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Teaching and facilitating action-based entrepreneurship education: Addressing challenges towards a research agenda

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ABSTRACT

Entrepreneurship education is an increasingly distinct domain with particular approaches emphasizing experiential and action-based design. Action-based entrepreneurship education aims to deliver authenticity in entrepreneurial experiences while simultaneously facilitating learning and fair assessment. A venture creation program (VCP) is one such type of action-based entrepreneurship education which uses the creation of a new venture as the main vehicle for students' learning, complemented with more traditional educational content. Engaging students in creating real-life ventures enables unique opportunities for learning but introduces a tension between didactic and pragmatic approaches and thus various challenges for educators. This paper's purpose is to address current controversies related to VCPs and offer research-driven suggestions to key challenges. The empirical investigation, consisting of focus group data and individual interviews, builds on the accumulated knowledge of a global collaborative forum for VCPs—the VCP Forum—which consists of 11 VCPs in six countries in Europe and North America. The findings highlight three main areas that present challenges to educators: (1) facilitating students' venture creation processes, (2) assessment of the students' work connected to real-life activity, and (3) mitigating interaction with external stakeholders. The present paper contributes to entrepreneurship education research by suggesting areas for pedagogic development that need further investigation.

1. Introduction

Entrepreneurship education is a growing research area within management education (Ratten & Jones, 2020). The growth has resulted in several streams of goals for entrepreneurship education and pedagogies used to provide entrepreneurship education (van Ewijk et al., 2020). The methods and approaches used tend to be rather diverse across programs, courses, and geographical areas (Bauman & Lucy, 2019). In action-based entrepreneurship education (Neck & Corbett, 2018; Rasmussen & Sørheim, 2006), students actively engage in entrepreneurship and learning is primarily student-centered rather than teacher-led (Günzel-Jensen & Robinson, 2017; Jones, 2019; Ollila & Williams-Middleton, 2011; Rasmussen & Sørheim, 2006; Verzat et al., 2017). A venture creation program (VCP) is a specific type of action-based entrepreneurship education that uses the creation of a new venture as the main vehicle for

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students' learning complemented with more traditional curricular educational content (Lackéus & Williams-Middleton, 2015). Venture creation programs thereby combine the launch of a venture with other methods that Bauman and Lucy (2019) suggested for improving entrepreneurship education, such as teamwork, real-world learning, problem solving, and collaboration. In particular, that the students are embedded in a community of peers (and collaborators) also creating ventures seems to be particularly important for their learning (Haneberg & Aadland, 2020; Neergård et al., 2022). Bozward and Rogers-Draycott (2020) suggest that VCPs have a positive impact on students, and Lundqvist (2014) argues that VCPs may have important societal impact in terms of students developing valuable (both economic and otherwise) ventures. National student evaluations have shown that VCPs are among the most popular study programs in some countries (Studiebarometeret, 2021). However, Lackéus et al. (2011) spoke specifically to challenges in VCPs both within and outside the scope of the educator facilitating learning. Inherit tensions emerge when real venture creation (Aadland & Aaboen, 2018; Lackéus & Williams-Middleton, 2015) is introduced into education involving curriculum, student assessment, and specific (required) learning objectives (Hägg & Kurczewska, 2016; Kolb & Kolb, 2005; Kozlinska, 2016; Neck & Greene, 2011).

Entrepreneurial processes tend to be characterized by serendipity and processes that cannot be fully controlled are instead handled in different ways (Dew, 2009; Hjorth et al., 2015). There have been few attempts to align venture creation with education (Macht & Ball, 2016) due to the tension between didactic and pragmatic approaches it caused. For example, the self-driving (Aadland & Aaboen, 2020) aspect of the programs—where the students prioritize learning what they need to learn to move ventures forward—challenges learning design and assessment (Ollila & Williams-Middleton, 2011). Recognizing this tension, we investigate challenges that educators face in developing education in VCPs. Emerging topics for future research and new ways of thinking for adapting existing teaching are often found in practice (Ratten & Usmanij, 2020). This paper's purpose is to address current controversies related to VCPs and offer research-driven suggestions to key challenges. This study, therefore, uses a global forum for VCPs as a starting point for investigating tensions that exist in VCPs, and suggests a research agenda for addressing these tensions. The data collected includes written accounts, group discussions, and interviews with program facilitators, which were then analyzed to gain an in-depth understanding of how tensions are addressed. The paper contributes to the literature on entrepreneurship education by outlining an agenda for the further development of VCP education in particular, and action-based entrepreneurship education in general.

2. Literature addressing challenges of VCP education

Literature analysis of entrepreneurship education research shows four distinctive periods of development: teacher-centric knowledge approaches in the 1980s; process-based approaches, with student-*as*-entrepreneur in the 1990s; a context-driven focus in the 2000s; and, most recently, a focus on a learner-societal interface from the learner's perspective in the 2010s (Gabrielsson et al., 2020). Entrepreneurship education has been increasingly seen as practice-oriented with an emphasis on curricula that utilizes both didactic and experiential approaches (Gabrielsson et al., 2020; Henry et al., 2005). Rasmussen and Sørheim (2006) coined the term "action-based" entrepreneurship education, specifically investigating entrepreneurship education aiming to prepare individuals to become entrepreneurs (i.e., individuals who will have careers that involve self-employment), including the pursuit of new opportunities. However, Heinonen and Hytti (2010) argue that the tension between academic and pragmatic approaches in the university context often restricts the development of entrepreneurship education. Despite developments including learning-by-doing and embeddedness in entrepreneurial ecosystems, this tension still exists (Naia et al., 2014), exposing the breadth of what we still do not know about delivering action-based entrepreneurship education (Ratten & Usmanij, 2020).

2.1. Learner-centric, experienced-based entrepreneurship education

Nabi et al. (2017) specifically investigates the relationships between pedagogical methods and educational outcomes in literature on entrepreneurship education from 2004 to 2016. Their analysis finds three main patterns: most literature focuses on short-term outcomes (such as intentionality); entrepreneurship education has both positive and negative effects on attitude and behavior; and entrepreneurship in higher education is under-researched. These evaluations of the literature point to the potential of an increasing rigor-relevance gap, where greater attention is paid to analysis of educational outcomes, whereas there is also an identified need for work exploring and evolving pedagogic methods (Gabrielsson et al., 2020; Nabi et al., 2017). Entrepreneurship education has shifted from a focus on experiences foretold in the classroom to experience connected to the entrepreneurial process and the learners' own reflective understanding of said experience. Experience- and action-based pedagogy requires the learner to interact, collaborate, solve problems, face difficulties, and make decisions (Arpiainen & Kurczewska, 2017; Rasmussen & Sørheim, 2006). To make sense of one's own engagement in these actions also requires reflection (Hägg, 2021; Williams-Middleton & Donnellon, 2014), situating the individual as a reflective practitioner (Schön, 1983) of their own entrepreneurial activity.

The shift towards the learner's own understanding of experience, as relevant to them, challenges existing perceptions of what entrepreneurship education is to provide in order to be considered successful (Hägg & Kurczewska, 2019). A learner-centric perspective places emphasis on a longer-term viewpoint of the utility post-education of competences developed through education, which questions the relevance of intentionality focus, as the objective is rather sustained activity and behavior (Williams-Middleton & Donnellon, 2014). While the perceived value of a learner-centric design to entrepreneurship education may be emphasized by policy (ex. EU Entrecomp), how this can be assessed, and within the timespan of the provision of education, remains a significant challenge (Fayolle et al., 2006), as the impact of the learning often comes well after the education is completed.

2.2. Realness and real-world learning in entrepreneurship education

Learning for the practice of entrepreneurship needs to include not only cognitive reasoning but also conative and affective learning regarding alertness, shrewdness, and prudence in the context of action (Johannisson, 2016; Kyro, 2008; Longva & Foss, 2018). To allow for this type of competence development, Johannisson (2016) argued that students must also be allowed to transcend the borders of and across the university space; for example, to provide students with real-life interactions and experiences (Guerrero et al., 2016; van Ewijk et al., 2020). In additional work, Johannisson and others (Hägg, 2011, 2017; Williams-Middleton & Donnellon, 2014) also explain how real-world contextuality brought into the learning sphere expands knowledge development to include know-who, know-how, and know-why. Realness in education allows for higher-level learning from highly emotional critical incidents (Cope, 2003), including learning situations where economic and personal stakes are high (Morris et al., 2012). However, the realness and associated consequences of this learning are often not controllable, meaning that allowances must be considered in regards to how real-world activity may impact the fairness and assessment of learning. Perhaps even more importantly, the emphasis on learning from emotionally laden engaged activity (Arpiainen et al., 2013; Jones & Underwood, 2017; Williams-Middleton et al., 2021) introduces challenges of how educators are or should be prepared to manage emotional work.

2.3. VCP education design

The design principle of VCPs emphasizes the importance of real-life interaction and experience by using the process of creating a new venture as the main learning vessel (Lackéus & Williams-Middleton, 2015) and the means of developing competence. The objective of the learning is not creating a venture, but rather, the engagement in a process of venture creation, regardless of the ultimate status of the venture. The learning context in a VCP is defined as "real" (Aadland & Aaboen, 2020) as the context is authentic and the students act as entrepreneurs rather than mimicking entrepreneurial activity. Importantly, engagement in the process exposes students to the positives, negatives, tensions, and trade-offs of the start-up process as means for achieving the desired learning outcomes (Lackéus, 2014), which are applicable to both current (during study) and future (career) entrepreneurial activity (Johannisson et al., 1998).

Given the multifaceted pedagogical underpinnings of VCP education, Lackéus and Williams-Middleton (2015) outline five bridging capabilities as a response to the recognized tensions between academic and pragmatic approaches, speaking primarily to design principles allowing for integrated entrepreneurship education and entrepreneurial practice in university settings. The five capabilities are experiential learning, interdisciplinarity, process-based curriculum, an external network of resources, and contribution to regional economic development. Lackéus and Williams-Middleton (2015) emphasize the importance of design principles, including the following: the integration of course material that students need for their daily entrepreneurial action with course material aiming for the broader scope of becoming entrepreneurial; requiring students to do what they need to do to learn what they need to learn when working on their ventures; securing student learning as the primary focus (such that the new venture is only a learning vehicle with the potential of being the future career outlet); and complementing the curriculum with infrastructure for the venture process, including physical "office" space and access to industry networks. These design principles aim to balance the tension between academic requirements and the pragmatic needs of entrepreneurial activity.

The bridging capabilities outlined in Lackéus and Williams-Middleton (2015) mirror previous work addressing action- and experience-based educational approaches (Rasmussen & Sørheim, 2006): experiential learning as synonymous with learning-by-doing, interdisciplinarity as synonymous with group settings, and the use of external networks and the contribution to regional development as included in the description of network context. Williams-Middleton and Donnellon (2014) present a framework for the design and delivery of education for entrepreneurial action that addresses both declarative and personalized knowledge development, stemming from practitioners' experience of VCP-style entrepreneurship education. It seeks to span the academic and pragmatic needs of engaging in entrepreneurial activity while at university from both the learner and educator perspectives. More recent work has emphasized the complexity of the learning processes in such programs. For instance, Haneberg and Aadland (2020) argued that situated and social learning is an integral part of students' learning in VCPs through the community of practice that develops among students as student entrepreneurs.

To summarize, VCPs have been developed to provide education where students learn through an entrepreneurial process. The programs aim to build upon the richness of didactic and experiential approaches to facilitate students' learning, applicable towards current and future entrepreneurial engagement (venture creation or other forms of venturing). In bringing in realness and emotionally laden work, VCPs increase the complexity of pedagogical approaches needed and present tensions in teaching practice. Research and theoretical development have lagged behind practice (Johannisson, 2011), and there is still a need for further understanding of how to address inherit tensions in action- and experience-based entrepreneurship education (Johannisson, 2016), such as VCPs. To address this, we build from experiential knowledge of VCP educators in order to take stock of current challenges and status quo in order to suggest future areas for research development.

3. Research method

3.1. Research design

Given the exploratory nature of this study, a qualitative and inductive research approach (Maxwell, 2009) was chosen where empirical inquiry is used to generate conceptual knowledge in multiple consecutive methodological steps (Orton, 1997) as the research

design involved two main parts, each with its own analytical steps, hereafter referred to as "Part I" and "Part II" (see Fig. 1). This allows for conceptual insights generated inductively in Part I to be analyzed in tandem with additional empirical data in Part II, such that analysis in Part II takes on a form of iterative and abductive research (Alvesson & Kärreman, 2007; Orton, 1997). Moreover, the stepwise addition of empirical data from different sources (different activities conducted by the study participant throughout the process) allows for triangulation to improve the methodological rigor (Patton, 1990).

The empirical investigation builds on the accumulated knowledge and collaborative insight of a global forum of VCPs, the VCP Forum. The VCP Forum consists of 11 VCPs in six countries in Europe and North America. Although there were many differences between the structure of the programs, they all shared a common approach of using venture creation as the main vehicle for learning. Using the whole member population of the VCP Forum as the sample for the present study, it is purposefully representative of VCPs as a specific type of action-based entrepreneurship education, as previously introduced (Patton, 1990).

Part I leveraged the unique research opportunity offered by a recurring global forum for VCPs to gain access to discussions and collaboration between key personnel of leading VCPs. Part I was, therefore, conducted *during* a workshop where focus group data was collected from educators in all 11 VCPs as they met in person to discuss how VCP education is taught and facilitated. Part I of the empirical method resulted in an organizing model (see Fig. 3) that identified challenges to be further investigated through qualitative interviews as well as the coding framework for the interview data. *Part II* involved individual semi-structured interviews with VCP educators in the months following the workshop. Interviews allowed VCP educators to elaborate on the pedagogic approaches used to address identified challenges.

3.2. Research analysis

3.2.1. Part I: leveraging the accumulated knowledge and collaborative power of educators

As a practical preparation before the annual workshop, educators in the 11 VCPs were asked to exemplify (a) the VCPs' current excellence in teaching and (b) the VCPs' important challenges for the future development of their teaching. The educators were free to choose the format of their responses, provided it was written and in English. The pre-workshop responses ranged from half a page to several pages in length and served as the baseline for the investigation.

During the workshop, the educators in the 11 VCPs were divided into heterogeneous groups depending on which VCP they belonged to and their amount of experience as entrepreneurship educators. They were asked to discuss current excellence and future challenges in VCP education. After the focus group discussions took place, the topics the groups found most relevant were discussed in a plenum. Participant observation of group work and the plenary discussion, as well as photographs of written material, were collected as additional documentary data for research-focused analysis. The written material included post-it notes, draft sketches, and presentation posters. This documentary data from the workshop (see Fig. 2) was digitalized and appended to the written pre-workshop responses.

Pre-workshop and documentary data was imported into NVivo 11 for analysis. The pre-workshop submissions were already categorized into best practices and challenges by the VCP representatives as part of the group work. The first coding dimension utilized the allocation into "excellence" or "challenge" which the representatives determined as part of the workshop. The second coding dimension is grounded in Lackéus and Williams-Middleton's (2015) five bridging capabilities. During the coding process, a third coding dimension emerged distinguishing between educational design, educational objectives, or educational outcomes. Having coded the pre-workshop and documentary data according to the three mentioned coding dimensions, the already-coded material was subsequently coded in a new iteration in order to output a set of axial or second-order codes, as illustrated in Table 1. The resulting second-order codes were then developed to provide some overall topics of what the challenges/excellence, bridging capabilities, and educational aspects addressed at a more general level. The coding process resulted in an organizing model (Fig. 3) that summarized the central topics reported that the workshop participants reported and used as a frame for Part II.

3.2.2. Part II: individual interviews with VCP educators

The organizing model developed in *Part I* was sent to educators of the 11 VCPs via email as a basis for face-to-face or digital in-depth, semi-structured interviews. The model guided the beginning of the interviews, with each of its elements discussed; however, the interviewees were later free to choose their focus and decide which topics they wanted to emphasize. Recorded interviews lasted

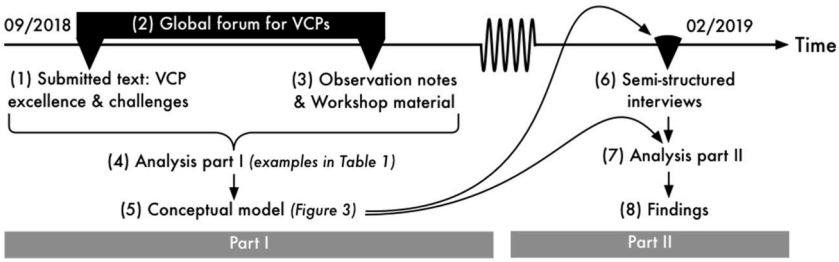

Fig. 1. Illustration of the research timeframe of this study. The different steps in the research process are numbered chronologically using bracketed numbers. The organizing model was sent to interviewees to guide the interviews and was also used to structure the analysis in Part II.

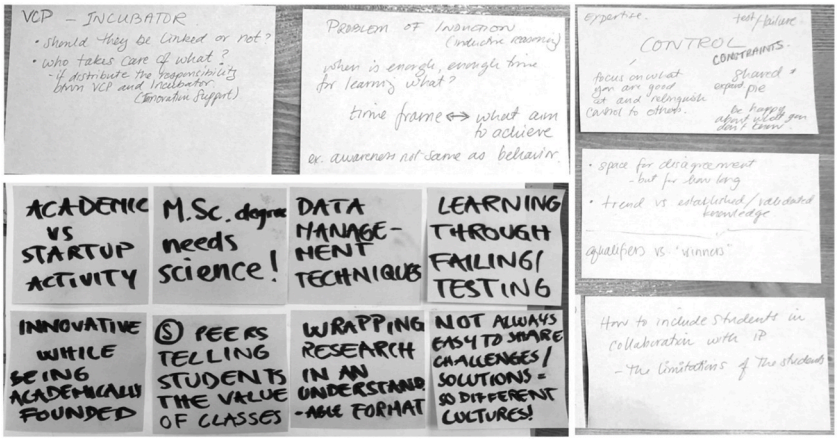

Fig. 2. Examples of extensive written material from the workshop.

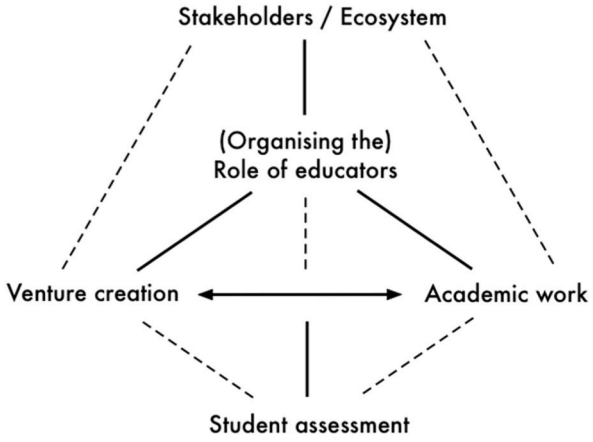

Fig. 3. Organizing model of educational challenges developed through Part I of the research design.

between 30 and 60 min and were subsequently transcribed. The authors took handwritten notes during the interviews as supplementary data. The transcribed interview data were analyzed in NVivo 11 using the elements of the organizing model (see Fig. 3) as a coding framework. The findings from the analysis of *Part II* are presented in the Findings section.

3.3. Limitations

There were many differences between the VCPs involved in this study. For example, there were differences in the extent and topical focus in their academic curriculum; the number and backgrounds of the students accepted into the VCPs; whether the VCP was a MSc-level, BSc-level, or even primarily co-curricular program; and which types of external stakeholders were involved with the VCPs and how stakeholders were involved. However, all 11 VCPs were considered to represent the particular type of action-based entrepreneurship education that utilizes learning through venture creation design and is complemented by some sort of academic curriculum.

4. Findings

In this section, we use the organizing model (Fig. 3) as a starting point for reporting and discussing the findings from this study. Identified challenges and suggested pedagogic approaches in VCP educational practice inform a future research agenda.

4.1. Tension between venture creation and academic work

The combination of venture creation and academic work is the basis for the specialized action- and experience-based entrepreneurship education of VCPs. In the submitted materials, workshop, and interviews, the educators emphasized the importance of developing the students and their entrepreneurial skills, as well as efforts to ensure that students can critically reflect upon their venturing process, contextualize their practical experiences, and have a theoretical foundation for what they do and experience. At the

Table 1
Coding examples of empirical data from the workshop.

Examples from the data	Dim. 1	Dim. 2	Dim. 3[a]	Axial/second-order codes[**]
"… how one can merge co-curricular and curricular entrepreneurship education/venture creation in such a hub."	Challenge in teaching	External network of resources	Educational design	Tension venture-academic
"… a diverse panel giving feedback on both proposals, communication and process"	Excellence in teaching	External network of resources	Educational design	Stakeholders/ ecosystem
"students are often leaning towards the entrepreneurial project since it carries practical knowledge and experience"	Challenge in teaching	Experiential learning	Educational design	Tension venture-academic
"We have developed an angel investment network ourselves."	Excellence in teaching	External network of resources	Educational design	Stakeholders/ ecosystem
"… finding ourselves in engagement with the productive tension between enterprise and traditionally academic dimensions within entrepreneurship education and VCPs."	Challenge in teaching	Process-based curriculum	Educational design	Tension venture-academic
"… empower individuals rather than volatile ideas, with a significant and long-lasting impact on their learning."	Excellence in teaching	Process-based curriculum	Educational objectives	Role of educators
"… the quality of the education is very tied to the quality of the idea/ venture or, to put it in better words, to how the idea/venture progresses."	Challenge in teaching	Process-based curriculum	Educational objectives	Tension venture-academic
"… reducing the focus on the idea and increasing the focus on the entrepreneur and on his/her motivations, resources, and skills."	Excellence in teaching	Process-based curriculum	Educational objectives	Role of educators
"All involved parties gain a networking experience, which is a classic on-going necessity for an entrepreneur to grasp new potential."	Excellence in teaching	Contribution to regional economic development	Educational outcomes	Stakeholders/ ecosystem

[a] Codes along dimension 3 emerged through the coding process. Second-order codes were created for further analysis of the coded data and provided a foundation for a preliminary organizing model for the individual interviews.
[**] These codes were structured into an organizing model later used as the starting point for the interviews.

same time, the tension between venture creation and academic work (see Fig. 3) is recognized as a fundamental challenge in VCP education. Educators reported that they felt responsible for supporting students by, in part, dissipating the tension between venture creation and academic work where possible. Primarily, three different strategies were used. The first was to provide an additional structure to the students' academic work. The second was to ensure that students working in teams were aware of each other's (potentially differentiating) ambitions for ventures and academic work. The third was to ensure that students' expectations of the program included a focus on academic work. In these ways, the tension between academic and venture work is not resolved, but is instead something that the educators have learned to manage over the years. Thus, the tension was not perceived as a pressing challenge, as described by one of the interviewees: *"… at the end of the day, they go hand in hand. But I won't say it's a challenge."* Reflection was reported to be an essential pedagogic approach for accomplishing this integration.

4.2. Role of educators in venture creation and academic work

Educator roles in the venture creation process (see Fig. 3) were often discussed by the educators in relation to the contexts of idea selection, team formation, research mobilization, and new venture failure. Across the 11 programs studied, there were significant differences in whether educators required or facilitated the students' venturing activities. The educators presented divergent views about team and idea selection. While some educators explained that they needed to facilitate learning by ensuring that the students' teams and ideas would provide learning for the students, others explained that a learning opportunity existed in how students were merely independently choosing their own teams and ideas. Nevertheless, most educators reported that they had reached their current way of facilitating the idea and team selection through a trial-and-error process, and that they were satisfied with their current practice.

However, the challenging part of facilitating venture creation was how to ensure that students participate in activities that would be useful for them *later* or prioritize a meeting that they did not understand the point of attending until afterward. This challenge was formulated in the following way by one of the interviewed educators: *"I really don't know how to teach them that they have to get their work done, and no one else is going to do that for them. Attending 400 workshops a week on marketing innovations, or whatever it is, is not going to get you that."* In other words, the challenge was to ensure that students did not avoid important learning experiences, which included trying to get them to make priorities that were appropriate for their own learning. This is, for example, by experiencing critical situations and making appropriate decisions in the venture creation process.

In this study, the interviewed educators also had a difficult role in overviewing the students' learning process and balancing their roles of mentoring the students while concurrently demanding outcomes. Simultaneously, the interviewed educators needed to understand the roles of external practitioners in integrating venture creation and academic work, as well as how to qualify practitioners who enter the academic space (such as incubation coaches, entrepreneurs-in-residence, and guest lecturers). This included training external practitioners to understand the learning components of their feedback and training the students in how to filter feedback from the practitioners.

4.3. Balancing venture creation and academic work in student assessment

The balance between venture creation and academic work was also reflected in the student assessment (see Fig. 3). Many of the interviewed educators found it challenging to assess students' academic work as a sign of combined learning. Assessing learning through venture creation can occur regardless of the results of the venture by assessing the level of analysis the students applied to the process, their reflections on the application of skills, and their ability to connect the reflections to entrepreneurship theories. The challenge for the educators is *how* to actually conduct such assessment. Acknowledging the importance of the new ventures in the pedagogical model and also in students' motivation, the interviewed educators found a possible conflict between what students put a significant amount of their efforts into (student venture creation) and what educators will actually regard in their assessment (academic work). The challenge was illustrated by one of the educators: *"… to start a venture is an important part of the pedagogical model; however, we do not assess what they achieve and do not achieve. This is a challenge that we clearly have not solved."* There was also the question of *when* to assess, given that, for example, at the end of a course, students may have reached different stages in their venture creation processes, and potentially also in their academic work building on insights from the venture creation process, depending on the nature of their venture. Therefore, the status of a non-assessed process, such as the venture creation process, may have a significant influence on how students are assessed.

4.4. Organizing stakeholders in venture creation and academic work

Lastly, organizing stakeholders and ecosystem relations (see Fig. 3) was a challenging topic brought forward in the workshop and the interviews. There was a consensus among the interviewed educators that program stakeholders and ecosystem actors provided value to the VCPs. An example of the value-adding highlighted in the interviews was how the program stakeholders and ecosystem actors contributed to the legitimacy of both the program and the students' ventures. The educators further emphasized the conflicting interests of the university as an educational institution and industry partners. The university expects academic performance from the students, while external industry partners may expect new ventures to emerge from the program: *"Some stakeholders might have a stake in the sense that for them, venture creation is actually an income further down the line."* A way to address this challenge is to design students' assignments so that they are suited to be curricular deliverables while also providing value to stakeholders. An example is feasibility studies of entrepreneurial opportunities that students can perform as an academic assignment based on technology provided by an external partner. The students gain insight into the application of various evaluation and feasibility tools, while the partner potentially receives value in a thorough report addressing the potential of their technology. Based on the presented findings, the current challenge of educators could be argued to essentially be able to motivate the development of the program's network through communicating its value, while also being very clear to stakeholders and ecosystem actors about the approach being a learning process that uses real ventures as a learning vehicle, meaning that successful ventures may develop. However, that it is not the core focus of the educators in the programs. Thus, there is a communication challenge regarding involving and managing very different stakeholders and ecosystem actors that must still be addressed, as different stakeholders value different aspects of the program.

5. Discussion

A key feature of VCPs is the combination between academic work and venture creation and the following inherent tension between the two that is at the center of the model of important challenges in Fig. 3. There is previous research on action-based entrepreneurship education that has also addressed educators' challenges in handling the tension between venture creation and academic work (Aadland & Aaboen, 2018; Lackéus & Williams-Middleton, 2015). Our empirical results from teaching practice suggest that the inherent tension of integrating venture creation and academic work has now been explored in both research and practice on a more overarching level to the extent that remaining challenges are instead found in the three other challenges surrounding this fundamental tension illustrated in Fig. 3. The VCP educators express various pedagogic approaches to overcome the restrictions set by a tension between academic and pragmatic approaches as Heinonen and Hytti (2010) suggested. By qualitatively investigating VCP educators'

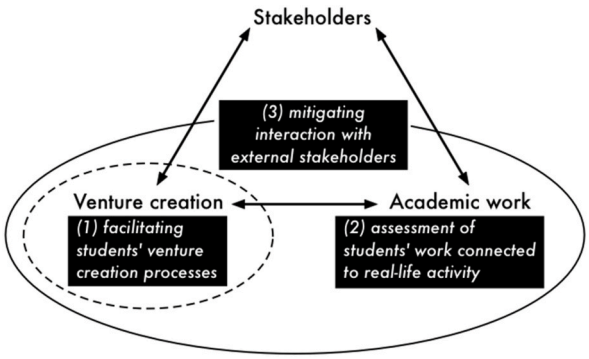

Fig. 4. Illustration of the challenge of maintaining authenticity while facilitating learning and fair assessment.

challenges and approaches to aligning venture creation as part of curricular education, we are able to emphasize key "pain-points" of educators, suggesting needs for future research. Specifically, an agenda for a future research agenda in action-based entrepreneurship education spanning the academic and pragmatic tensions inherent in such education includes (1) facilitating students' venture creation processes, (2) assessment of the students' work connected to real-life activity, and (3) mitigating interaction with external stakeholders. Fig. 4 illustrates the three focus areas, which are also discussed in detail below.

5.1. Facilitating students' venture creation processes

Previous literature has reached a broad consensus about the importance of experiential learning and reflection (Cope, 2003; Hägg & Kurczewska, 2016). Our findings suggest that further research efforts should be conducted to develop strategies that ensure students acquire the appropriate learning experiences. Each venture creation process is fundamentally unique (see Longva & Foss, 2018), and requires a delicate balance to point students toward useful learning experiences while simultaneously not losing the authenticity of the venture creation process (see Aadland & Aaboen, 2020). Followingly, a wide range of competencies may be required from educators. The role of educators has recently established itself in the same stream of literature as a way to bridge between theory and practice (Gabrielsson et al., 2020). Since some learning outcomes may be more applicable later in life (Johannisson et al., 1998), the role of bridging in theory is to prepare students to use and reflect upon both current practices (Hägg, 2021) but also be able to apply their learning in new contexts and situations later in life. Managing the design and delivery of both theoretical and practical content to be applied directly and later in life is therefore an inherent characteristic of the educator role. Hence, a further exploration of the role of educators, as well as best-practice human resource management to prepare educators for work in or related to a VCP, will expand the educator role concept and should be a focus in further research. Two questions for further research are therefore: "How might VCP educators manage multiple roles?" and "How could academic staff be trained to take the roles required as VCP educators?"

5.2. Assessment of the students' work connected to real-life activity

Previous VCP research has acknowledged the importance of how to manage student assessment (Lackéus & Williams-Middleton, 2015), but it does not fully elaborate on the complexity of including the authentic entrepreneurship process. Studies of entrepreneurship courses have suggested that assessment types based on responses to real-life cases and interaction with internal or external stakeholders could be borrowed from art and design education to capture the experiential aspect of the education (van Ewijk et al., 2020). They did not, however, elaborate on how this may play out in practice. Previous studies have thus acknowledged, but not yet solved, the challenges of assessment emphasized by the findings of this study. Although greater attention is paid to analysis of educational outcomes of, for instance, VCPs, there is still a need to assess how evolving pedagogical methods facilitate rich learning processes and provide learning outcomes in multiple dimensions (Gabrielsson et al., 2020; Nabi et al., 2017). Thus, there is a need for further research in order to develop assessment approaches that cover what students have *learned* and *understood* from the venture creation process rather than merely assessing the ventures that students eventually may produce during their time in the program. A question for further research is therefore: "How can assessment methods be developed to appropriately evaluate students' learning from venture creation processes?"

5.3. Mitigating interaction with external stakeholders

Integration of venture creation in an entrepreneurship education program introduces an element that educators cannot—and should not—control, as it is a student-driven process (Aadland & Aaboen, 2020). However, student ventures are learning vehicles and still need to be nurtured and facilitated by educators (Lackéus & Williams-Middleton, 2015). This challenges educators, who must simultaneously supervise the action-based learning process of a group of self-driven students, manage the expectations from a set of external stakeholders, and fulfill the needs for an academic program with, for instance, some set standards for assessing students' achievements. Nonetheless, an important role of educators is to filter the activities and tasks that students are introduced to, such that the effects of a "failed" learning vehicle (that is, an unsuccessful new venture) are reduced. Instead, eventual "failure" should be leveraged as a learning opportunity, and educators can have an important role in that respect. Further research should also increasingly accept the fact that educators cannot fully control the learning processes in VCPs and instead focus on how educators continuously handle and manage multiple interests in the best possible ways. A question for further research is therefore: "How could practices for interaction with stakeholders of VCPs be developed to align with requirements and standards for teaching, learning and assessment?"

The essence of the VCP research agenda is, thus, how the three focus areas mentioned above and in Fig. 3 can be considered alone or from a holistic point of view; that is, how educators may combine and manage their role(s) in terms of (1) facilitating students' venture creation processes, (2) assessment of the students' work connected to real-life activity, and (3) mitigating interaction with external stakeholders.

6. Conclusion

Based on a qualitative investigation of challenges that educators face in VCPs, the present paper contributes to the discussion of trends and gaps in action-based entrepreneurship education. In line with Ratten and Jones (2020) and Ratten and Usmanij (2020), we study entrepreneurship education that incorporate experiential and action-based approaches, where theoretical content is integrated

with entrepreneurial decisions. We focus on a specific way of making this integration—the creation of a venture as the main vehicle for learning, complemented by more traditional educational content (Lackéus & Williams-Middleton, 2015)—and suggest challenges of integrating theory and practice that require further investigation.

Ratten and Usmanij (2020) argued that previous entrepreneurship education research tends to assume that anything is possible, while in reality, environmental pressures and practical tensions may prevent this from being true. The present study answers this implicit call for a more balanced view by presenting a more holistic and realistic view of entrepreneurship education and the challenges surrounding it that research and practice have yet to resolve. Followingly, the present paper also argues for further integration of theory and practice related to entrepreneurship education. Moreover, the present study responds to the call for international studies on best practices for entrepreneurship education (van Ewijk et al., 2020), and does so by taking the educators' view rather than an institutional view. This study suggests a shift toward strategies for handling the inherent complexity involved in experiential and action-based entrepreneurship education, and specifically, for VCPs. The present study leveraged the educators' perspectives to arrive at the research agenda, and further research that also brings student and well as other stakeholder voices into the spotlight is highly encouraged. Practical implications are that the identified research agenda could motivate future studies that aid educators to include venturing processes in their education. Thus, the findings of this study could support educators to overcome barriers when they are interested in integrating venturing processes as part of entrepreneurship education.

Author statement

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