33 S1 (Michael)	I also don't understand why they're not distributed.	
00:34:36 S2 (George)	They gave it before. I think that's part of the research. Research, maybe they want to test also the stress factor.	

00:34:43 SX	But yeah, now three minutes are over.	
00:34:47 S1 (Michael)	OK, what feedback would you give to your team members? What's the data? Where could they improve?	
00:34:59 S2 (George)	So, Michael (S1) did well in staying super strong. Super strong. Maybe you could have been more a bit bit more soft, a bit more nicer to Phuc. And for just the argument that S3 had also just said, it could have been lot more as a team, but I think in this stressful situation, you just immediately feel like you have to fight, and since this situation was not real, I just focused more on the fighting aspect and not really thinking, OK, these are my friends that was just not in my head.	Comment: S2 brings again up the notion of the 2 against 1 situation they created in that group. Build-up 2: This is the moment when S2 moves from her two against one framing to a critique of the behavior of S1 and her lack of focus on the team but just on herself
00:35:40 SX	Four minutes are over.	
00:35:45 S1 (Michael)	What did you take away for your studies at CBS, your professional career and your personal development?	
00:35:52 S2 (George)	Oh, go prepared if you go to this kind of negotiation: prepare yourself very, very well. And also don't shoot your arguments too fast because one thing that I did was: take two arguments and I set them up: "guys. But I have two	Broad Reorientation: Be better prepared in another negotiation

	arguments Bam. Bam." It's fucking stupid. Keep it big: say the weakest before and then wait, and then put your second argument at the end to just not waste everything at once and make the better coherent argument more maybe. And the whole negotiation can be used for everything. I don't know. That's it.	Actionable Guideline: Stage your arguments in a way that you begin with the weakest, wait and then present the next strongest one
00:36:34 S1 (Michael)	What did you learn about yourself?	
00:36:42 S2 (George)	That, yah, that I get a bit, maybe I got a bit too lazy because I don't think at the end, if you look at the scorecard, I was not so good at the end, and I got a bit too lazy because I felt that you, Michael, were strong already; but I shouldn't have been that lazy, I should have done more, and it should have been fighting more against Phuc- Maybe. Hmm. And also, maybe I was also too, as always, too impatient or because in the beginning they kind of wanted to go through all the steps, because for him, it was a coherent argument. But for me it was not. So I try to break this argument, but I just don't care and let him do. It's also fine, in the end, it's always a mix. I don't know.	Broad Reorientation Make your points in a negotiation and don’t be too hesitant or holding back
00:37:37 S1 (Michael)	And what did you learn about your team members?	
00:37:40	Is the question about team members, just about you as my classmates or about	

S2 (George)	Michael and Phuc?	
00:37:46 S1 (Michael)	Oh, i don't know. I mean, how do you see that question?	
00:37:52 S2 (George)	Team members is probably about Michael, and Phuc I think. So about Phuc, I learned. What did I learn about Phuc?	
00:38:01 S1 (Michael)	Are you sure?	
00:38:02 S3(Phuc)	It's the same thing you can talk about Phuc, i mean, its the same	
00:38:07 S2 (George)	Yeah, I learned that S3 was more the person that if he has a clear goal he runs, doesn't wait, maybe he doesn't think enough just runs runs to reach it fast, because if he knows something he wants to put it: like has a goal, just wants to put it out. S1 is strong, maybe not wanting so much to compromise. almost not at all [laughter]. Yeah, and also S3gets disappointed if it's not about team spirit, but more about egotistic reaching goals, however, S3 also said that he would have acted the same if he would have been Phuc. But still, you were kind of disappointed that we didn't compromise more, especially when you saw the others,t he negotiation scarred.	Comment: S2 frames S1 as being uncompromisable but also re-stating the point about startup teams Build-up 2: S2 critiques S1 for being too uncompromising in the negotiation and reemphasizes the frustration of S3.

00:39:05 SX	Cool! Seven and a half minutes, so we can switch now if we want.	
00:39:10 S1 (Michael)	Yeah, yeah. It's my turn, though. So Ricardo, you ask questions? [concurs] OK, I go.	
00:39:20 S3(Phuc)	So hearing your team members description of the negotiation and their feelings, what surprised you about that?	
00:39:29 S1 (Michael)	I guess the five that S2 said that we did talk about decreasing my equity, well, I mean, I think it was just like too small to even pay attention to it. Which then also like maybe highlights the way I'm thinking, that's is something --- it's like at the lower level than ---- at some point it will just die but if something is here. So like Phuc's points, then this is something that you have to deal with. But what else is surprising me? Also, the feeling that the thing that S3, you said that because of that, you were feeling like basically you were not happy with the deal, even though we agreed on the deal, but you weren't happy and that you were getting frustrated. I mean, yeah, of course, I could sense that a little bit, but I thought that we sort of sorts of things. But I mean, now I can --- now I think up there again, I can see that you could get really frustrated, actually. And I think in your position, I would also get super frustrated	Comment: S1 sees the frustration of S3 now and agrees that she did not behave well during the equity split negotiation. She is struggling a bit with her own emotions on this here trying to accommodate S3. Build-Up 2: S1 struggles with the emotions of the other two (especially S3). She feels with him and shows empathy. She will integrate this later on in her reasoning on how her perspective on team negotiations changes.

	with your view and even	
00:40:50 SX	Next question	
00:40:50 S3(Phuc)	OK, so look it at your own experience in the negotiation and your feelings. What surprised you about yourself?	
00:41:00 S1 (Michael)	Yeah, that again, I wasn't able to compromise as much: because I mean, yeah, there is sort of like my negotiation style is a bit more aggressive than it is to compromise, and I know that. But the thing is that I felt like I wasn't trying to be as aggressive in this negotiation, and I still came up as quite aggressive in the struggle, in the negotiation. And then also, I know for the surprise a little bit is the fact that: if we don't have to give out my equity, that if we don't have to give out my equity, if you don’t ask for it, then I'm not going to do it. It's a fear. And like if you aren't directly arguing against my equity and my share, then I mean, why should I give out if I'm not being asked for it? So I'm sort of just compromising when it is here and that's here, you know, like, I wouldn't suggest this for myself.	Build-Up 2: S1 explaining her position and arguing for why she did not give in on equity on her own. However, she is also bickering with herself about her aggressiveness and that she did not succeed in avoiding such a behavior.
SX	And what would you do differently in another equity split negotiation,	
00:42:01 S3(Phuc)	Yeah, I would consider more the overall feeling of the other members because of course, like I think like George was quite happy but you weren't, and maybe I	Build-Up 2: S2 here openly admits some mistakes and suggests focusing more on the

	should consider that's more, and even though you weren't asking for equity, I could suggest that I could, which I think maybe I did, but maybe it wasn't like as highlighted by me, but I feel I would give out to you parts of my equity at least one percent or 2. And, sort of I would make it that suggested by me so that you feel that you are recognized and you are valued team member. Because I mean, to me, it's probably one or two percent weren't as big as the one to you. So I feel if that would come up for me and would sort of maybe make you less irritated and less frustrated and more happy with the team and an overall negotiation. So, yeah, so I would just take care of the candidates.	team. However, from the way how S2 is saying that one can see how much she struggles with this position – in a way still expecting from the others to ask for more if they want.
00:43:13 S2 (George)	Can I ask something? I think we have enough time for question. You said that you would have rather preferred to come from your side as: "hey Phuc, do you want a bit more equity?" and you didn't do that right? But how exactly did it happen? Phuc just said I need more immediately, right? So he didn't give you kind of time to to do it for himself.	Comment: S2 is questioning what S1 was saying and pointing to an inconsistency in her reasoning because prior she was saying that people should ask her (which according to the others seemed to have happened) and now she said that she would do it anyway Build-Up 2: This is an important moment in the build-up because S2

		is making S1 aware of her ambiguous slightly inconsistent role in the split.
00:43:33 S1 (Michael)	And, you know, I mean, from my point of view, he didn't ask me to give away my equity. I mean, from that point of view, I was like, "then there's no need for me to reduce my equity." It's like he was only asking you and I was like, "Well, OK." But I mean, I can see that it would be nicer for me to give away like at least one or two percent of my equity because I mean, I have like a lot of points and I could compromise a lot, but by then, I mean, it was just like: felt so much focus on deal and so focused on the how team members are feeling because I feel S3wouldn't feel as a valued team member if, yeah, if maybe I'm not willing to compromise more. And I feel that if it would come up from me, then first of all, I would give way less, and second of all, he would be more happy with it, that he is actually appreciated, instead of just asking for it. Yeah.	Comment: S1 is again questioning her own position thinking that giving up equity by herself would make other team members even happier. Build-Up 2: One can observe the struggle and the development of her meaning change here from focusing on her own benefit only towards an understanding of team negotiations as being about making the team members happy as well. Broad Reorientation: Instead of focusing solely on her own interests focus on all team members interests.

		Broad Reorientation: Even though not directly asked, give up some of your benefits to accommodate your team members.
00:44:42 S3(Phuc)	So the next question is what feedback would you give to your team members? What did they do well and where could they improve?	
00:44:52 S1 (Michael)	Yeah. So, I mean, for both of you, I would question my equity. So I would question instead of just fighting against each other, like I think you could include me and fight against my equity because I had more to give away. So that's one thing. And the other thing, I mean, in the end, George, you ended up having less equity than Phuc. And I think that could have been a little bit more.	
00:45:24 S2 (George)	Dont we have the same? From my understanding and for you S32.	
00:45:30 S3(Phuc)	Twenty seven, twenty seven and part of the ---	
00:45:33 S1 (Michael)	Ahhh twenty seven?	
00:45:35	And the part the part of the the equity that the S2--- George is giving me is part	

S3(Phuc)	of the seed capital. So it's like zero point nine of capital equity and zero point one seed. So, so George is going to have zero point forty of seed. You are going to have 50 and I've got over 10 percent of seed. Did you get it?	
00:46:10 S1 (Michael)	Yeah, yep. OK. Next question. Well, OK, that's fine, because I actually know what the numbers are, so what are the numbers? He's forty five and 27 27?	
00:46:27 S3(Phuc)	I don't have the table, uh.	
00:46:31 S1 (Michael)	OK. I mean, we can ---	
00:46:34 S3(Phuc)	forty five, twenty seven, twenty seven [unclear word] in one and then seed 10 percent.	
00:46:41 S1 (Michael)	10% is part of 27, 27, already?	
00:46:46 S2 (George)	27, 27 is the same, he just explained how it comes together.	
00:46:50 S1 (Michael)	OK, OK, OK. OK. But then again, I mean, I think George should have because [incomprehensible]	
00:47:01	for example, if you ---	

S3(Phuc)		
00:47:03 S1 (Michael)	let's finish the question first, though.	
00:47:05 S3(Phuc)	No, but we have a time just one thing: if you S1 want to let Georg to have more equity than you, just you could also just say, OK, George give the equity to back to Phuc, but I give, because I want George to get more recognized in the group. I give my part a little bit on George.	
00:47:31 S1 (Michael)	Yeah, yeah, it would have been nice. That could have been nice, but it never happened. So let's move on. Let's move on.	
00:47:39 S3(Phuc)	So where did we finish what we expected?	
00:47:42 SX	Yeah	
00:47:43 S2 (George)	But you have to give feedback to Phuc still S1.	
00:47:46 S1 (Michael)	As for Phuc, I don't know maybe argue more.	
00:47:54 S3(Phuc)	Actually also you didn't say anything about Phuc in this question in my notes.	

	You didn't do it.	
00:48:01 S1 (Michael)	Maybe subtle things in a different way, because maybe what you were saying was quite repetitive. And again, I mean, you were only attacking George and not Michael. So I would think of a different way of how you can get things.	
00:48:15 S3(Phuc)	OK, next question. The take away from your study at (university), your professional career and your personal development.	
00:48:23 S1 (Michael)	Yeah, that's for sure. I mean, I have to feel like paying more attention to how I negotiate things and just compromise a little bit more. My professional career and negotiation skills for parts of professional and personal. I guess also take a more long term approach and more holistic approach to the team negotiation. So I mean, even though we negotiate this deal, it might be good for me now, but it doesn't mean that you would be happy with that long run. So I think that sort of thing that you should also consider for the future, like focus on long term goals instead of the short ones and focus on having like a nice atmosphere in the team.	Build up 2: S1 formulates broad re-orientations which lead her to develop a new understanding of the meaning of benefit in team negotiations Broad Reorientation: Be more compromising in professional settings Broad Reorientation: Take a more long-term and holistic approach in team negotiations Broad Reorientation:

		Focus on the other team members interests and not just on your own
00:49:20 S3(Phuc)	Yeah. And what did you learn about yourself?	
00:49:26 S1 (Michael)	Uh, yeah, I'm not willing that much to compromise, or give away if I'm not asked for it. Like why should they give away something that is mine if it isn't argued for it sort of? So I think I'm just very protective of my own wealth, so that's something that I learned about myself, but then again, that wealth is not going to multiply if I wont have a team that is happy with how things are evolving. So, yeah, so that's for sure. I mean, like, I have to pay attention to those things.	Build-up 2: S1 combines earlier insights and what she knows and re-frames her understanding of the role of her own interest in team negotiations. She realizes that in order to get the most (wealth) out of team negotiations it is not just about the immediate compensation or benefit but also about the long-term benefit achieved by making the team members happy. She builds this argument upon her broad re-orientations on being more compromising and taking a more long-term approach (48:23) She also builds upon her

		own earlier statements that show the struggle between balancing her self-interest and the one of others (43:33) Changed Perspective She shifts her view on team negotiations from one that is solely on her own interests to one that focuses on other's interests as well
00:50:11 S3(Phuc)		
00:50:16 S1 (Michael)	What did I learn about my team members? Yeah. I mean, you also want to have a good deal, and you need argue for it, and I mean, you also have the points like that make your argumentation valid. So do you like deserve also that part of the equity? you know, even though maybe it means reducing mine, but you still deserve it because I mean, you're in the end like, co-creating business with me. So yeah from that point of view, like, I think I've learned that you're more valuable than maybe what was shown by me during the negotiation, especially you Phuc!	
00:51:15	OK. Finish.	

S3(Phuc)		
00:51:18 S1 (Michael)	I Perfect. That was 12 minutes. But I think you have some minutes left, like one or two or so, maybe.	
00:51:27 S2 (George)	let's look again at the scoresheet.	
00:51:29 S3(Phuc)	But also, SX, what do you think about all this stuff?	
00:51:35 SX	I think it's quite interesting. I mean, I've also done some negotiation practices before. I think what was most surprising for me that I didn't look at the material yet, so I don't know. But that apparently from what you talked, you had quite strict goals and points like, OK, this is like my deal breaker. This is like my maximum I want to reach, which I think is really surprising because it didn't give you any room at all to kind of explore your own boundaries. You know what I mean? I guess it's for some some research, so they have to have quite strict regulations. But from the experiences I had, you never reaIly --- mean, of course, you also had goals that you wanted to reach, but not a concrete goal. And I think it's definitely yeah. I mean, as you said, it's a role play, so you are not actually the characters. And I think the most important takeaway is really, if you're in real life and you have negotiations, what S1 just said, like	

	take this also holistic and long term approach and really try to see it --- Yeah. Also for the positive benefits in the future and not right now because as you said, for example, for Phuc or for you Riccardo, you didn't really feel that much value in the end. Which I mean, in this case, I think you still had some other site projects running, so maybe it would have just left you in that point: "OK, okay they don't really value me anyway. So why should I stay here?" Well, yeah, yeah.	
00:53:15 S1 (Michael)	So yeah I think from Phuc's point of view, I would just walk away. But also from Michael's point of view, I think maybe he doesn't give him that much. Well.	
00:53:26 S2 (George)	Yeah, that was another thing I thought about was always saying, "Oh, I'm so valuable and I'm so valuable". He's not. We can also ask another person to do it, actually.	
00:53:35 S3(Phuc)	So in the case, it was written that he had so much experience in the field and he was creating the same. So it was not so easy to replace a guy like that, I think. And a lot of startups, I ---	
00:53:48 S1 (Michael)	I think usually also the recruitment process was quite hard for them. I think they only had like two persons that they kind of considered and then chose Phuc, so.	
00:53:57	But Phuc didn't know that.	

S2 (George)		
00:53:59 S1 (Michael)	Yeah, yeah. No he didn't know	
00:54:03 SX	it was nice having you here, but thanks for your insights. (end of transcript)	

Appendix 11

Sample Transcript Hostility Effect (UG1)

<u>Context</u>: All three students participated in the equity split. The transcript consists of three rows. The first row entails the timestamp, the second row displays the speaker (S1, S2, S3) and the original comments made by the students. The third row entails comments and codes by the researcher to illustrate their interpretation.

<u>Hostility Effect:</u> The two male students (S1 and S3) create a very hostile environment in which they make fun of the female student (S2), talk down to her, focus almost exclusively on competition as a framing concept, use offensive and aggressive language and similar body language. The effects on learning outcomes are prevalent as all students developed only proposed actions (one each by the two males and a few more by the female student). There was no room for showing vulnerability or being open to changes in how they saw themselves or the world around them changing. The two moments when S2 is trying this, the two men jump on her avoiding any form of vulnerability and empathy. Striking is as well the almost entire absence of emotions and feelings – even when they talk about those things.

TIME	STUDENT DISCUSSION	Comment/Codes
00:00:02	S1 (Michael): Awesome.	
00:00:04	S2 (Georg): So you got it	
00:00:04	S1 (Michael): I think so.	
00:00:06	S3 (Phuc): Great. So should we just start off by section A.	
00:00:21	S1 (Michael): OK, are we ready, guys? Which decisions that you find difficult and why?	

00:00:30	S2 (Georg): Do you want to start?	
00:00:30	S1: I can start. Yeah Sure. I think for the most part we took our starting point in the like the post that I made, which I like. I thought it was a bit difficult because I had to reflect my opinions, meaning that I had to maybe, like, benefit you (pointing to Georg) a bit more than in the benefit of you (pointing to Phuc). So I thought that it was like like my starting point was not very fair, to be honest. And I have to argue for that, which I found being quite difficult. I believe that was what I had to say.	
00:01:10	S2 (Georg): I thought it was the most hard was actually to take equity from you (no clear identification possible). And then we were pretty like close and you had better arguments because you were like yeah in the this and this you had a lot of points you could list downwards so you always took like a little bit there and a little bit there. I found that really hard then how to balance that	
00:01:36	S1 (Michael): Mhm (signs or approval)	
00:01:36	S3 (Phuc): I have a similar argument to to that. And that would definitely be when you are arguing against a majority. If so, you sort of have to reverse the other majority's view. And so that makes it a lot harder to convince other people if they're not already following the idea you actually came with. So yeah.	
00:02:01	S1 (Michael): Mhm (signs of approval).	

00:02:01	To room. S1 (Michael): Also, the fact that you have like a future role your role wasn't utilized yet, and it made it very hard to like you had an ace somehow because we both knew that we would need to in the future. Yeah, OK.	
00:02:16	S1 (Michael): The next one is what were critical moments or incidents for you during the negotiation? And the most critical part, I would say, was the actual equity split. I mean, we pretty came to a pretty fast conclusion at the salary negotiation and also we found out the fourth person, what was his name	
00:02:39	S2 (Georg): Warren.	
00:02:40	S1 (Michael): Warren Yes. I mean, we ended up deciding his equity split quite fast as well. So it all came down to the actual equity split	
00:02:50	S3 (Phuc): For me like to get that many points. It was that I sort of tried to leverage the unchanged compensation, which you both of you were against, that I should get any additional compensation and then because of that, I tried to to leverage that information to a higher equity founder equity in relation to the first issue. So I think that there was the number one thing that made me succeed in that negotiation. So, yeah,	
00:03:24	S2 (Goerg): For me the most critical was you still had a salary and you still were getting more equity than me.S1 (Michael): I understand that one.	
00:03:3	S2 (Georg): And then we did the first split, you know, the equity the one percent to two percent	

3	if it were up to me we would have done that in the last. So that I could have like even it out a bit more.	
00:03:47	S1 (Michael: Yeah, it makes sense. It makes sense. Yeah.	
00:03:52	S3 (Phuc): Well, that was actually a point that I've written down that the negotiation is a lot easier if you get at least one to subscribe to the idea you have.	
00:04:01	And I was sort of targeting you (pointing to S1 (Michael)) because you are more likely to follow the arguments that I had and then I sort of used that against you (pointing towards S2 (Georg)). So I ended up so it ended up being a majority against the minority. And then that way I got the decision made.	**Hostility Effect:** Use of aggressive language and body language; emphasizing the two against one situation they created.
00:04:20	S1 (Michael): I mean, I followed your arguments because, as you say, the majority against the minority. If you could agree on that, you would get an additional percentage point. Yeah, and I didn't have to give up some of my exclusivities to you (looking at S2 (Georg)) so that way. I thought. I also noted that down actually that we somehow made some kind of cooperation because, I mean, then it was just for our own benefit. Yeah. Yeah, definitely.	**Hostility Effect:** Re-emphasizing the two against one situation Talking down to S2 and using provocative language like "exclusivity"
00:04:49	S1 (Michael): What made these moments or incidents critical? Again, I believe that relates	

	to like personal benefit, more or less.	
00:04:59	S3 (Phuc): Yeah. And it had a huge impact on the total on the outcome of the negotiation benefiting me more than than George.	
00:05:11	S1 (Michael): Yeah, exactly. That's right. That is right. What faces can you identify in your negotiation please try to find names for the faces you identified?	
00:05:25	S3 (Phuc): We followed the issue after issue and then didn't we try to convey some or like, well, what we were aiming for and then we followed by that. We had some arguments to support that. And then we sort of let the other peoples convey their their opinion towards the suggestion or the proposal with the next step.	
00:05:53	S1 (Michael): My strategy was always to take the lead in asking the question and then just asking for opinions.	**Hostility Effect:** S1 showing arrogant body language, he feels superior
00:05:59	S3 (Phuc): Yeah, yeah.	
00:06:00	S1 (Michael): Because then I could like to take a starting point in what you expected, because I sold my role as sort of I had to give up some of my equity. That is just not up to discussion.	
00:06:13	So I just tried to minimize that. Um, I believe that's section one then, or do you have any additional comments to decide to name the phases, I find that a bit little bit ….	**Hostility Effect:** Arrogant body language; contemptuous comment about the

		exercise
00:06:30	S3 (Phuc): This is very similar to building an argument, wasn't it? You have the idea, the support of his arguments, although that you get to to hear the other people's opinion about what you're proposing. And then on the basis of that, we have a decision for negotiation, whatever you might call it.	
00:06:50	S2 (Georg): It was really like split up for issues we didn't like mix really mix them up. S3 (Phuc): No, but I meant for each issue that was kind of the process that we went through. If this particular relatable to one person than one person would say.	
00:07:08	S1 (Michael): Ok ähm ... discuss. How would you describe your feelings before the negotiation? We just start off. I	
00:07:26	S3 (Phuc): I don't really	
00:07:28	S1 (Michael): You came prepared right?	
00:07:28	S3 (Phuc): I don't know if I had any feelings. It was quite a lot of information to grasp at one time, depending on what person you were assigned. But I think that Phuc was a favorable person to to to have in this negotiation, because obviously there were some quite decent arguments to convey.	**Hostility Effect:** S3 reports on having no feelings but he liked his own character. Absence of Emotions.
00:07:5	S1 (Michael): You also kind of the underdog in	

6	terms of equity split.	
00:08:00	S3 (Phuc): Yeah, yeah. Yeah. I mean, yeah,	
00:08:02	S1 (Michael): And you had definitely a useful role. So. Yeah, yeah. What about you?	
00:08:07	S2 (Georg): I had no idea what I came into. I didn't know yeah. I didn't know you guys and your scripts at all so ah and my script was a bit this a bit and this a bit so I don't know.	**Hostility Effect:** The voice of S2 sounds very insecure; it seems she holds back.
00:08:27	S1 (Michael): Um, how would you describe your feelings during the negotiation? S3 (Phuc): I think if I were to put myself in the role of Phuc I would probably have said that before the negotiation, that there would be a lot that I should achieve with this negotiation in terms of getting a higher equity or a high stake in the venture.	**Hostility Effect:** S1 is avoiding any personal feelings and instead talks about the role he had. Absence of Emotions.
00:08:49	And then during the negotiation, I probably felt that it was going quite well, because already by going through the two first issues, I was able to to gain like two percent more and succeeded with the third one. So as we yeah, as we went through it, it went quite well. And I was confident with the outcome.	**Hostility Effect:** S1 is not talking about feelings but how the negotiation went. Absence of Emotions.
00:09:15	S1 (Michael): I see I get that. What about you S2?	
00:09:19	S2 (Georg): I might have been, äh I regret it a bit how	**Hostility Effect:** S2 has an insecure voice again;

		making herself vulnerable be admitting mistakes
00:09:24	I started off because I was trying to be a bit more careful and (mumbling) I now know I would have done it differently. So	
00:09:35	S1 (Michael): That's a good learning.	**Hostility Effect:** S1 talking down on her with a laughing voice already
00:09:36	S2 (Georg) Yeah. I really gets learning. But other than that I might have become a bit frustrated in the end, but it was my character was a bit different as well so it's fine.	**Hostility Effect:** S2 shares emotions: frustration
00:09:48	S1 (Michael): I was actually wondering, did you feel at some point that we had some kind of cooperation going on? I mean, I agreed a lot with his arguments (looking to Nicolai (Phuc)) at some point, and it just kept nothing like	**Hostility Effect:** S1 asking about how she felt when the other two partnered up against here; gloating voice
00:10:00	S3 (Phuc): I was riding on that wave, being more aggressive in the negotiation.	**Hostility Effect:** Use of aggressive language
00:10:03	S2 (Georg): And then I had already started off on the wrong foot. So that is	
00:10:06	S1 (Michael): Yeah, exactly.	

00:10:07	S2 (Georg): next time!	**Hostility Effect:** S2 is talking down to S3;
00:10:13	S1 (Michael): My feelings during the negotiation, I mean, I saw my role as being like I had to give up some kind of equity. And I thought it was a benefit for me that I only had to really give up, give up my own equity to one person. And then I believe that quickly in the process. I mean, I realized that you (looking towards S3 (Phuc)) had a lot of well argument. I mean, well prepared arguments, maybe not well prepared, but you had a lot of good arguments. And I just found it easy just to agree with those arguments in order to create this majority against minority thing.	**Hostility Effect:** S1 again avoids to talk about feelings and goes into his role; S1 is proud on having created a coalition with S3
00:10:57	And I believe that was also reflected in the sections because I mean that how many sections did you lose points. And one was something like that	**Comment:** S1 frames the experience around individual winning vs. losing
00:11:11	S3 (Phuc): No actually two.	
00:11:12	S1 (Michael): Two, Yeah.	
00:11:12	S3 (Phuc): And that was from the unchanged compensation. That was the most critical one. Oh, that was actually the only one.	
00:11:20	S1 (Michael): Yeah. I wasn't sure how many did you lose?	
00:11:2	S2 (Georg): Two or three. But it wasn't like big sums. It was all around just lower sums. So it	

7	wasn't one really bad result.	
00:11:36	S1 (Michael): Only I lost a lot in the equity negotiation. I lost like 120 points.	
00:11:41	S3 (Phuc): But you were allowed to end up with a negative outcome right?	
00:11:43	S1 (Michael): Yeah, negative minus 221, 220. And I end up with minus 140. Yeah. So it was all right. I mean, I try to be nice in the beginning so I could gain some advantage at later points. Um.	
00:12:00	S1 (Michael): How would you describe your feelings after the negotiation? I think we covered that	
00:12:05	S3 (Phuc): Pretty much as the same as as when we went through or proceeded with the negotiation.	**Hostility Effect:** S3 is avoiding to talk about emotions again; he did not say how he felt going into it Absence of emotions
00:12:11	S1 (Michael): Yes, I agree. Do you have any additional comments?	
00:12:18	S2 (Georg): No, in my script it said that I thought that. Phuc was like deserved to have equity at all, because he was actually quitting his job. OK, (laughing) my script said it would be like halfway is OK.	**Hostility Effect:** S2 is adapting to the environment and starts to speak also about her role instead of feelings

00:12:35	S1 (Michael): Yeah. So if your feelings have changed. Why was that?	
00:12:43	S3 (Phuc): Well, initially there were some high expectations about the negotiation. And then afterwards or during the negotiation, the expectation changed or the feeling changed because the expectations became reality.	**Hostility Effect:** Hostile Environment S3 again avoids to talk about emotions, he instead talks about expectations (competitive language)
00:13:00	S1 (Michael): Yeah, I mean, my feelings didn't change.	**Hostility Effect:** S1 avoids to talk about feelings again Absence of emotions
00:13:05	I was overall fairly happy with the outcome. What about your feelings (looking to S2 O (Georg)?	**Comment:** First feeling from S1: Happyness
00:13:12	S2 (Georg): Mine have changed a bit I was maybe too naive in the start.	**Comment:** S2 is regretful and opens up a little but
00:13:17	S1 (Michael): (Laughing)I feel like we have been a little ruined to be honest. I feel a little bad for you. You're going to have some of my equity now it is fine. OK,	**Hostility Effect:** S1 is talking her down again; making fun of her; saying this in a laughing voice
00:13:3	S2 (Georg): But still, it was a constructive like	**Hostility Effect:**

1	ah discussion.	S2 with an insecure voice trying to get the reflection back into a constructive mode
00:13:35	S1 (Michael): I think so too.	
00:13:36	S2 (Georg) Yeah.	
00:13:36	S1 (Michael): Yeah, I think so too. I mean, we all presented quite funded arguments. I've mean and I like how we ended up just giving more equity to Warren. (Laughing)	**Hostility Effect:** S1 again makes a joke on S2's performance; as they could also have given more equity to her
00:13:52	S2 (Georg): (Laughing) I mean, he wasn't there.	
00:13:56	S1: He wasn't there that that makes it it way easier	
00:14:00	Nikolai R. (Phuc): It's there only there was only a social connection between George and Warren. And that was the only idea	
00:14:06	S1 (Michael):I know in my script stated that I have to support it as well. But I didn't lose points from not giving him so much.	**Hostility Effect:** Competitive Mindset, S1 was only interested in the competition
00:14:1	S3 (Phuc): My script, it just said that I was	**Hostility Effect:**

4	indifferent like, that I wasn't really into the negotiation about Warren because I didn't care, although I was losing a few points if he were to gain more equity.	Competitive Mindset S3 was only into the points
00:14:30	S1 (Michael): I actually lost both. If he like, he's equity decreased, and if it increased. So I had to keep it somewhere, somehow stable. I think I should maybe wait for his scope. Yeah.	
00:14:51	S3. (Phuc): Should we pause the ...? (Background noise, they pressed pause)	
00:15:19	S1 (Michael): Should I do interview and then we just rotate.	
00:15:25	S3 (Phuc): Yeah we can do that.	
00:15:25	I think it's going to be a bit hard to do nine minutes with	**Hostility Effect:** S3 already making sure that the others do not talk too much
00:15:28	S1 (Michael): You don't have to	
00:15:29	Fourth Person: Is it these questions?	
00:15:31	S3 (Phuc): I think it's actually on the front isn't	
00:15:32	S1 (Michael): Yeah it is on the front and then just take notes on the back	
00:15:37	S3 (Phuc): Yeah it's because there's an ... I figure that	

00:15:41	S1 (Michael): Awesome thing.	
00:15:45	Fourth Person: But have you seen this? Like, what were you doing before?	
00:15:48	S3 (Phuc): Yeah, that's the same as this. Yeah.	
00:15:53	S1 (Michael): So that's just like a summary of the question.	
00:15:57	S3 (Phuc): This just makes room for notes.	
00:15:59	S1 (Michael): OK, so I still have to ask these questions here right?	
00:16:01	S3 (Phuc): Yeah. SECTION C:	
00:16:03	S1 (Michael): OK, um, Phuc hearing your team members description of the negotiations and their feelings, what surprised you about that?	
00:16:16	S3 (Phuc): Well, I was a bit surprised how we were able to form our cooperation in order to get a better outcome, at least for both of us (looking at S1 (Michael), on behalf of the third person (laughing). And we kind of didn't give her or what was the name George. The same opportunity for expressing his idea or opinion about what was going on in this negotiation. And ah I think that might be the most surprising thing, that once you you're off on the wrong foot is actually hard to to get some traction in negotiation because you put yourself	**Hostility Effect:** S3 is again very proud that he excluded S2. He also says that S2 was weak!

	in the position of of of being weak. And then when there's, like equity or money on the table, then people will, like, do what it takes to truly get the best possible outcome for themselves.	
00:17:20	I believe, at least in this situation, as it turned out.	
00:17:26	S1 (Michael): So looking at your own experience and negotiation and your feelings, what surprised you about yourself?	
00:17:34	S3 (Phuc): I'm surprised how I could leverage the cooperation to be more aggressive in the negotiation. So if I initially thought that I would aim for, let's say, one or two percent, I actually I am from one in the beginning. But then as soon as I noticed how we could, like, figure this out, then I actually increased my my expectations and then sort of aim for a higher percentage than I initially did. Ahm so to come back to the question? What I was most surprised about was the aggressiveness of getting a higher percentage because the negotiation turned out well or in favor of George. Once I got into all the documents	**Hostility Effect:** S3 talks again about how he made the collaboration with S1; aiming only on personal gain
00:18:24	S1 (Michael): So what would you do differently in another equity split negotiation?	
00:18:29	S3 (Phuc): Mhm (pause) Well, that's a bit hard to say in terms of Phuc, because I think like life is should be more fair, at least then you should mhm consider other people's opinion, more in detail than we perhaps did. Just maybe if there would have been a person in this negotiation that would facilitate talking time for each. So it's more of a process rather than	**Broad Reorientation:** Have a facilitator type in a negotiation S3 showing signs of regret here a bit.

	two persons leading the negotiations. OK,	
00:19:22	S1 (Michael): So what feedback would you give your team members? What did they do well and where what then? Where could they improve?	
00:19:34	S3 (Phuc): Well, at least for me, I believe that George (S2) should have been more persistent in the argumentation and in terms of fighting back the cooperation. I think she, he would have had to be more aggressive in this negotiation. We are mixing around the order (Laughing). Mhm	**Hostility Effect:** S3 recommends to S2 that she should have been more aggressive;
00:20:10	I was quite surprised how Michael was able to or was willing to give away equity without really fighting it.	
00:20:24	S1 (Michael): OK,	
00:20:24	S3 (Phuc): But I don't have much to add about this. I honestly don't know.	
00:20:28	S1 (Michael): So what did you take away for your studies at (UNIVERSITY), your professional career and your personal development?	
00:20:37	S3 (Phuc): It's a tough one. Mhm (Pause). Mhm (Pause) Well, (Pause), I really don't know if I'm ever going to be in a similar situation. I don't want to be the person standing in the back, getting other letting other people getting in the way they wanted without considering in this in this how we call it?	**Hostility Effect:** S3 is again pitting S2.
00:21:1	S1 (Michael): Negotiation?	

4		
00:21:14	S3 (Phuc): Yeah. Negotiation exactly and personal development I don't know	
00:21:22	S1 (Michael): (Laughing) Fair enough then.	
00:21:22	S3 (Phuc):I don't think I've experienced any personal development.	
00:21:26	S1 (Michael): So did you learn anything about yourself or what did you learn about yourself?	
00:21:30	S3 (Phuc): Mhm (Pause) How I on purpose was willing to exclude others from the negotiation if that would was favoring me.	
00:21:56	Fourth person: Three minutes left	
00:21:56	S3 (Phuc): Yes.	
00:21:58	S1 (Michael): So what did you learn about your team members?	
00:22:00	S3 (Phuc): Do you think these questions are referring to to the people or the way people were presenting a negotiation?	
00:22:09	S1 (Michael): The people	
00:22:11	S3 (Phuc): In ah and that we were imitiating?	
00:22:13	S1 (Michael): No, I actually think it's like us to be honest	
00:22:1	S3 (Phuc): Mhm (Pause) I am out of words	

7		
00:22:40	S1 (Michael): Fair enough So that the next one is the next one. How do you rotate? Which will take which roles?	
00:22:50	S2 (Georg): You take notes. You ask questions like	
00:22:53	S1 (Michael): Let's let's do it that way.	
00:23:00	S3 (Phuc): Yes. All right.	
00:23:04	S3 (Phuc) Hearing your team members description of the negotiation and their feelings what surprised you about that?	
00:23:12	S2 (Georg): Ahm I was actually not aware that you had such like a defined tactic at all. Because I thought, first of all, the time in the negotiation was a bit short. So I would have been a bit more had a lot more time in the end because I was like, we're not finished yet. But no, I was surprised that you also dind't find it that fair. I was a bit indifferent as well	
00:23:58	S3 (Phuc): Good, so if we continued the next question. Looking at your own experience in the negotiation and your feelings, what surprised you about yourself?	
00:24:11	S2 (Georg): Ahm, it surprised me a lot how you could like you could just get in one track and then it was hard to get out of that track in the in the negotiation, how everything was set in the beginning. That surprised me a lot and also how I should have structured afterwards. I saw like I should have done that and that and	**Broad Reorientation:** Next Time I should structure it better Next time i should

	like structured in a whole other way. And I was mostly like in the beginning, I was a bit hesitant to like what you actually want. And it surprised me how that backfired a lot.	focus more on what I want
00:24:58	S3 (Phuc): Just follow up question, do you think that was because the person you were imitating or would that be a way you would approach, or is that a normal way that you would approach a negotiation to reach the best possible outcome for yourself?	**Hostility Effect:** S3 signals again that his logic is personal gain only
00:25:15	S2 (Georg): It was a mix of it as well? Because the script said it was this and this. Yeah, I wouldn't have done it the same way that if I did it again.	
00:25:25	S3 (Phuc): OK, so that's similar or relatable to the third question, which is what would you do differently in another equity split negotiation?	
00:25:38	S2 (Georg): Start off better? I might have let you have the first question, and it was like a long break before anyone answered. I would have answered first, next time.S3 (Phuc): What feedback would you give your give to your team members? What what did they do well and where could they improve?	**Actionable Guideline:** Speak first
00:26:06	S2 (Georg): It was ... I think you did everything pretty well, but Michael you gave a lot of equity away, you didn't voice your opinions that much much as well. So it was really hard to like I agree with you in a way, because you didn't bring anything to the table yourself. So that's one thing And I can agree with you because it was either good.	

00:26:38	S3 (Phuc): Yeah, it makes sense. So, um, so what what did you take away for your studies at (UNIVERSITY), your professional career and your personal development?	
00:26:48	S2 (Georg): Be more upfront and ah maybe have a better plan.	**Broad Reorientation:** Be more upfront , prepare better
00:27:02	S3 (Phuc): So second last question. What did you learn about yourself?	
00:27:07	S2 (Georg): Ähm (Pause)	
00:27:07	S3 (Phuc): Seems like there is a tendency that everyone is a bit more quiet for the last ... (laughing)	**Hostility Effect:** The effect of a hostile environment S3 says this with an insecure voice again. It sounds like she has something but does not want to tell
00:27:20	S1 (Michael): It is a very deep deep reflections, you have to make (with laughing voice).	**Hostility Effect:** S1 making fun of her even signaling that she would have something to say here
00:27:23	S3 (Phuc): You normally don't reflect on this kind of level.	

00:27:27	S1 (Michael): Exactly. It's many years ago.	
00:27:30	S3 (Phuc): Yes. No, maybe	
00:27:31	S1 (Michael): Yeah haha	
00:27:31	S2 (Georg): I'm a careful negotiator. Why may not be a good thing.	
00:27:47	S3 (Phuc): What did you learn about your team members?	
00:27:52	S2 (Georg): Ähm (Pause)	
00:27:52	S1 (Michael): I can't even read my own handwriting (laughing)	
00:28:00	S2 (Georg): I have actually no idea	
00:28:06	S1 (Michael): No idea, great.	
00:28:06	S3 (Phuc): Mike is a nice person and Phuc is a dick. (Laughing)	**Hostility Effect:** Offensive language
00:28:14	S3 (Phuc) All right.	
00:28:19	S1 (Michael): So you would be asking me questions now?	
00:28:22	S2 (Georg): Yeah.	
00:28:2	S1 (Michael): Fair enough. I'll try to answer	

3	the best I can.	
00:28:27	S3 (Phuc): Do you want to be the notetaker or should I (looking at the fourth person)?	
00:28:29	Fourth Person: I can take notes. I have done that for all of you	
00:28:31	S1 (Michael): you have?	
00:28:31	Fourth Person: I am here to observe you	
00:28:31	S2 (Georg): OK, hearing your team members description of the negotiation and their feelings. What surprised you about that?	
00:28:48	S1 (Michael): Yeah, um, I wouldn't say I'm surprised, but I feel like the fact that we teamed up is a mean, I feel like we were kind of rude now that we sit in front of you and have to, like, admit that we actually teamed up and formed some kind of cooperation, which I mean, now it doesn't seem very fair. I mean, if it was me now, I think we should just split it equally. But that was just not the situation we were placed in. So so that's what I have thought of afterwards.	**Comment:** S1 admits that they have not been nice to S2. However, the way how he says that sounds dishonest
00:29:22	S2 (Georg): When looking at your own experience in the negotiation and your feelings, what surprised you about yourself?	
00:29:31	S1 (Michael): Um, I think that it surprised me that, first of all, actually afterwards it surprised me that I think the way we structured it without like having an agreement that surprised me a lot because it wasn't like we had talked to each other or figured something out. I just I think we	

	listen to each other's arguments and I could both see how we benefited from agreeing with each other without having any kind of deals or agreements.	
00:30:09	S2 (Georg): What would you do differently in another equity split negotiation. I	
00:30:15	S1 (Michael): I think it depends on the role you assigned. I believe that the role I was assigned was more like being a mediator in some way. And as you say, um, that it was hard to disagree with me. That was also how I tried to be I tried to be the person that assists other people's arguments in order to, like, share my own if you give out of my own equity to see more generous. So I try not to be the person for sending arguments. I try to assist people, other people's arguments. Um, so back to the questions. I don't know if I believe that depends a lot on the role you assign,	**Broad Reorienation:** Do not formulate arguments, manipulaute others when they do it S1 basically suggests to manipulate others when they formulate arguments
00:31:01	S2 (Georg): What feedback you give to your team members. What do they do well? Where could they improve?	
00:31:07	S1 (Michael): I think Phuc had some great and thoughtful arguments which helped him a lot along the way. But, uh, because it was it was I mean, they were logical it is hard to disagree with logic. Um, and he had this ace like this ace of a we need we need him somehow, you know, in the future process. And I think that the way you (looking to S2 (Georg)) negotiated was very good in the way that you didn't step on anyone's toes. So you were careful, but which might not have been the right approach,	

	but you were very respectful as well.	
00:31:54	S2 (Georg): What did you take away for your studies at (UNIVERSITY), your professional career and your personal development?	
00:32:02	S1 (Michael): Um, I don't know, maybe that I know that you say that I was very generous with the equity, but I saw it as initially I only had thirty three percent. So I actually like at the end I had way more than I would expect. Maybe what I think was fair, because, as you said, it was only a couple of weeks where you couldn't contribute as much as I did because of Christmas and family and so on. So I actually felt like I got quite well away with it, considering that I proposed like 50 percent more than I had initially, and so in that way, I also felt that I could give out I mean, I had some kind of pain limit of three percent, which I didn't want to exceed. So I believe that acting like a mediator and trying to assess other people's arguments that maybe help you if you are in a role where you have I mean, the role I was assigned, I think that suits quite well.	**Broad Reorientation:** Act like a mediator/manipulator S1 is recalling the experience (framing)
00:33:07	S2 (George): What did you learn about yourself?	
00:33:10	S1 (Michael): Nothing really. I don't think I learned anything.	
00:33:15	S2 (Georg): What did you learn about your team members?	
00:33:15	S1 (Michael): That you (pointing to S2 (Georg)) are a very careful negotiator and you're good at not stepping on other people's toes. So which I'm very thankful for that you	

	(pointing to S3 (Phuc)) have some very, very well thought arguments. So I think it was a pleasure negotiating with you guys.	
00:33:31	S2 (Georg): Yes. Sums it up.	
00:33:33	S1 (Michael): That sums it up.	

Appendix 12:

Developed Insights per Student and Group

The student ID entails information about groups and students. Groups starting with G are graduate students, and groups starting with UG are undergraduate students. The first number indicates the group number and the second number the student number according to the role the student has played during role play (1 = Michael, 2 = Georg, 3 = Phuc). Students were only counted in the groups if they had been at the negotiation.

Student ID	Proposed Actions	Changed Perspectives
G1_3	X	X
G1_2	X	0
G1_1	X	X
G2_1	X	0
G2_2	X	0
G2_3	X	X
G3_3	X	X
G3_2	X	X
G3_1	X	X
G4_1	X	0
G6_2	X	X
G6_3	X	0
G6_1	X	0
G7_4	X	0
G7_1	X	X

G7_3	X	X
G9_2	X	X
G9_3	X	0
G9_1	X	0
G9_4	X	0
G10_1	X	X
G10_2	X	X
G10_3	X	0
G12_2	X	0
G12_1	X	X
G12_3	X	0
G12_4	X	0
G13_3	X	0
G13_2	X	0
G13_1	X	0
G8_2	X	X
G8_1	X	X
G8_3	X	0
G15_3	X	0
G15_2	X	0
G15_1	X	0
G16_2	X	X
G16_3	X	X

G16_1	X	X
G17_1	X	0
G17_3	X	0
G17_2	X	0
G18_3	X	0
G18_1	X	0
G18_2	X	0
G19_1	X	0
G19_3	X	0
G19_2	X	0
UG1_1	X	0
UG1_3	X	0
UG1_2	X	0
UG2_3	X	X
UG2_2	X	0
UG2_1	X	X
UG3_2	X	0
UG3_3	X	0
UG3_3	X	0
UG4_1	X	X
UG4_2	X	0
UG4_3	X	X
UG5_3	X	X

UG5_1	X	X
UG5_2	X	0
UG6_2	X	X
UG6_3	X	X
UG6_1	X	X
UG7_3	X	0
UG7_3	X	0
UG7_2	X	0
UG8_3	X	0
UG8_3	X	0
UG8_2	X	0
UG9_3	X	0
UG9_1	X	X
UG10_2	X	0
UG10_3	X	0
UG11_1	X	0
UG11_3	X	0
UG12_1	X	0
UG12_3	X	X
UG12_2	X	0
UG13_1	X	0
UG13_1	X	0
UG14_1	X	0

UG14_2	X	0
UG14_2	X	0
UG15_3	X	0
UG15_1	X	X
UG15_3	X	X
UG16_3	X	0
UG16_3	X	0
UG16_1	X	0
UG16_2	X	0
UG17_1	X	0
UG17_3	X	X
UG17_2	X	X
UG18_1	X	0
UG18_2	X	0
UG18_3	X	0
UG19_1	X	0
UG19_2	X	0
UG20_3	X	0
UG20_2	X	0
UG20_1	X	0

TITLER I PH.D.SERIEN:

2004

1. Martin Grieger
Internet-based Electronic Marketplaces and Supply Chain Management

2. Thomas Basbøll
LIKENESS
A Philosophical Investigation

3. Morten Knudsen
Beslutningens vaklen
En systemteoretisk analyse of moderniseringen af et amtskommunalt sundhedsvæsen 1980-2000

4. Lars Bo Jeppesen
Organizing Consumer Innovation
A product development strategy that is based on online communities and allows some firms to benefit from a distributed process of innovation by consumers

5. Barbara Dragsted
SEGMENTATION IN TRANSLATION AND TRANSLATION MEMORY SYSTEMS
An empirical investigation of cognitive segmentation and effects of integrating a TM system into the translation process

6. Jeanet Hardis
Sociale partnerskaber
Et socialkonstruktivistisk casestudie af partnerskabsaktørers virkelighedsopfattelse mellem identitet og legitimitet

7. Henriette Hallberg Thygesen
System Dynamics in Action

8. Carsten Mejer Plath
Strategisk Økonomistyring

9. Annemette Kjærgaard
Knowledge Management as Internal Corporate Venturing
– a Field Study of the Rise and Fall of a Bottom-Up Process

10. Knut Arne Hovdal
De profesjonelle i endring
Norsk ph.d., ej til salg gennem Samfundslitteratur

11. Søren Jeppesen
Environmental Practices and Greening Strategies in Small Manufacturing Enterprises in South Africa
– A Critical Realist Approach

12. Lars Frode Frederiksen
Industriel forskningsledelse
– på sporet af mønstre og samarbejde i danske forskningsintensive virksomheder

13. Martin Jes Iversen
The Governance of GN Great Nordic
– in an age of strategic and structural transitions 1939-1988

14. Lars Pynt Andersen
The Rhetorical Strategies of Danish TV Advertising
A study of the first fifteen years with special emphasis on genre and irony

15. Jakob Rasmussen
Business Perspectives on E-learning

16. Sof Thrane
The Social and Economic Dynamics of Networks
– a Weberian Analysis of Three Formalised Horizontal Networks

17. Lene Nielsen
Engaging Personas and Narrative Scenarios – a study on how a user-centered approach influenced the perception of the design process in the e-business group at AstraZeneca

18. S.J Valstad
Organisationsidentitet
Norsk ph.d., ej til salg gennem Samfundslitteratur

19. Thomas Lyse Hansen
Six Essays on Pricing and Weather risk in Energy Markets

20. Sabine Madsen
Emerging Methods – An Interpretive Study of ISD Methods in Practice

21. Evis Sinani
The Impact of Foreign Direct Investment on Efficiency, Productivity Growth and Trade: An Empirical Investigation

22. Bent Meier Sørensen
Making Events Work Or, How to Multiply Your Crisis

23. Pernille Schnoor
Brand Ethos
Om troværdige brand- og virksomhedsidentiteter i et retorisk og diskursteoretisk perspektiv

24. Sidsel Fabech
Von welchem Österreich ist hier die Rede?
Diskursive forhandlinger og magtkampe mellem rivaliserende nationale identitetskonstruktioner i østrigske pressediskurser

25. Klavs Odgaard Christensen
Sprogpolitik og identitetsdannelse i flersprogede forbundsstater
Et komparativt studie af Schweiz og Canada

26. Dana B. Minbaeva
Human Resource Practices and Knowledge Transfer in Multinational Corporations

27. Holger Højlund
Markedets politiske fornuft
Et studie af velfærdens organisering i perioden 1990-2003

28. Christine Mølgaard Frandsen
A.s erfaring
Om mellemværendets praktik i en transformation af mennesket og subjektiviteten

29. Sine Nørholm Just
The Constitution of Meaning – A Meaningful Constitution?
Legitimacy, identity, and public opinion in the debate on the future of Europe

2005

1. Claus J. Varnes
Managing product innovation through rules – The role of formal and structured methods in product development

2. Helle Hedegaard Hein
Mellem konflikt og konsensus – Dialogudvikling på hospitalsklinikker

3. Axel Rosenø
Customer Value Driven Product Innovation – A Study of Market Learning in New Product Development

4. Søren Buhl Pedersen
Making space
An outline of place branding

5. Camilla Funck Ellehave
Differences that Matter
An analysis of practices of gender and organizing in contemporary workplaces

6. Rigmor Madeleine Lond
Styring af kommunale forvaltninger

7. Mette Aagaard Andreassen
Supply Chain versus Supply Chain
Benchmarking as a Means to Managing Supply Chains

8. Caroline Aggestam-Pontoppidan
From an idea to a standard
The UN and the global governance of accountants' competence

9. Norsk ph.d.

10. Vivienne Heng Ker-ni
An Experimental Field Study on the

Effectiveness of Grocer Media Advertising
Measuring Ad Recall and Recognition, Purchase Intentions and Short-Term Sales

11. Allan Mortensen
Essays on the Pricing of Corporate Bonds and Credit Derivatives

12. Remo Stefano Chiari
Figure che fanno conoscere
Itinerario sull'idea del valore cognitivo e espressivo della metafora e di altri tropi da Aristotele e da Vico fino al cognitivismo contemporaneo

13. Anders McIlquham-Schmidt
Strategic Planning and Corporate Performance
An integrative research review and a meta-analysis of the strategic planning and corporate performance literature from 1956 to 2003

14. Jens Geersbro
The TDF – PMI Case
Making Sense of the Dynamics of Business Relationships and Networks

15 Mette Andersen
Corporate Social Responsibility in Global Supply Chains
Understanding the uniqueness of firm behaviour

16. Eva Boxenbaum
Institutional Genesis: Micro – Dynamic Foundations of Institutional Change

17. Peter Lund-Thomsen
Capacity Development, Environmental Justice NGOs, and Governance: The Case of South Africa

18. Signe Jarlov
Konstruktioner af offentlig ledelse

19. Lars Stæhr Jensen
Vocabulary Knowledge and Listening Comprehension in English as a Foreign Language
An empirical study employing data elicited from Danish EFL learners

20. Christian Nielsen
Essays on Business Reporting
Production and consumption of strategic information in the market for information

21. Marianne Thejls Fischer
Egos and Ethics of Management Consultants

22. Annie Bekke Kjær
Performance management i Proces-innovation
– belyst i et social-konstruktivistisk perspektiv

23. Suzanne Dee Pedersen
GENTAGELSENS METAMORFOSE
Om organisering af den kreative gøren i den kunstneriske arbejdspraksis

24. Benedikte Dorte Rosenbrink
Revenue Management
Økonomiske, konkurrencemæssige & organisatoriske konsekvenser

25. Thomas Riise Johansen
Written Accounts and Verbal Accounts
The Danish Case of Accounting and Accountability to Employees

26. Ann Fogelgren-Pedersen
The Mobile Internet: Pioneering Users' Adoption Decisions

27. Birgitte Rasmussen
Ledelse i fællesskab – de tillidsvalgtes fornyende rolle

28. Gitte Thit Nielsen
Remerger
– skabende ledelseskræfter i fusion og opkøb

29. Carmine Gioia
A MICROECONOMETRIC ANALYSIS OF MERGERS AND ACQUISITIONS

30. Ole Hinz
Den effektive forandringsleder: pilot, pædagog eller politiker?
Et studie i arbejdslederes meningstilskrivninger i forbindelse med vellykket gennemførelse af ledelsesinitierede forandringsprojekter

31. Kjell-Åge Gotvassli
Et praksisbasert perspektiv på dynamiske
læringsnettverk i toppidretten
Norsk ph.d., ej til salg gennem Samfundslitteratur

32. Henriette Langstrup Nielsen
Linking Healthcare
An inquiry into the changing performances of web-based technology for asthma monitoring

33. Karin Tweddell Levinsen
Virtuel Uddannelsespraksis
Master i IKT og Læring – et casestudie i hvordan proaktiv proceshåndtering kan forbedre praksis i virtuelle læringsmiljøer

34. Anika Liversage
Finding a Path
Labour Market Life Stories of Immigrant Professionals

35. Kasper Elmquist Jørgensen
Studier i samspillet mellem stat og erhvervsliv i Danmark under 1. verdenskrig

36. Finn Janning
A DIFFERENT STORY
Seduction, Conquest and Discovery

37. Patricia Ann Plackett
Strategic Management of the Radical Innovation Process
Leveraging Social Capital for Market Uncertainty Management

2006

1. Christian Vintergaard
Early Phases of Corporate Venturing

2. Niels Rom-Poulsen
Essays in Computational Finance

3. Tina Brandt Husman
Organisational Capabilities, Competitive Advantage & Project-Based Organisations
The Case of Advertising and Creative Good Production

4. Mette Rosenkrands Johansen
Practice at the top
– how top managers mobilise and use non-financial performance measures

5. Eva Parum
Corporate governance som strategisk kommunikations- og ledelsesværktøj

6. Susan Aagaard Petersen
Culture's Influence on Performance Management: The Case of a Danish Company in China

7. Thomas Nicolai Pedersen
The Discursive Constitution of Organizational Governance – Between unity and differentiation
The Case of the governance of environmental risks by World Bank environmental staff

8. Cynthia Selin
Volatile Visions: Transactons in Anticipatory Knowledge

9. Jesper Banghøj
Financial Accounting Information and Compensation in Danish Companies

10. Mikkel Lucas Overby
Strategic Alliances in Emerging High-Tech Markets: What's the Difference and does it Matter?

11. Tine Aage
External Information Acquisition of Industrial Districts and the Impact of Different Knowledge Creation Dimensions

A case study of the Fashion and Design Branch of the Industrial District of Montebelluna, NE Italy

12. Mikkel Flyverbom
Making the Global Information Society Governable
On the Governmentality of Multi-Stakeholder Networks

13. Anette Grønning
Personen bag
Tilstedevær i e-mail som inter-aktionsform mellem kunde og med-arbejder i dansk forsikringskontekst

14. Jørn Helder
One Company – One Language?
The NN-case

15. Lars Bjerregaard Mikkelsen
Differing perceptions of customer value
Development and application of a tool for mapping perceptions of customer value at both ends of customer-supplier dyads in industrial markets

16. Lise Granerud
Exploring Learning
Technological learning within small manufacturers in South Africa

17. Esben Rahbek Pedersen
Between Hopes and Realities: Reflections on the Promises and Practices of Corporate Social Responsibility (CSR)

18. Ramona Samson
The Cultural Integration Model and European Transformation.
The Case of Romania

2007

1. Jakob Vestergaard
Discipline in The Global Economy
Panopticism and the Post-Washington Consensus

2. Heidi Lund Hansen
Spaces for learning and working
A qualitative study of change of work, management, vehicles of power and social practices in open offices

3. Sudhanshu Rai
Exploring the internal dynamics of software development teams during user analysis
A tension enabled Institutionalization Model; "Where process becomes the objective"

4. Norsk ph.d.
Ej til salg gennem Samfundslitteratur

5. Serden Ozcan
EXPLORING HETEROGENEITY IN ORGANIZATIONAL ACTIONS AND OUTCOMES
A Behavioural Perspective

6. Kim Sundtoft Hald
Inter-organizational Performance Measurement and Management in Action
– An Ethnography on the Construction of Management, Identity and Relationships

7. Tobias Lindeberg
Evaluative Technologies
Quality and the Multiplicity of Performance

8. Merete Wedell-Wedellsborg
Den globale soldat
Identitetsdannelse og identitetsledelse i multinationale militære organisationer

9. Lars Frederiksen
Open Innovation Business Models
Innovation in firm-hosted online user communities and inter-firm project ventures in the music industry
– A collection of essays

10. Jonas Gabrielsen
Retorisk toposlære – fra statisk 'sted' til persuasiv aktivitet

11. Christian Moldt-Jørgensen
Fra meningsløs til meningsfuld evaluering.
Anvendelsen af studentertilfredshedsmålinger på de korte og mellemlange videregående uddannelser set fra et psykodynamisk systemperspektiv

12. Ping Gao
Extending the application of actor-network theory
Cases of innovation in the telecommunications industry

13. Peter Mejlby
Frihed og fængsel, en del af den samme drøm?
Et phronetisk baseret casestudie af frigørelsens og kontrollens sameksistens i værdibaseret ledelse!

14. Kristina Birch
Statistical Modelling in Marketing

15. Signe Poulsen
Sense and sensibility:
The language of emotional appeals in insurance marketing

16. Anders Bjerre Trolle
Essays on derivatives pricing and dynamic asset allocation

17. Peter Feldhütter
Empirical Studies of Bond and Credit Markets

18. Jens Henrik Eggert Christensen
Default and Recovery Risk Modeling and Estimation

19. Maria Theresa Larsen
Academic Enterprise: A New Mission for Universities or a Contradiction in Terms?
Four papers on the long-term implications of increasing industry involvement and commercialization in academia

20. Morten Wellendorf
Postimplementering af teknologi i den offentlige forvaltning
Analyser af en organisations kontinuerlige arbejde med informationsteknologi

21. Ekaterina Mhaanna
Concept Relations for Terminological Process Analysis

22. Stefan Ring Thorbjørnsen
Forsvaret i forandring
Et studie i officerers kapabiliteter under påvirkning af omverdenens forandringspres mod øget styring og læring

23. Christa Breum Amhøj
Det selvskabte medlemskab om managementstaten, dens styringsteknologier og indbyggere

24. Karoline Bromose
Between Technological Turbulence and Operational Stability
– An empirical case study of corporate venturing in TDC

25. Susanne Justesen
Navigating the Paradoxes of Diversity in Innovation Practice
– A Longitudinal study of six very different innovation processes – in practice

26. Luise Noring Henler
Conceptualising successful supply chain partnerships
– Viewing supply chain partnerships from an organisational culture perspective

27. Mark Mau
Kampen om telefonen
Det danske telefonvæsen under den tyske besættelse 1940-45

28. Jakob Halskov
The semiautomatic expansion of existing terminological ontologies using knowledge patterns discovered

on the WWW – an implementation and evaluation

29. Gergana Koleva
European Policy Instruments Beyond Networks and Structure: The Innovative Medicines Initiative

30. Christian Geisler Asmussen
Global Strategy and International Diversity: A Double-Edged Sword?

31. Christina Holm-Petersen
Stolthed og fordom
Kultur- og identitetsarbejde ved skabelsen af en ny sengeafdeling gennem fusion

32. Hans Peter Olsen
Hybrid Governance of Standardized States
Causes and Contours of the Global Regulation of Government Auditing

33. Lars Bøge Sørensen
Risk Management in the Supply Chain

34. Peter Aagaard
Det unikkes dynamikker
De institutionelle mulighedsbetingelser bag den individuelle udforskning i professionelt og frivilligt arbejde

35. Yun Mi Antorini
Brand Community Innovation
An Intrinsic Case Study of the Adult Fans of LEGO Community

36. Joachim Lynggaard Boll
Labor Related Corporate Social Performance in Denmark
Organizational and Institutional Perspectives

2008

1. Frederik Christian Vinten
Essays on Private Equity

2. Jesper Clement
Visual Influence of Packaging Design on In-Store Buying Decisions

3. Marius Brostrøm Kousgaard
Tid til kvalitetsmåling?
– Studier af indrulleringsprocesser i forbindelse med introduktionen af kliniske kvalitetsdatabaser i speciallægepraksissektoren

4. Irene Skovgaard Smith
Management Consulting in Action
Value creation and ambiguity in client-consultant relations

5. Anders Rom
Management accounting and integrated information systems
How to exploit the potential for management accounting of information technology

6. Marina Candi
Aesthetic Design as an Element of Service Innovation in New Technology-based Firms

7. Morten Schnack
Teknologi og tværfaglighed
– en analyse af diskussionen omkring indførelse af EPJ på en hospitalsafdeling

8. Helene Balslev Clausen
Juntos pero no revueltos – un estudio sobre emigrantes norteamericanos en un pueblo mexicano

9. Lise Justesen
Kunsten at skrive revisionsrapporter.
En beretning om forvaltningsrevisionens beretninger

10. Michael E. Hansen
The politics of corporate responsibility: CSR and the governance of child labor and core labor rights in the 1990s

11. Anne Roepstorff
Holdning for handling – en etnologisk undersøgelse af Virksomheders Sociale Ansvar/CSR

12. Claus Bajlum
Essays on Credit Risk and Credit Derivatives

13. Anders Bojesen
The Performative Power of Competence – an Inquiry into Subjectivity and Social Technologies at Work

14. Satu Reijonen
Green and Fragile
A Study on Markets and the Natural Environment

15. Ilduara Busta
Corporate Governance in Banking
A European Study

16. Kristian Anders Hvass
A Boolean Analysis Predicting Industry Change: Innovation, Imitation & Business Models
The Winning Hybrid: A case study of isomorphism in the airline industry

17. Trine Paludan
De uvidende og de udviklingsparate
Identitet som mulighed og restriktion blandt fabriksarbejdere på det aftayloriserede fabriksgulv

18. Kristian Jakobsen
Foreign market entry in transition economies: Entry timing and mode choice

19. Jakob Elming
Syntactic reordering in statistical machine translation

20. Lars Brømsøe Termansen
Regional Computable General Equilibrium Models for Denmark
Three papers laying the foundation for regional CGE models with agglomeration characteristics

21. Mia Reinholt
The Motivational Foundations of Knowledge Sharing

22. Frederikke Krogh-Meibom
The Co-Evolution of Institutions and Technology
– A Neo-Institutional Understanding of Change Processes within the Business Press – the Case Study of Financial Times

23. Peter D. Ørberg Jensen
OFFSHORING OF ADVANCED AND HIGH-VALUE TECHNICAL SERVICES: ANTECEDENTS, PROCESS DYNAMICS AND FIRMLEVEL IMPACTS

24. Pham Thi Song Hanh
Functional Upgrading, Relational Capability and Export Performance of Vietnamese Wood Furniture Producers

25. Mads Vangkilde
Why wait?
An Exploration of first-mover advantages among Danish e-grocers through a resource perspective

26. Hubert Buch-Hansen
Rethinking the History of European Level Merger Control
A Critical Political Economy Perspective

2009

1. Vivian Lindhardsen
From Independent Ratings to Communal Ratings: A Study of CWA Raters' Decision-Making Behaviours

2. Guðrið Weihe
Public-Private Partnerships: Meaning and Practice

3. Chris Nøkkentved
Enabling Supply Networks with Collaborative Information Infrastructures
An Empirical Investigation of Business Model Innovation in Supplier Relationship Management

4. Sara Louise Muhr
Wound, Interrupted – On the Vulnerability of Diversity Management

5. Christine Sestoft
Forbrugeradfærd i et Stats- og Livsformsteoretisk perspektiv

6. Michael Pedersen
Tune in, Breakdown, and Reboot: On the production of the stress-fit self-managing employee

7. Salla Lutz
Position and Reposition in Networks – Exemplified by the Transformation of the Danish Pine Furniture Manufacturers

8. Jens Forssbæck
Essays on market discipline in commercial and central banking

9. Tine Murphy
Sense from Silence – A Basis for Organised Action
How do Sensemaking Processes with Minimal Sharing Relate to the Reproduction of Organised Action?

10. Sara Malou Strandvad
Inspirations for a new sociology of art: A sociomaterial study of development processes in the Danish film industry

11. Nicolaas Mouton
On the evolution of social scientific metaphors:
A cognitive-historical enquiry into the divergent trajectories of the idea that collective entities – states and societies, cities and corporations – are biological organisms.

12. Lars Andreas Knutsen
Mobile Data Services:
Shaping of user engagements

13. Nikolaos Theodoros Korfiatis
Information Exchange and Behavior
A Multi-method Inquiry on Online Communities

14. Jens Albæk
Forestillinger om kvalitet og tværfaglighed på sygehuse
– skabelse af forestillinger i læge- og plejegrupperne angående relevans af nye idéer om kvalitetsudvikling gennem tolkningsprocesser

15. Maja Lotz
The Business of Co-Creation – and the Co-Creation of Business

16. Gitte P. Jakobsen
Narrative Construction of Leader Identity in a Leader Development Program Context

17. Dorte Hermansen
"Living the brand" som en brandorienteret dialogisk praxis:
Om udvikling af medarbejdernes brandorienterede dømmekraft

18. Aseem Kinra
Supply Chain (logistics) Environmental Complexity

19. Michael Nørager
How to manage SMEs through the transformation from non innovative to innovative?

20. Kristin Wallevik
Corporate Governance in Family Firms
The Norwegian Maritime Sector

21. Bo Hansen Hansen
Beyond the Process
Enriching Software Process Improvement with Knowledge Management

22. Annemette Skot-Hansen
Franske adjektivisk afledte adverbier, der tager præpositionssyntagmer indledt med præpositionen à som argumenter
En valensgrammatisk undersøgelse

23. Line Gry Knudsen
Collaborative R&D Capabilities
In Search of Micro-Foundations

24. Christian Scheuer
Employers meet employees
Essays on sorting and globalization

25. Rasmus Johnsen
The Great Health of Melancholy
A Study of the Pathologies of Performativity

26. Ha Thi Van Pham
Internationalization, Competitiveness Enhancement and Export Performance of Emerging Market Firms:
Evidence from Vietnam

27. Henriette Balieu
Kontrolbegrebets betydning for kausativalternationen i spansk
En kognitiv-typologisk analyse

2010

1. Yen Tran
Organizing Innovationin Turbulent Fashion Market
Four papers on how fashion firms create and appropriate innovation value

2. Anders Raastrup Kristensen
Metaphysical Labour
Flexibility, Performance and Commitment in Work-Life Management

3. Margrét Sigrún Sigurdardottir
Dependently independent
Co-existence of institutional logics in the recorded music industry

4. Ásta Dis Óladóttir
Internationalization from a small domestic base:
An empirical analysis of Economics and Management

5. Christine Secher
E-deltagelse i praksis – politikernes og forvaltningens medkonstruktion og konsekvenserne heraf

6. Marianne Stang Våland
What we talk about when we talk about space:
End User Participation between Processes of Organizational and Architectural Design

7. Rex Degnegaard
Strategic Change Management
Change Management Challenges in the Danish Police Reform

8. Ulrik Schultz Brix
Værdi i rekruttering – den sikre beslutning
En pragmatisk analyse af perception og synliggørelse af værdi i rekrutterings- og udvælgelsesarbejdet

9. Jan Ole Similä
Kontraktsledelse
Relasjonen mellom virksomhetsledelse og kontraktshåndtering, belyst via fire norske virksomheter

10. Susanne Boch Waldorff
Emerging Organizations: In between local translation, institutional logics and discourse

11. Brian Kane
Performance Talk
Next Generation Management of Organizational Performance

12. Lars Ohnemus
Brand Thrust: Strategic Branding and Shareholder Value
An Empirical Reconciliation of two Critical Concepts

13. Jesper Schlamovitz
Håndtering af usikkerhed i film- og byggeprojekter

14. Tommy Moesby-Jensen
Det faktiske livs forbindtlighed
Førsokratisk informeret, ny-aristotelisk ἦθος-tænkning hos Martin Heidegger

15. Christian Fich
Two Nations Divided by Common Values
French National Habitus and the Rejection of American Power

16. Peter Beyer
Processer, sammenhængskraft og fleksibilitet
Et empirisk casestudie af omstillingsforløb i fire virksomheder

17. Adam Buchhorn
Markets of Good Intentions
Constructing and Organizing Biogas Markets Amid Fragility and Controversy

18. Cecilie K. Moesby-Jensen
Social læring og fælles praksis
Et mixed method studie, der belyser læringskonsekvenser af et lederkursus for et praksisfællesskab af offentlige mellemledere

19. Heidi Boye
Fødevarer og sundhed i senmodernismen
– En indsigt i hyggefænomenet og de relaterede fødevarepraksisser

20. Kristine Munkgård Pedersen
Flygtige forbindelser og midlertidige mobiliseringer
Om kulturel produktion på Roskilde Festival

21. Oliver Jacob Weber
Causes of Intercompany Harmony in Business Markets – An Empirical Investigation from a Dyad Perspective

22. Susanne Ekman
Authority and Autonomy
Paradoxes of Modern Knowledge Work

23. Anette Frey Larsen
Kvalitetsledelse på danske hospitaler
– Ledelsernes indflydelse på introduktion og vedligeholdelse af kvalitetsstrategier i det danske sundhedsvæsen

24. Toyoko Sato
Performativity and Discourse: Japanese Advertisements on the Aesthetic Education of Desire

25. Kenneth Brinch Jensen
Identifying the Last Planner System
Lean management in the construction industry

26. Javier Busquets
Orchestrating Network Behavior for Innovation

27. Luke Patey
The Power of Resistance: India's National Oil Company and International Activism in Sudan

28. Mette Vedel
Value Creation in Triadic Business Relationships. Interaction, Interconnection and Position

29. Kristian Tørning
Knowledge Management Systems in Practice – A Work Place Study

30. Qingxin Shi
An Empirical Study of Thinking Aloud Usability Testing from a Cultural Perspective

31. Tanja Juul Christiansen
Corporate blogging: Medarbejderes kommunikative handlekraft

32. Malgorzata Ciesielska
Hybrid Organisations.
A study of the Open Source – business setting

33. Jens Dick-Nielsen
Three Essays on Corporate Bond Market Liquidity

34. Sabrina Speiermann
Modstandens Politik
Kampagnestyring i Velfærdsstaten.
En diskussion af trafikkampagners styringspotentiale

35. Julie Uldam
Fickle Commitment. Fostering political engagement in 'the flighty world of online activism'

36. Annegrete Juul Nielsen
Traveling technologies and transformations in health care

37. Athur Mühlen-Schulte
Organising Development
Power and Organisational Reform in the United Nations Development Programme

38. Louise Rygaard Jonas
Branding på butiksgulvet
Et case-studie af kultur- og identitets-arbejdet i Kvickly

2011

1. Stefan Fraenkel
Key Success Factors for Sales Force Readiness during New Product Launch
A Study of Product Launches in the Swedish Pharmaceutical Industry

2. Christian Plesner Rossing
International Transfer Pricing in Theory and Practice

3. Tobias Dam Hede
Samtalekunst og ledelsesdisciplin
– en analyse af coachingsdiskursens genealogi og governmentality

4. Kim Pettersson
Essays on Audit Quality, Auditor Choice, and Equity Valuation

5. Henrik Merkelsen
The expert-lay controversy in risk research and management. Effects of institutional distances. Studies of risk definitions, perceptions, management and communication

6. Simon S. Torp
Employee Stock Ownership:
Effect on Strategic Management and Performance

7. Mie Harder
Internal Antecedents of Management Innovation

8. Ole Helby Petersen
Public-Private Partnerships: Policy and Regulation – With Comparative and Multi-level Case Studies from Denmark and Ireland

9. Morten Krogh Petersen
'Good' Outcomes. Handling Multiplicity in Government Communication

10. Kristian Tangsgaard Hvelplund
Allocation of cognitive resources in translation - an eye-tracking and key-logging study

11. Moshe Yonatany
The Internationalization Process of Digital Service Providers

12. Anne Vestergaard
Distance and Suffering
Humanitarian Discourse in the age of Mediatization

13. Thorsten Mikkelsen
Personligsheds indflydelse på forretningsrelationer

14. Jane Thostrup Jagd
Hvorfor fortsætter fusionsbølgen udover "the tipping point"?
– en empirisk analyse af information og kognitioner om fusioner

15. Gregory Gimpel
Value-driven Adoption and Consumption of Technology: Understanding Technology Decision Making

16. Thomas Stengade Sønderskov
Den nye mulighed
Social innovation i en forretningsmæssig kontekst

17. Jeppe Christoffersen
Donor supported strategic alliances in developing countries

18. Vibeke Vad Baunsgaard
Dominant Ideological Modes of Rationality: Cross functional

integration in the process of product innovation

19. Throstur Olaf Sigurjonsson
Governance Failure and Icelands's Financial Collapse

20. Allan Sall Tang Andersen
Essays on the modeling of risks in interest-rate and inflation markets

21. Heidi Tscherning
Mobile Devices in Social Contexts

22. Birgitte Gorm Hansen
Adapting in the Knowledge Economy Lateral Strategies for Scientists and Those Who Study Them

23. Kristina Vaarst Andersen
Optimal Levels of Embeddedness The Contingent Value of Networked Collaboration

24. Justine Grønbæk Pors
Noisy Management A History of Danish School Governing from 1970-2010

25. Stefan Linder
Micro-foundations of Strategic Entrepreneurship Essays on Autonomous Strategic Action

26. Xin Li
Toward an Integrative Framework of National Competitiveness An application to China

27. Rune Thorbjørn Clausen
Værdifuld arkitektur Et eksplorativt studie af bygningers rolle i virksomheders værdiskabelse

28. Monica Viken
Markedsundersøkelser som bevis i varemerke- og markedsføringsrett

29. Christian Wymann
Tattooing The Economic and Artistic Constitution of a Social Phenomenon

30. Sanne Frandsen
Productive Incoherence A Case Study of Branding and Identity Struggles in a Low-Prestige Organization

31. Mads Stenbo Nielsen
Essays on Correlation Modelling

32. Ivan Häuser
Følelse og sprog Etablering af en ekspressiv kategori, eksemplificeret på russisk

33. Sebastian Schwenen
Security of Supply in Electricity Markets

2012

1. Peter Holm Andreasen
The Dynamics of Procurement Management - A Complexity Approach

2. Martin Haulrich
Data-Driven Bitext Dependency Parsing and Alignment

3. Line Kirkegaard
Konsulenten i den anden nat En undersøgelse af det intense arbejdsliv

4. Tonny Stenheim
Decision usefulness of goodwill under IFRS

5. Morten Lind Larsen
Produktivitet, vækst og velfærd Industrirådet og efterkrigstidens Danmark 1945 - 1958

6. Petter Berg
Cartel Damages and Cost Asymmetries

7. Lynn Kahle
Experiential Discourse in Marketing A methodical inquiry into practice and theory

8. Anne Roelsgaard Obling
Management of Emotions in Accelerated Medical Relationships

9. Thomas Frandsen
Managing Modularity of Service Processes Architecture

10. Carina Christine Skovmøller
CSR som noget særligt
Et casestudie om styring og meningsskabelse i relation til CSR ud fra en intern optik

11. Michael Tell
Fradragsbeskæring af selskabers finansieringsudgifter
En skatteretlig analyse af SEL §§ 11, 11B og 11C

12. Morten Holm
Customer Profitability Measurement Models
Their Merits and Sophistication across Contexts

13. Katja Joo Dyppel
Beskatning af derivater
En analyse af dansk skatteret

14. Esben Anton Schultz
Essays in Labor Economics
Evidence from Danish Micro Data

15. Carina Risvig Hansen
"Contracts not covered, or not fully covered, by the Public Sector Directive"

16. Anja Svejgaard Pors
Iværksættelse af kommunikation
- patientfigurer i hospitalets strategiske kommunikation

17. Frans Bévort
Making sense of management with logics
An ethnographic study of accountants who become managers

18. René Kallestrup
The Dynamics of Bank and Sovereign Credit Risk

19. Brett Crawford
Revisiting the Phenomenon of Interests in Organizational Institutionalism
The Case of U.S. Chambers of Commerce

20. Mario Daniele Amore
Essays on Empirical Corporate Finance

21. Arne Stjernholm Madsen
The evolution of innovation strategy
Studied in the context of medical device activities at the pharmaceutical company Novo Nordisk A/S in the period 1980-2008

22. Jacob Holm Hansen
Is Social Integration Necessary for Corporate Branding?
A study of corporate branding strategies at Novo Nordisk

23. Stuart Webber
Corporate Profit Shifting and the Multinational Enterprise

24. Helene Ratner
Promises of Reflexivity
Managing and Researching Inclusive Schools

25. Therese Strand
The Owners and the Power: Insights from Annual General Meetings

26. Robert Gavin Strand
In Praise of Corporate Social Responsibility Bureaucracy

27. Nina Sormunen
Auditor's going-concern reporting
Reporting decision and content of the report

28. John Bang Mathiasen
Learning within a product development working practice:
- an understanding anchored in pragmatism

29. Philip Holst Riis
Understanding Role-Oriented Enterprise Systems: From Vendors to Customers

30. Marie Lisa Dacanay
Social Enterprises and the Poor
Enhancing Social Entrepreneurship and Stakeholder Theory

31. Fumiko Kano Glückstad
Bridging Remote Cultures: Cross-lingual concept mapping based on the information receiver's prior-knowledge

32. Henrik Barslund Fosse
Empirical Essays in International Trade

33. Peter Alexander Albrecht
Foundational hybridity and its reproduction
Security sector reform in Sierra Leone

34. Maja Rosenstock
CSR - hvor svært kan det være?
Kulturanalytisk casestudie om udfordringer og dilemmaer med at forankre Coops CSR-strategi

35. Jeanette Rasmussen
Tweens, medier og forbrug
Et studie af 10-12 årige danske børns brug af internettet, opfattelse og forståelse af markedsføring og forbrug

36. Ib Tunby Gulbrandsen
'This page is not intended for a US Audience'
A five-act spectacle on online communication, collaboration & organization.

37. Kasper Aalling Teilmann
Interactive Approaches to Rural Development

38. Mette Mogensen
The Organization(s) of Well-being and Productivity
(Re)assembling work in the Danish Post

39. Søren Friis Møller
From Disinterestedness to Engagement Towards Relational Leadership In the Cultural Sector

40. Nico Peter Berhausen
Management Control, Innovation and Strategic Objectives – Interactions and Convergence in Product Development Networks

41. Balder Onarheim
Creativity under Constraints
Creativity as Balancing 'Constrainedness'

42. Haoyong Zhou
Essays on Family Firms

43. Elisabeth Naima Mikkelsen
Making sense of organisational conflict
An empirical study of enacted sense-making in everyday conflict at work

2013

1. Jacob Lyngsie
Entrepreneurship in an Organizational Context

2. Signe Groth-Brodersen
Fra ledelse til selvet
En socialpsykologisk analyse af forholdet imellem selvledelse, ledelse og stress i det moderne arbejdsliv

3. Nis Høyrup Christensen
Shaping Markets: A Neoinstitutional Analysis of the Emerging Organizational Field of Renewable Energy in China

4. Christian Edelvold Berg
As a matter of size
THE IMPORTANCE OF CRITICAL MASS AND THE CONSEQUENCES OF SCARCITY FOR TELEVISION MARKETS

5. Christine D. Isakson
Coworker Influence and Labor Mobility
Essays on Turnover, Entrepreneurship and Location Choice in the Danish Maritime Industry

6. Niels Joseph Jerne Lennon
Accounting Qualities in Practice
Rhizomatic stories of representational faithfulness, decision making and control

7. Shannon O'Donnell
Making Ensemble Possible
How special groups organize for collaborative creativity in conditions of spatial variability and distance

8. Robert W. D. Veitch
Access Decisions in a Partly-Digital World Comparing Digital Piracy and Legal Modes for Film and Music

9. Marie Mathiesen
Making Strategy Work An Organizational Ethnography

10. Arisa Shollo
The role of business intelligence in organizational decision-making

11. Mia Kaspersen
The construction of social and environmental reporting

12. Marcus Møller Larsen
The organizational design of offshoring

13. Mette Ohm Rørdam
EU Law on Food Naming The prohibition against misleading names in an internal market context

14. Hans Peter Rasmussen
GIV EN GED! Kan giver-idealtyper forklare støtte til velgørenhed og understøtte relationsopbygning?

15. Ruben Schachtenhaufen
Fonetisk reduktion i dansk

16. Peter Koerver Schmidt
Dansk CFC-beskatning I et internationalt og komparativt perspektiv

17. Morten Froholdt
Strategi i den offentlige sektor En kortlægning af styringsmæssig kontekst, strategisk tilgang, samt anvendte redskaber og teknologier for udvalgte danske statslige styrelser

18. Annette Camilla Sjørup
Cognitive effort in metaphor translation An eye-tracking and key-logging study

19. Tamara Stucchi
The Internationalization of Emerging Market Firms: A Context-Specific Study

20. Thomas Lopdrup-Hjorth
"Let's Go Outside": The Value of Co-Creation

21. Ana Alačovska
Genre and Autonomy in Cultural Production The case of travel guidebook production

22. Marius Gudmand-Høyer
Stemningssindssygdommenes historie i det 19. århundrede Omtydningen af melankolien og manien som bipolære stemningslidelser i dansk sammenhæng under hensyn til dannelsen af det moderne følelseslivs relative autonomi. En problematiserings- og erfarings-analytisk undersøgelse

23. Lichen Alex Yu
Fabricating an S&OP Process Circulating References and Matters of Concern

24. Esben Alfort
The Expression of a Need Understanding search

25. Trine Pallesen
Assembling Markets for Wind Power An Inquiry into the Making of Market Devices

26. Anders Koed Madsen
Web-Visions Repurposing digital traces to organize social attention

27. Lærke Højgaard Christiansen
BREWING ORGANIZATIONAL RESPONSES TO INSTITUTIONAL LOGICS

28. Tommy Kjær Lassen
EGENTLIG SELVLEDELSE En ledelsesfilosofisk afhandling om selvledelsens paradoksale dynamik og eksistentielle engagement

29. Morten Rossing
Local Adaption and Meaning Creation in Performance Appraisal

30. Søren Obed Madsen
Lederen som oversætter
Et oversættelsesteoretisk perspektiv på strategisk arbejde

31. Thomas Høgenhaven
Open Government Communities
Does Design Affect Participation?

32. Kirstine Zinck Pedersen
Failsafe Organizing?
A Pragmatic Stance on Patient Safety

33. Anne Petersen
Hverdagslogikker i psykiatrisk arbejde
En institutionsetnografisk undersøgelse af hverdagen i psykiatriske organisationer

34. Didde Maria Humle
Fortællinger om arbejde

35. Mark Holst-Mikkelsen
Strategieksekvering i praksis – barrierer og muligheder!

36. Malek Maalouf
Sustaining lean
Strategies for dealing with organizational paradoxes

37. Nicolaj Tofte Brenneche
Systemic Innovation In The Making
The Social Productivity of Cartographic Crisis and Transitions in the Case of SEEIT

38. Morten Gylling
The Structure of Discourse
A Corpus-Based Cross-Linguistic Study

39. Binzhang YANG
Urban Green Spaces for Quality Life - Case Study: the landscape architecture for people in Copenhagen

40. Michael Friis Pedersen
Finance and Organization:
The Implications for Whole Farm Risk Management

41. Even Fallan
Issues on supply and demand for environmental accounting information

42. Ather Nawaz
Website user experience
A cross-cultural study of the relation between users´ cognitive style, context of use, and information architecture of local websites

43. Karin Beukel
The Determinants for Creating Valuable Inventions

44. Arjan Markus
External Knowledge Sourcing and Firm Innovation
Essays on the Micro-Foundations of Firms' Search for Innovation

2014

1. Solon Moreira
Four Essays on Technology Licensing and Firm Innovation

2. Karin Strzeletz Ivertsen
Partnership Drift in Innovation Processes
A study of the Think City electric car development

3. Kathrine Hoffmann Pii
Responsibility Flows in Patient-centred Prevention

4. Jane Bjørn Vedel
Managing Strategic Research
An empirical analysis of science-industry collaboration in a pharmaceutical company

5. Martin Gylling
Processuel strategi i organisationer
Monografi om dobbeltheden i tænkning af strategi, dels som vidensfelt i organisationsteori, dels som kunstnerisk tilgang til at skabe i erhvervsmæssig innovation

6. Linne Marie Lauesen
Corporate Social Responsibility in the Water Sector: How Material Practices and their Symbolic and Physical Meanings Form a Colonising Logic

7. Maggie Qiuzhu Mei
LEARNING TO INNOVATE: The role of ambidexterity, standard, and decision process

8. Inger Høedt-Rasmussen
Developing Identity for Lawyers Towards Sustainable Lawyering

9. Sebastian Fux
Essays on Return Predictability and Term Structure Modelling

10. Thorbjørn N. M. Lund-Poulsen
Essays on Value Based Management

11. Oana Brindusa Albu
Transparency in Organizing: A Performative Approach

12. Lena Olaison
Entrepreneurship at the limits

13. Hanne Sørum
DRESSED FOR WEB SUCCESS? An Empirical Study of Website Quality in the Public Sector

14. Lasse Folke Henriksen
Knowing networks How experts shape transnational governance

15. Maria Halbinger
Entrepreneurial Individuals Empirical Investigations into Entrepreneurial Activities of Hackers and Makers

16. Robert Spliid
Kapitalfondenes metoder og kompetencer

17. Christiane Stelling
Public-private partnerships & the need, development and management of trusting A processual and embedded exploration

18. Marta Gasparin
Management of design as a translation process

19. Kåre Moberg
Assessing the Impact of Entrepreneurship Education From ABC to PhD

20. Alexander Cole
Distant neighbors Collective learning beyond the cluster

21. Martin Møller Boje Rasmussen
Is Competitiveness a Question of Being Alike? How the United Kingdom, Germany and Denmark Came to Compete through their Knowledge Regimes from 1993 to 2007

22. Anders Ravn Sørensen
Studies in central bank legitimacy, currency and national identity Four cases from Danish monetary history

23. Nina Bellak
Can Language be Managed in International Business? Insights into Language Choice from a Case Study of Danish and Austrian Multinational Corporations (MNCs)

24. Rikke Kristine Nielsen
Global Mindset as Managerial Meta-competence and Organizational Capability: Boundary-crossing Leadership Cooperation in the MNC The Case of 'Group Mindset' in Solar A/S.

25. Rasmus Koss Hartmann
User Innovation inside government Towards a critically performative foundation for inquiry

26. Kristian Gylling Olesen
Flertydig og emergerende ledelse i folkeskolen
Et aktør-netværksteoretisk ledelses-studie af politiske evalueringsreformers betydning for ledelse i den danske folkeskole

27. Troels Riis Larsen
Kampen om Danmarks omdømme 1945-2010
Omdømmearbejde og omdømmepolitik

28. Klaus Majgaard
Jagten på autenticitet i offentlig styring

29. Ming Hua Li
Institutional Transition and Organizational Diversity:
Differentiated internationalization strategies of emerging market state-owned enterprises

30. Sofie Blinkenberg Federspiel
IT, organisation og digitalisering:
Institutionelt arbejde i den kommunale digitaliseringsproces

31. Elvi Weinreich
Hvilke offentlige ledere er der brug for når velfærdstænkningen flytter sig
– er Diplomuddannelsens lederprofil svaret?

32. Ellen Mølgaard Korsager
Self-conception and image of context in the growth of the firm
– A Penrosian History of Fiberline Composites

33. Else Skjold
The Daily Selection

34. Marie Louise Conradsen
The Cancer Centre That Never Was
The Organisation of Danish Cancer Research 1949-1992

35. Virgilio Failla
Three Essays on the Dynamics of Entrepreneurs in the Labor Market

36. Nicky Nedergaard
Brand-Based Innovation
Relational Perspectives on Brand Logics and Design Innovation Strategies and Implementation

37. Mads Gjedsted Nielsen
Essays in Real Estate Finance

38. Kristin Martina Brandl
Process Perspectives on Service Offshoring

39. Mia Rosa Koss Hartmann
In the gray zone
With police in making space for creativity

40. Karen Ingerslev
Healthcare Innovation under The Microscope
Framing Boundaries of Wicked Problems

41. Tim Neerup Themsen
Risk Management in large Danish public capital investment programmes

2015

1. Jakob Ion Wille
Film som design
Design af levende billeder i film og tv-serier

2. Christiane Mossin
Interzones of Law and Metaphysics
Hierarchies, Logics and Foundations of Social Order seen through the Prism of EU Social Rights

3. Thomas Tøth
TRUSTWORTHINESS: ENABLING GLOBAL COLLABORATION
An Ethnographic Study of Trust, Distance, Control, Culture and Boundary Spanning within Offshore Outsourcing of IT Services

4. Steven Højlund
Evaluation Use in Evaluation Systems – The Case of the European Commission

5. Julia Kirch Kirkegaard
AMBIGUOUS WINDS OF CHANGE – OR FIGHTING AGAINST WINDMILLS IN CHINESE WIND POWER
A CONSTRUCTIVIST INQUIRY INTO CHINA'S PRAGMATICS OF GREEN MARKETISATION MAPPING CONTROVERSIES OVER A POTENTIAL TURN TO QUALITY IN CHINESE WIND POWER

6. Michelle Carol Antero
A Multi-case Analysis of the Development of Enterprise Resource Planning Systems (ERP) Business Practices

Morten Friis-Olivarius
The Associative Nature of Creativity

7. Mathew Abraham
New Cooperativism:
A study of emerging producer organisations in India

8. Stine Hedegaard
Sustainability-Focused Identity: Identity work performed to manage, negotiate and resolve barriers and tensions that arise in the process of constructing or ganizational identity in a sustainability context

9. Cecilie Glerup
Organizing Science in Society – the conduct and justification of resposible research

10. Allan Salling Pedersen
Implementering af ITIL® IT-governance - når best practice konflikter med kulturen Løsning af implementerings-problemer gennem anvendelse af kendte CSF i et aktionsforskningsforløb.

11. Nihat Misir
A Real Options Approach to Determining Power Prices

12. Mamdouh Medhat
MEASURING AND PRICING THE RISK OF CORPORATE FAILURES

13. Rina Hansen
Toward a Digital Strategy for Omnichannel Retailing

14. Eva Pallesen
In the rhythm of welfare creation
A relational processual investigation moving beyond the conceptual horizon of welfare management

15. Gouya Harirchi
In Search of Opportunities: Three Essays on Global Linkages for Innovation

16. Lotte Holck
Embedded Diversity: A critical ethnographic study of the structural tensions of organizing diversity

17. Jose Daniel Balarezo
Learning through Scenario Planning

18. Louise Pram Nielsen
Knowledge dissemination based on terminological ontologies. Using eye tracking to further user interface design.

19. Sofie Dam
PUBLIC-PRIVATE PARTNERSHIPS FOR INNOVATION AND SUSTAINABILITY TRANSFORMATION
An embedded, comparative case study of municipal waste management in England and Denmark

20. Ulrik Hartmyer Christiansen
Follwoing the Content of Reported Risk Across the Organization

21. Guro Refsum Sanden
Language strategies in multinational corporations. A cross-sector study of financial service companies and manufacturing companies.

22. Linn Gevoll
Designing performance management for operational level
- A closer look on the role of design choices in framing coordination and motivation

23. Frederik Larsen
Objects and Social Actions
– on Second-hand Valuation Practices

24. Thorhildur Hansdottir Jetzek
The Sustainable Value of Open Government Data
Uncovering the Generative Mechanisms of Open Data through a Mixed Methods Approach

25. Gustav Toppenberg
Innovation-based M&A
– Technological-Integration Challenges – The Case of Digital-Technology Companies

26. Mie Plotnikof
Challenges of Collaborative Governance
An Organizational Discourse Study of Public Managers' Struggles with Collaboration across the Daycare Area

27. Christian Garmann Johnsen
Who Are the Post-Bureaucrats?
A Philosophical Examination of the Creative Manager, the Authentic Leader and the Entrepreneur

28. Jacob Brogaard-Kay
Constituting Performance Management
A field study of a pharmaceutical company

29. Rasmus Ploug Jenle
Engineering Markets for Control: Integrating Wind Power into the Danish Electricity System

30. Morten Lindholst
Complex Business Negotiation: Understanding Preparation and Planning

31. Morten Grynings
TRUST AND TRANSPARENCY FROM AN ALIGNMENT PERSPECTIVE

32. Peter Andreas Norn
Byregimer og styringsevne: Politisk lederskab af store byudviklingsprojekter

33. Milan Miric
Essays on Competition, Innovation and Firm Strategy in Digital Markets

34. Sanne K. Hjordrup
The Value of Talent Management
Rethinking practice, problems and possibilities

35. Johanna Sax
Strategic Risk Management
– Analyzing Antecedents and Contingencies for Value Creation

36. Pernille Rydén
Strategic Cognition of Social Media

37. Mimmi Sjöklint
The Measurable Me
- The Influence of Self-tracking on the User Experience

38. Juan Ignacio Staricco
Towards a Fair Global Economic Regime? A critical assessment of Fair Trade through the examination of the Argentinean wine industry

39. Marie Henriette Madsen
Emerging and temporary connections in Quality work

40. Yangfeng CAO
Toward a Process Framework of Business Model Innovation in the Global Context
Entrepreneurship-Enabled Dynamic Capability of Medium-Sized Multinational Enterprises

41. Carsten Scheibye
Enactment of the Organizational Cost Structure in Value Chain Configuration
A Contribution to Strategic Cost Management

2016

1. Signe Sofie Dyrby
Enterprise Social Media at Work

2. Dorte Boesby Dahl
The making of the public parking attendant
Dirt, aesthetics and inclusion in public service work

3. Verena Girschik
Realizing Corporate Responsibility Positioning and Framing in Nascent Institutional Change

4. Anders Ørding Olsen
IN SEARCH OF SOLUTIONS
Inertia, Knowledge Sources and Diversity in Collaborative Problem-solving

5. Pernille Steen Pedersen
Udkast til et nyt copingbegreb
En kvalifikation af ledelsesmuligheder for at forebygge sygefravær ved psykiske problemer.

6. Kerli Kant Hvass
Weaving a Path from Waste to Value: Exploring fashion industry business models and the circular economy

7. Kasper Lindskow
Exploring Digital News Publishing Business Models – a production network approach

8. Mikkel Mouritz Marfelt
The chameleon workforce:
Assembling and negotiating the content of a workforce

9. Marianne Bertelsen
Aesthetic encounters
Rethinking autonomy, space & time in today's world of art

10. Louise Hauberg Wilhelmsen
EU PERSPECTIVES ON INTERNATIONAL COMMERCIAL ARBITRATION

11. Abid Hussain
On the Design, Development and Use of the Social Data Analytics Tool (SODATO): Design Propositions, Patterns, and Principles for Big Social Data Analytics

12. Mark Bruun
Essays on Earnings Predictability

13. Tor Bøe-Lillegraven
BUSINESS PARADOXES, BLACK BOXES, AND BIG DATA: BEYOND ORGANIZATIONAL AMBIDEXTERITY

14. Hadis Khonsary-Atighi
ECONOMIC DETERMINANTS OF DOMESTIC INVESTMENT IN AN OIL-BASED ECONOMY: THE CASE OF IRAN (1965-2010)

15. Maj Lervad Grasten
Rule of Law or Rule by Lawyers?
On the Politics of Translation in Global Governance

16. Lene Granzau Juel-Jacobsen
SUPERMARKEDETS MODUS OPERANDI – en hverdagssociologisk undersøgelse af forholdet mellem rum og handlen og understøtte relationsopbygning?

17. Christine Thalsgård Henriques
In search of entrepreneurial learning – Towards a relational perspective on incubating practices?

18. Patrick Bennett
Essays in Education, Crime, and Job Displacement

19. Søren Korsgaard
Payments and Central Bank Policy

20. Marie Kruse Skibsted
Empirical Essays in Economics of Education and Labor

21. Elizabeth Benedict Christensen
The Constantly Contingent Sense of Belonging of the 1.5 Generation Undocumented Youth
An Everyday Perspective

22. Lasse J. Jessen
Essays on Discounting Behavior and Gambling Behavior

23. Kalle Johannes Rose
Når stifterviljen dør…
Et retsøkonomisk bidrag til 200 års juridisk konflikt om ejendomsretten

24. Andreas Søeborg Kirkedal
Danish Stød and Automatic Speech Recognition

25. Ida Lunde Jørgensen
Institutions and Legitimations in Finance for the Arts

26. Olga Rykov Ibsen
An empirical cross-linguistic study of directives: A semiotic approach to the sentence forms chosen by British, Danish and Russian speakers in native and ELF contexts

27. Desi Volker
Understanding Interest Rate Volatility

28. Angeli Elizabeth Weller
Practice at the Boundaries of Business Ethics & Corporate Social Responsibility

29. Ida Danneskiold-Samsøe
Levende læring i kunstneriske organisationer
En undersøgelse af læringsprocesser mellem projekt og organisation på Aarhus Teater

30. Leif Christensen
Quality of information – The role of internal controls and materiality

31. Olga Zarzecka
Tie Content in Professional Networks

32. Henrik Mahncke
De store gaver
- Filantropiens gensidighedsrelationer i teori og praksis

33. Carsten Lund Pedersen
Using the Collective Wisdom of Frontline Employees in Strategic Issue Management

34. Yun Liu
Essays on Market Design

35. Denitsa Hazarbassanova Blagoeva
The Internationalisation of Service Firms

36. Manya Jaura Lind
Capability development in an off-shoring context: How, why and by whom

37. Luis R. Boscán F.
Essays on the Design of Contracts and Markets for Power System Flexibility

38. Andreas Philipp Distel
Capabilities for Strategic Adaptation: Micro-Foundations, Organizational Conditions, and Performance Implications

39. Lavinia Bleoca
The Usefulness of Innovation and Intellectual Capital in Business Performance: The Financial Effects of Knowledge Management vs. Disclosure

40. Henrik Jensen
Economic Organization and Imperfect Managerial Knowledge: A Study of the Role of Managerial Meta-Knowledge in the Management of Distributed Knowledge

41. Stine Mosekjær
The Understanding of English Emotion Words by Chinese and Japanese Speakers of English as a Lingua Franca An Empirical Study

42. Hallur Tor Sigurdarson
The Ministry of Desire - Anxiety and entrepreneurship in a bureaucracy

43. Kätlin Pulk
Making Time While Being in Time
A study of the temporality of organizational processes

44. Valeria Giacomin
Contextualizing the cluster Palm oil in Southeast Asia in global perspective (1880s–1970s)

45. Jeanette Willert
Managers' use of multiple Management Control Systems: The role and interplay of management control systems and company performance

46. Mads Vestergaard Jensen
Financial Frictions: Implications for Early Option Exercise and Realized Volatility

47. Mikael Reimer Jensen
Interbank Markets and Frictions

48. Benjamin Faigen
Essays on Employee Ownership

49. Adela Michea
Enacting Business Models
An Ethnographic Study of an Emerging Business Model Innovation within the Frame of a Manufacturing Company.

50. Iben Sandal Stjerne
Transcending organization in temporary systems
Aesthetics' organizing work and employment in Creative Industries

51. Simon Krogh
Anticipating Organizational Change

52. Sarah Netter
Exploring the Sharing Economy

53. Lene Tolstrup Christensen
State-owned enterprises as institutional market actors in the marketization of public service provision:
A comparative case study of Danish and Swedish passenger rail 1990–2015

54. Kyoung(Kay) Sun Park
Three Essays on Financial Economics

2017

1. Mari Bjerck
Apparel at work. Work uniforms and women in male-dominated manual occupations.

2. Christoph H. Flöthmann
Who Manages Our Supply Chains? Backgrounds, Competencies and Contributions of Human Resources in Supply Chain Management

3. Aleksandra Anna Rzeźnik
Essays in Empirical Asset Pricing

4. Claes Bäckman
Essays on Housing Markets

5. Kirsti Reitan Andersen
Stabilizing Sustainability
in the Textile and Fashion Industry

6. Kira Hoffmann
Cost Behavior: An Empirical Analysis of Determinants and Consequences of Asymmetries

7. Tobin Hanspal
Essays in Household Finance

8. Nina Lange
Correlation in Energy Markets

9. Anjum Fayyaz
Donor Interventions and SME Networking in Industrial Clusters in Punjab Province, Pakistan

10. Magnus Paulsen Hansen
Trying the unemployed. Justification and critique, emancipation and coercion towards the 'active society'. A study of contemporary reforms in France and Denmark

11. Sameer Azizi
Corporate Social Responsibility in Afghanistan
– a critical case study of the mobile telecommunications industry

12. Malene Myhre
The internationalization of small and medium-sized enterprises: A qualitative study

13. Thomas Presskorn-Thygesen
The Significance of Normativity – Studies in Post-Kantian Philosophy and Social Theory

14. Federico Clementi
Essays on multinational production and international trade

15. Lara Anne Hale
Experimental Standards in Sustainability Transitions: Insights from the Building Sector

16. Richard Pucci
Accounting for Financial Instruments in an Uncertain World Controversies in IFRS in the Aftermath of the 2008 Financial Crisis

17. Sarah Maria Denta
Kommunale offentlige private partnerskaber Regulering I skyggen af Farumsagen

18. Christian Östlund
Design for e-training

19. Amalie Martinus Hauge
Organizing Valuations – a pragmatic inquiry

20. Tim Holst Celik
Tension-filled Governance? Exploring the Emergence, Consolidation and Reconfiguration of Legitimatory and Fiscal State-crafting

21. Christian Bason
Leading Public Design: How managers engage with design to transform public governance

22. Davide Tomio
Essays on Arbitrage and Market Liquidity

23. Simone Stæhr
Financial Analysts' Forecasts Behavioral Aspects and the Impact of Personal Characteristics

24. Mikkel Godt Gregersen
Management Control, Intrinsic Motivation and Creativity – How Can They Coexist

25. Kristjan Johannes Suse Jespersen
Advancing the Payments for Ecosystem Service Discourse Through Institutional Theory

26. Kristian Bondo Hansen
Crowds and Speculation: A study of crowd phenomena in the U.S. financial markets 1890 to 1940

27. Lars Balslev
Actors and practices – An institutional study on management accounting change in Air Greenland

28. Sven Klingler
Essays on Asset Pricing with Financial Frictions

29. Klement Ahrensbach Rasmussen
Business Model Innovation The Role of Organizational Design

30. Giulio Zichella
Entrepreneurial Cognition. Three essays on entrepreneurial behavior and cognition under risk and uncertainty

31. Richard Ledborg Hansen
En forkærlighed til det eksisterende – mellemlederens oplevelse af forandringsmodstand i organisatoriske forandringer

32. Vilhelm Stefan Holsting
Militært chefvirke: Kritik og retfærdiggørelse mellem politik og profession

33. Thomas Jensen
Shipping Information Pipeline: An information infrastructure to improve international containerized shipping

34. Dzmitry Bartalevich
Do economic theories inform policy? Analysis of the influence of the Chicago School on European Union competition policy

35. Kristian Roed Nielsen
Crowdfunding for Sustainability: A study on the potential of reward-based crowdfunding in supporting sustainable entrepreneurship

36. Emil Husted
There is always an alternative: A study of control and commitment in political organization

37. Anders Ludvig Sevelsted
Interpreting Bonds and Boundaries of Obligation. A genealogy of the emergence and development of Protestant voluntary social work in Denmark as shown through the cases of the Copenhagen Home Mission and the Blue Cross (1850 – 1950)

38. Niklas Kohl
Essays on Stock Issuance

39. Maya Christiane Flensborg Jensen
BOUNDARIES OF PROFESSIONALIZATION AT WORK An ethnography-inspired study of care workers' dilemmas at the margin

40. Andreas Kamstrup
Crowdsourcing and the Architectural Competition as Organisational Technologies

41. Louise Lyngfeldt Gorm Hansen
Triggering Earthquakes in Science, Politics and Chinese Hydropower - A Controversy Study

2018

1. Vishv Priya Kohli
Combatting Falsifi cation and Counterfeiting of Medicinal Products in the E uropean Union – A Legal Analysis

2. Helle Haurum
Customer Engagement Behavior in the context of Continuous Service Relationships

3. Nis Grünberg
The Party -state order: Essays on China's political organization and political economic institutions

4. Jesper Christensen
A Behavioral Theory of Human Capital Integration

5. Poula Marie Helth
Learning in practice

6. Rasmus Vendler Toft-Kehler
Entrepreneurship as a career? An investigation of the relationship between entrepreneurial experience and entrepreneurial outcome

7. Szymon Furtak
Sensing the Future: Designing sensor-based predictive information systems for forecasting spare part demand for diesel engines

8. Mette Brehm Johansen
Organizing patient involvement. An ethnographic study

9. Iwona Sulinska
Complexities of Social Capital in Boards of Directors

10. Cecilie Fanøe Petersen
Award of public contracts as a means to conferring State aid: A legal analysis of the interface between public procurement law and State aid law

11. Ahmad Ahmad Barirani
Three Experimental Studies on Entrepreneurship

12. Carsten Allerslev Olsen
Financial Reporting Enforcement: Impact and Consequences

13. Irene Christensen
New product fumbles – Organizing for the Ramp-up process

14. Jacob Taarup-Esbensen
Managing communities – Mining MNEs' community risk management practices

15. Lester Allan Lasrado
Set-Theoretic approach to maturity models

16. Mia B. Münster
Intention vs. Perception of Designed Atmospheres in Fashion Stores

17. Anne Sluhan
Non-Financial Dimensions of Family Firm Ownership: How Socioemotional Wealth and Familiness Influence Internationalization

18. Henrik Yde Andersen
Essays on Debt and Pensions

19. Fabian Heinrich Müller
Valuation Reversed – When Valuators are Valuated. An Analysis of the Perception of and Reaction to Reviewers in Fine-Dining

20. Martin Jarmatz
Organizing for Pricing

21. Niels Joachim Christfort Gormsen
Essays on Empirical Asset Pricing

22. Diego Zunino
Socio-Cognitive Perspectives in Business Venturing

23. Benjamin Asmussen
Networks and Faces between Copenhagen and Canton, 1730-1840

24. Dalia Bagdziunaite
Brains at Brand Touchpoints
A Consumer Neuroscience Study of Information Processing of Brand Advertisements and the Store Environment in Compulsive Buying

25. Erol Kazan
Towards a Disruptive Digital Platform Model

26. Andreas Bang Nielsen
Essays on Foreign Exchange and Credit Risk

27. Anne Krebs
Accountable, Operable Knowledge Toward Value Representations of Individual Knowledge in Accounting

28. Matilde Fogh Kirkegaard
A firm- and demand-side perspective on behavioral strategy for value creation: Insights from the hearing aid industry

29. Agnieszka Nowinska
SHIPS AND RELATION-SHIPS
Tie formation in the sector of shipping intermediaries in shipping

30. Stine Evald Bentsen
The Comprehension of English Texts by Native Speakers of English and Japanese, Chinese and Russian Speakers of English as a Lingua Franca. An Empirical Study.

31. Stine Louise Daetz
Essays on Financial Frictions in Lending Markets

32. *Christian Skov Jensen*
Essays on Asset Pricing

33. Anders Kryger
Aligning future employee action and corporate strategy in a resource-scarce environment

34. Maitane Elorriaga-Rubio
The behavioral foundations of strategic decision-making: A contextual perspective

35. Roddy Walker
Leadership Development as Organisational Rehabilitation: Shaping Middle-Managers as Double Agents

36. Jinsun Bae
Producing Garments for Global Markets Corporate social responsibility (CSR) in Myanmar's export garment industry 2011–2015

37. Queralt Prat-i-Pubill
Axiological knowledge in a knowledge driven world. Considerations for organizations.

38. Pia Mølgaard
Essays on Corporate Loans and Credit Risk

39. Marzia Aricò
Service Design as a Transformative Force: Introduction and Adoption in an Organizational Context

40. Christian Dyrlund Wåhlin-Jacobsen
Constructing change initiatives in workplace voice activities Studies from a social interaction perspective

41. Peter Kalum Schou
Institutional Logics in Entrepreneurial Ventures: How Competing Logics arise and shape organizational processes and outcomes during scale-up

42. Per Henriksen
Enterprise Risk Management Rationaler og paradokser i en moderne ledelsesteknologi

43. Maximilian Schellmann
The Politics of Organizing Refugee Camps

44. Jacob Halvas Bjerre
Excluding the Jews: The Aryanization of Danish-German Trade and German Anti-Jewish Policy in Denmark 1937-1943

45. Ida Schrøder
Hybridising accounting and caring: A symmetrical study of how costs and needs are connected in Danish child protection work

46. Katrine Kunst
Electronic Word of Behavior: Transforming digital traces of consumer behaviors into communicative content in product design

47. Viktor Avlonitis
Essays on the role of modularity in management: Towards a unified perspective of modular and integral design

48. Anne Sofie Fischer
Negotiating Spaces of Everyday Politics:
-An ethnographic study of organizing for social transformation for women in urban poverty, Delhi, India

2019

1. Shihan Du
ESSAYS IN EMPIRICAL STUDIES BASED ON ADMINISTRATIVE LABOUR MARKET DATA

2. Mart Laatsit
Policy learning in innovation policy: A comparative analysis of European Union member states

3. Peter J. Wynne
Proactively Building Capabilities for the Post-Acquisition Integration of Information Systems

4. Kalina S. Staykova
Generative Mechanisms for Digital Platform Ecosystem Evolution

5. Ieva Linkeviciute
Essays on the Demand-Side Management in Electricity Markets

6. Jonatan Echebarria Fernández
Jurisdiction and Arbitration Agreements in Contracts for the Carriage of Goods by Sea – Limitations on Party Autonomy

7. Louise Thorn Bøttkjær
Votes for sale. Essays on clientelism in new democracies.

8. Ditte Vilstrup Holm
The Poetics of Participation: the organizing of participation in contemporary art

9. Philip Rosenbaum
Essays in Labor Markets – Gender, Fertility and Education

10. Mia Olsen
Mobile Betalinger - Succesfaktorer og Adfærdsmæssige Konsekvenser

11. Adrián Luis Mérida Gutiérrez
Entrepreneurial Careers: Determinants, Trajectories, and Outcomes

12. Frederik Regli
Essays on Crude Oil Tanker Markets

13. Cancan Wang
Becoming Adaptive through Social Media: Transforming Governance and Organizational Form in Collaborative E-government

14. Lena Lindbjerg Sperling
Economic and Cultural Development: Empirical Studies of Micro-level Data

15. Xia Zhang
Obligation, face and facework: An empirical study of the communicative act of cancellation of an obligation by Chinese, Danish and British business professionals in both L1 and ELF contexts

16. Stefan Kirkegaard Sløk-Madsen
Entrepreneurial Judgment and Commercialization

17. Erin Leitheiser
The Comparative Dynamics of Private Governance
The case of the Bangladesh Ready-Made Garment Industry

18. Lone Christensen
STRATEGIIMPLEMENTERING: STYRINGSBESTRÆBELSER, IDENTITET OG AFFEKT

19. Thomas Kjær Poulsen
Essays on Asset Pricing with Financial Frictions

20. Maria Lundberg
Trust and self-trust in leadership identity constructions: A qualitative exploration of narrative ecology in the discursive aftermath of heroic discourse

21. Tina Joanes
Sufficiency for sustainability
Determinants and strategies for reducing clothing consumption

22. Benjamin Johannes Flesch
Social Set Visualizer (SoSeVi): Design, Development and Evaluation of a Visual Analytics Tool for Computational Set Analysis of Big Social Data

23. Henriette Sophia Groskopff Tvede Schleimann
Creating innovation through collaboration – Partnering in the maritime sector

24. Kristian Steensen Nielsen
The Role of Self-Regulation in Environmental Behavior Change

25. Lydia L. Jørgensen
Moving Organizational Atmospheres

26. Theodor Lucian Vladasel
Embracing Heterogeneity: Essays in Entrepreneurship and Human Capital

27. Seidi Suurmets
Contextual Effects in Consumer Research: An Investigation of Consumer Information Processing and Behavior via the Applicati on of Eye-tracking Methodology

28. Marie Sundby Palle Nickelsen
Reformer mellem integritet og innovation: Reform af reformens form i den danske centraladministration fra 1920 til 2019

29. Vibeke Kristine Scheller
The temporal organizing of same-day discharge: A tempography of a Cardiac Day Unit

30. Qian Sun
Adopting Artificial Intelligence in Healthcare in the Digital Age: Perceived Challenges, Frame Incongruence, and Social Power

31. Dorthe Thorning Mejlhede
Artful change agency and organizing for innovation – the case of a Nordic fintech cooperative

32. Benjamin Christoffersen
Corporate Default Models:
Empirical Evidence and Methodical Contributions

33. Filipe Antonio Bonito Vieira
Essays on Pensions and Fiscal Sustainability

34. Morten Nicklas Bigler Jensen
Earnings Management in Private Firms: An Empirical Analysis of Determinants and Consequences of Earnings Management in Private Firms

2020

1. Christian Hendriksen
Inside the Blue Box: Explaining industry influence in the International Maritime Organization

2. Vasileios Kosmas
Environmental and social issues in global supply chains:
Emission reduction in the maritime transport industry and maritime search and rescue operational response to migration

3. Thorben Peter Simonsen
The spatial organization of psychiatric practice: A situated inquiry into 'healing architecture'

4. Signe Bruskin
The infinite storm: An ethnographic study of organizational change in a bank

5. Rasmus Corlin Christensen
Politics and Professionals: Transnational Struggles to Change International Taxation

6. Robert Lorenz Törmer
The Architectural Enablement of a Digital Platform Strategy

7. Anna Kirkebæk Johansson Gosovic
Ethics as Practice: An ethnographic study of business ethics in a multinational biopharmaceutical company

8. Frank Meier
Making up leaders in leadership development

9. Kai Basner
Servitization at work: On proliferation and containment

10. Anestis Keremis
Anti-corruption in action: How is anticorruption practiced in multinational companies?

11. Marie Larsen Ryberg
Governing Interdisciolinarity: Stakes and translations of interdisciplinarity in Danish high school education.

12. Jannick Friis Christensen
Queering organisation(s): Norm-critical orientations to organising and researching diversity

13. Thorsteinn Sigurdur Sveinsson
Essays on Macroeconomic Implications of Demographic Change

14. Catherine Casler
Reconstruction in strategy and organization: For a pragmatic stance

15. Luisa Murphy
Revisiting the standard organization of multi-stakeholder initiatives (MSIs): The case of a meta-MSI in Southeast Asia

16. Friedrich Bergmann
Essays on International Trade

17. Nicholas Haagensen
European Legal Networks in Crisis: The Legal Construction of Economic Policy

18. Charlotte Biil
Samskabelse med en sommerfuglemodel: Hybrid ret i forbindelse med et partnerskabsprojekt mellem 100 selvejende daginstitutioner, deres paraplyorganisation, tre kommuner og CBS

19. Andreas Dimmelmeier
The Role of Economic Ideas in Sustainable Finance: From Paradigms to Policy

20. Maibrith Kempka Jensen
Ledelse og autoritet i interaktion - En interaktionsbaseret undersøgelse af autoritet i ledelse i praksis

21. Thomas Burø
LAND OF LIGHT: Assembling the Ecology of Culture in Odsherred 2000-2018

22. Prins Marcus Valiant Lantz
Timely Emotion: The Rhetorical Framing of Strategic Decision Making

23. Thorbjørn Vittenhof Fejerskov
Fra værdi til invitationer - offentlig værdiskabelse gennem affekt, potentialitet og begivenhed

24. Lea Acre Foverskov
Demographic Change and Employment: Path dependencies and institutional logics in the European Commission

25. Anirudh Agrawal
A Doctoral Dissertation

26. Julie Marx
Households in the housing market

27. Hadar Gafni
Alternative Digital Methods of Providing Entrepreneurial Finance

28. Mathilde Hjerrild Carlsen
Ledelse af engagementer: En undersøgelse af samarbejde mellem folkeskoler og virksomheder i Danmark

29. Suen Wang
Essays on the Gendered Origins and Implications of Social Policies in the Developing World

30. Stine Hald Larsen
The Story of the Relative: A Systems-Theoretical Analysis of the Role of the Relative in Danish Eldercare Policy from 1930 to 2020

31. Christian Casper Hofma
Immersive technologies and organizational routines: When head-mounted displays meet organizational routines

32. Jonathan Feddersen
The temporal emergence of social relations: An event-based perspective of organising

33. Nageswaran Vaidyanathan
ENRICHING RETAIL CUSTOMER EXPERIENCE USING AUGMENTED REALITY

2021

1. Vanya Rusinova
The Determinants of Firms' Engagement in Corporate Social Responsibility: Evidence from Natural Experiments

2. Lívia Lopes Barakat
Knowledge management mechanisms at MNCs:
The enhancing effect of absorptive capacity and its effects on performance and innovation

3. Søren Bundgaard Brøgger
Essays on Modern Derivatives Markets

4. Martin Friis Nielsen
Consuming Memory: Towards a conceptualization of social media platforms as organizational technologies of consumption

05. Fei Liu
Emergent Technology Use in Consumer Decision Journeys: A Process-as-Propensity Approach

06. Jakob Rømer Barfod
Ledelse i militære højrisikoteams

07. Elham Shafiei Gol
Creative Crowdwork Arrangements

08. Árni Jóhan Petersen
Collective Imaginary as (Residual) Fantasy: A Case Study of the Faroese Oil Bonanza

09. Søren Bering
"Manufacturing, Forward Integration and Governance Strategy"

10. Lars Oehler
Technological Change and the Decomposition of Innovation:
Choices and Consequences for Latecomer Firm Upgrading: The Case of China's Wind Energy Sector

11. Lise Dahl Arvedsen
Leadership in interaction in a virtual context:
A study of the role of leadership processes in a complex context, and how such processes are accomplished in practice

12. Jacob Emil Jeppesen
Essays on Knowledge networks, scientific impact and new knowledge adoption

13. Kasper Ingeman Beck
Essays on Chinese State-Owned Enterprises:
Reform, Corporate Governance and Subnational Diversity

14. Sönnich Dahl Sönnichsen
Exploring the interface between public demand and private supply for implementation of circular economy principles

15. Benjamin Knox
Essays on Financial Markets and Monetary Policy

16. Anita Eskesen
Essays on Utility Regulation: Evaluating Negotiation-Based Approaches inthe Context of Danish Utility Regulation

17. Agnes Guenther
Essays on Firm Strategy and Human Capital

18. Sophie Marie Cappelen
Walking on Eggshells: The balancing act of temporal work in a setting of culinary change

19. Manar Saleh Alnamlah
About Gender Gaps in Entrepreneurial Finance

20. Kirsten Tangaa Nielsen
Essays on the Value of CEOs and Directors

21. Renée Ridgway
Re:search - the Personalised Subject vs. the Anonymous User

22. Codrina Ana Maria Lauth
IMPACT Industrial Hackathons: Findings from a longitudinal case study on short-term vs long-term IMPACT implementations from industrial hackathons within Grundfos

23. Wolf-Hendrik Uhlbach
Scientist Mobility: Essays on knowledge production and innovation

24. Tomaz Sedej
Blockchain technology and inter-organizational relationships

25. Lasse Bundgaard
Public Private Innovation Partnerships: Creating Public Value & Scaling Up Sustainable City Solutions

26. Dimitra Makri Andersen
Walking through Temporal Walls: Rethinking NGO Organizing for Sustainability through a Temporal Lens on NGO-Business Partnerships

27. Louise Fjord Kjærsgaard
Allocation of the Right to Tax Income from Digital Products and Services: A legal analysis of international tax treaty law

28. Sara Dahlman
Marginal alternativity: Organizing for sustainable investing

29. Henrik Gundelach
Performance determinants: An Investigation of the Relationship between Resources, Experience and Performance in Challenging Business Environments

30. Tom Wraight
Confronting the Developmental State: American Trade Policy in the Neoliberal Era

31. Mathias Fjællegaard Jensen
Essays on Gender and Skills in the Labour Market

32. Daniel Lundgaard
Using Social Media to Discuss Global Challenges: Case Studies of the Climate Change Debate on Twitter

33. Jonas Sveistrup Søgaard
Designs for Accounting Information Systems using Distributed Ledger Technology

34. Sarosh Asad
CEO narcissism and board composition: Implications for firm strategy and performance

35. Johann Ole Willers
Experts and Markets in Cybersecurity On Definitional Power and the Organization of Cyber Risks

36. Alexander Kronies
Opportunities and Risks in Alternative Investments

37. Niels Fuglsang
The Politics of Economic Models: An inquiry into the possibilities and limits concerning the rise of macroeconomic forecasting models and what this means for policymaking

38. David Howoldt
Policy Instruments and Policy Mixes for Innovation: Analysing Their Relation to Grand Challenges, Entrepreneurship and Innovation Capability with Natural Language Processing and Latent Variable Methods

2022

01. Ditte Thøgersen
Managing Public Innovation on the Frontline

02. Rasmus Jørgensen
Essays on Empirical Asset Pricing and Private Equity

03. Nicola Giommetti
Essays on Private Equity

04. Laila Starr
When Is Health Innovation Worth It? Essays On New Approaches To Value Creation In Health

05. Maria Krysfeldt Rasmussen
Den transformative ledelsesbyrde – etnografisk studie af en religionsinspireret ledelsesfilosofi i en dansk modevirksomhed

06. Rikke Sejer Nielsen
Mortgage Decisions of Households: Consequences for Consumption and Savings

07. Myriam Noémy Marending
Essays on development challenges of low income countries: Evidence from conflict, pest and credit

08. Selorm Agbleze
A BEHAVIORAL THEORY OF FIRM FORMALIZATION

09. Rasmus Arler Bogetoft
Rettighedshavers faktisk lidte tab i immaterialretssager: Studier af dansk ret med støtte i økonomisk teori og metode

10. Franz Maximilian Buchmann
Driving the Green Transition of the Maritime Industry through Clean Technology Adoption and Environmental Policies

11. Ivan Olav Vulchanov
The role of English as an organisational language in international workplaces

12. Anne Agerbak Bilde
TRANSFORMATIONER AF SKOLELEDELSE - en systemteoretisk analyse af hvordan betingelser for skoleledelse forandres med læring som genstand i perioden 1958-2020

13. JUAN JOSE PRICE ELTON
EFFICIENCY AND PRODUCTIVITY ANALYSIS: TWO EMPIRICAL APPLICATIONS AND A METHODOLOGICAL CONTRIBUTION

14. Catarina Pessanha Gomes
The Art of Occupying: Romanticism as Political Culture in French Prefigurative politics

15. Mark Ørberg
Fondsretten og den levende vedtægt

16. Majbritt Greve
Maersk's Role in Economic Development: A Study of Shipping and Logistics Foreign Direct Investment in Global Trade

17. Sille Julie J. Abildgaard
Doing-Being Creative: Empirical Studies of Interaction in Design Work

18. Jette Sandager
Glitter, Glamour, and the Future of (More) Girls in STEM: Gendered Formations of STEM Aspirations

19. Casper Hein Winther
Inside the innovation lab - How paradoxical tensions persist in ambidextrous organizations over time

20. Nikola Kostić
Collaborative governance of inter-organizational relationships: The effects of management controls, blockchain technology, and industry standards

21. Saila Naomi Stausholm
Maximum capital, minimum tax: Enablers and facilitators of corporate tax minimization

22. Robin Porsfelt
Seeing through Signs: On Economic Imagination and Semiotic Speculation

23. Michael Herburger
Supply chain resilience – a concept for coping with cyber risks

24. Katharina Christiane Nielsen Jeschke
Balancing safety in everyday work - A case study of construction managers' dynamic safety practices

25. Jakob Ahm Sørensen
Financial Markets with Frictions and Belief Distortions

26. Jakob Laage-Thomsen
Nudging Leviathan, Protecting Demos - A Comparative Sociology of Public Administration and Expertise in the Nordics

27. Kathrine Søs Jacobsen Cesko
Collaboration between Economic Operators in the Competition for Public Contracts: A Legal and Economic Analysis of Grey Zones between EU Public Procurement Law and EU Competition Law

28. Mette Nelund
Den nye jord – Et feltstudie af et bæredygtigt virke på Farendløse Mosteri

29. Benjamin Cedric Larsen
Governing Artificial Intelligence – Lessons from the United States and China

30. Anders Brøndum Klein
Kollektiv meningsdannelse iblandt heterogene aktører i eksperimentelle samskabelsesprocesser

31. Stefano Tripodi
Essays on Development Economicis

32. Katrine Maria Lumbye
Internationalization of European Electricity Multinationals in Times of Transition

33. Xiaochun Guo
Dynamic Roles of Digital Currency – An Exploration from Interactive Processes: Difference, Time, and Perspective

34. Louise Lindbjerg
Three Essays on Firm Innovation

35. Marcela Galvis Restrepo
Feature reduction for classification with mixed data: an algorithmic approach

36. Hanna Nyborg Storm
Cultural institutions and attractiveness – How cultural institutions contribute to the development of regions and local communities

37. Anna-Bertha Heeris Christensen
Conflicts and Challenges in Practices of Commercializing Humans – An Ethnographic Study of Influencer Marketing Work

38. Casper Berg Lavmand Larsen
A Worker-Centered Inquiry into the Contingencies and Consequences of Worker Representation

39. Niels le Duc
The Resource Commitment of Multinational Enterprise R&D Activities

40. Esben Langager Olsen
Change management tools and change managers – Examining the simulacra of change

41. Anne Sophie Lassen
Gender in the Labor Market

42. Alison E. Holm
Corrective corporate responses to accusations of misconduct on societal issues

43. Chenyan Lyu
Carbon Pricing, Renewable Energy, and Clean Growth – A Market Perspective

44. Alina Grecu
UNPACKING MULTI-LEVEL OFFSHORING CONSEQUENCES: Hiring Wages, Onshore Performance, and Public Sentiment

45. Alexandra Lüth
Offshore Energy Hubs as an Emerging Concept – Sector Integration at Sea

2023

01. Cheryl Basil Sequeira
Port Business Development – Digitalisation of Port Authroity and Hybrid Governance Model

02. Mette Suder Franck
Empirical Essays on Technology Supported Learning – Studies of Danish Higher Education

03. Søren Lund Frandsen
States and Experts – Assembling Expertise for Climate Change and Pandemics

04. Guowei Dong
Innovation and Internationalization – Evidence from Chinese Manufacturing Enterprises

05. Eileen Murphy
In Service to Security – Constructing the Authority to Manage European Border Data Infrastructures

06. Bontu Lucie Guschke
THE PERSISTENCE OF SEXISM AND RACISM AT UNIVERSITIES – Exploring the imperceptibility and unspeakability of workplace harassment and discrimination in academia

07. Christoph Viebig
Learning Entrepreneurship – How capabilities shape learning from experience, reflection, and action

TITLER I ATV PH.D.-SERIEN

1992

1. Niels Kornum
Servicesamkørsel – organisation, økonomi og planlægningsmetode

1995

2. Verner Worm
Nordiske virksomheder i Kina
Kulturspecifikke interaktionsrelationer ved nordiske virksomhedsetableringer i Kina

1999

3. Mogens Bjerre
Key Account Management of Complex Strategic Relationships
An Empirical Study of the Fast Moving Consumer Goods Industry

2000

4. Lotte Darsø
Innovation in the Making
Interaction Research with heterogeneous Groups of Knowledge Workers creating new Knowledge and new Leads

2001

5. Peter Hobolt Jensen
Managing Strategic Design Identities
The case of the Lego Developer Network

2002

6. Peter Lohmann
The Deleuzian Other of Organizational Change – Moving Perspectives of the Human

7. Anne Marie Jess Hansen
To lead from a distance: The dynamic interplay between strategy and strategizing – A case study of the strategic management process

2003

8. Lotte Henriksen
Videndeling
– om organisatoriske og ledelsesmæssige udfordringer ved videndeling i praksis

9. Niels Christian Nickelsen
Arrangements of Knowing: Coordinating Procedures Tools and Bodies in Industrial Production – a case study of the collective making of new products

2005

10. Carsten Ørts Hansen
Konstruktion af ledelsesteknologier og effektivitet

TITLER I DBA PH.D.-SERIEN

2007

1. Peter Kastrup-Misir
Endeavoring to Understand Market Orientation – and the concomitant co-mutation of the researched, the re searcher, the research itself and the truth

2009

1. Torkild Leo Thellefsen
Fundamental Signs and Significance effects
A Semeiotic outline of Fundamental Signs, Significance-effects, Knowledge Profiling and their use in Knowledge Organization and Branding

2. Daniel Ronzani
When Bits Learn to Walk Don’t Make Them Trip. Technological Innovation and the Role of Regulation by Law in Information Systems Research: the Case of Radio Frequency Identification (RFID)

2010

1. Alexander Carnera
Magten over livet og livet som magt
Studier i den biopolitiske ambivalens