Painting on the Business Model Canvas:
A Case of Art-Based Entrepreneurship Education

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ARTICLE INFO	ABSTRACT
Keywords: *art-based learning,* *art-based teaching,* *entrepreneurial competence,* *entrepreneurship education,* *visual arts*	Entrepreneurship education at universities tends to neglect entrepreneurial soft skills such as uncertainty competence and resilience. Art-based teaching and learning are considered as an effective way of fostering such competencies but have hardly been described in the context of entrepreneurship education. This paper explores what and how students learn from integrating a studio approach into entrepreneurship education. The research object is a teaching event on developing a business idea through painting. The two-day workshop encompassed instructions by an artist, students painting on large-size canvases, and an extended crit. The case study was informed by teaching conversations, student statements, lecturers' observations, and resulting field notes. The data reveal that the creative process made participants reflect on the entrepreneurial mindset. Students experienced self-efficacy and learned how to embrace uncertainty. Although the qualitative approach of this study lacks generalizability, the case adds to research and practice by underpinning the potential of art-based entrepreneurship education in fostering entrepreneurial competence.

1. Introduction

As entrepreneurship is considered as a driver of innovation, economic development, and social progress (World Economic Forum, 2015), public authorities, the corporate sector, and civil society promote start-up activities (European Commission, 2006, 2013; Stifterverband, 2022). Universities play a key role in igniting students' propensity to establish a business and in providing them corresponding education and training opportunities (Liening et al., 2019; Horng et al., 2020). Backed by public funding and empirical evidence on the teachability of entrepreneurship, pertinent offers in higher education have multiplied since the turn of the millennium (European Commission, 2015; Kakouris & Georgiadis, 2016; Hou et al., 2022).

Entrepreneurship programs in higher education are aiming at preparing students for entrepreneurial practice while developing entrepreneurial competence (Tittel & Terzidis, 2020). The latter term marks a set of skills ranging from business knowledge to personality competencies as compiled, for instance, by the European Commission in its Entrepreneurship Competence Framework (EntreComp) (Bacigalupo et al., 2016). Students are supposed to

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acquire an entrepreneurial mindset characterized by self-efficacy, openness to new experiences, willingness to take risks and tolerance of ambiguity (Timmons & Spinelli, 2007; Mauer et al., 2017). They shall be able to cope with uncertainty, act confidently, learn from failure and persevere while following their vision and collaborating with others (Bacigalupo et al., 2016; Baggen et al., 2022).

As those soft skills tend to be neglected in educational practice, the educational discourse calls for entrepreneurial personality development to complement teaching of technical and methodological knowledge (Lackéus, 2015; Baggen & Kaffka, 2022). As for teaching methods, the traditional classroom lecture is considered as insufficient. Ideally, it is turned into a space for play, experimentation, and reflection (Neck et al., 2014).

One approach to experiential learning that seems quite new to the entrepreneurship context is art-based teaching and learning. With art-based methods, learners actively engage in an art form to access non-art subjects from a different angle. Art-based learning relies on multimodal teaching activities that trigger sensory experiences through artworks, artistic materials or techniques and help transcend rational approaches to business topics (Taylor & Ladkin, 2009). Examples are exploring management theory through clay sculpting, realizing managers' behavior through theater play, or making sense of leadership while observing a choreographic process (Kerr & Lloyd, 2008).

In both higher education and advanced training, art-based teaching and learning is considered a promising approach to fostering key competencies such as creativity, communication, and reflection skills (Darsø, 2009; Taylor & Ladkin, 2009; Nissley, 2010; Springborg & Ladkin, 2018). In higher management education, art-based teaching activities have been successfully applied to general management (Kerr & Lloyd, 2008), intercultural management (Higson & Liu, 2013), and leadership (Gayá Wicks & Rippin, 2010; Sutherland & Jelinek, 2015; Peña & Grant, 2019). However, linking the arts to entrepreneurship education is still lingering in a conceptual and empirical niche (Kakouris & Liargovas, 2022).

Teaching cases have been scarcely discussed. Kakouris (2014) has provided a teaching case using paintings of merchants from different centuries as a trigger for critical reflection of entrepreneurial characteristics. Mars (2021) has reported on an exercise that takes paintings as starting points for reflections on entrepreneurial identity. Heldal and colleagues (2018) have described a case in which students experience the entrepreneurial continuum between exploration and exploitation while creating and performing a piece of music. Sandberg and Reckhenrich (2021) have referred to a visual art-based simulation of the entrepreneurial process.

It is assumed that artistic attitudes and artistic practice make a suitable role model for opportunity creation and self-management in entrepreneurial settings, because starting a business strongly resembles creating an artwork (Daum, 2005; Archer et al., 2009; Di Domenico et al., 2010; Sandberg & Reckhenrich, 2021). In order to substantiate this idea, this paper presents the case study of an art-based teaching event in higher education that complemented a live teaching case and classroom lectures on entrepreneurial methods and knowledge. While the case study focuses on the teaching event, which was conducted as a painting workshop, it highlights the learning outcomes of an art-based approach to business planning. The results show how art-based learning can support students in developing an entrepreneurial mindset.

2. The Teaching Event

The case evolved in a one-semester course within a master program on nonprofit management at a German university of applied sciences. The module was framed as a case study on a recently established, struggling not-for-profit exhibition space dedicated to the visual arts. The students took on the role of consultants who were asked to develop and present a strategic concept for the institution. The course was announced under the title "Between White Cube and Blank Canvas" and introduced as a combination of applied business planning, experiential learning, and art-based methods for exploring and visualizing the concept to be pursued.

The course was taught by the author, who is a professor of business administration, and a visual artist with profound exhibition experience, who is also an art assistant at a public German art academy. 24 students enrolled in the course, which was offered as an elective. Participants knew in advance there would be a painting workshop and learned about the motivation behind the art-based approach in the first lecture.

Throughout the course, students received a briefing from the founders of the exhibition space under scrutiny, some input on exhibition concepts, curatorial work and cultural mediation, cultural-political background information, and information on relevant socio-cultural trends. They talked to invited artists, took a guided tour of exhibition spaces in the quarter, visited a project space, and did research on the local art scene. Suitable management tools such as strategic planning, SWOT analysis, and positioning analysis were presented and linked to the given case. In the previous semester, all students had completed a course on business planning and were familiar with the Business Model Canvas, a template for assessing and describing the key aspects of how a business creates value (Osterwalder & Pigneur, 2010).

The painting workshop was run in the last third of the course after the students had gathered all relevant information and before they actually started working on conceptual ideas. The workshop aimed at triggering a non-rational approach to business planning, enhancing students' perception of the problem space, and provoking a change of perspective. The factual knowledge about the live case that the students had previously acquired served as the starting point for the creative task they were asked to perform. In contrast, the familiar business methods they had used to analyze the live case were completely abandoned during the workshop.

Aside from improving the conceptual quality of solutions, the workshop setting was meant to enhance students' ability to deal with unfamiliar situations and open-ended tasks. Other than the Business Model Canvas with its key categories, a real canvas is blank and does not offer any starting point than a theme to work on. While the unfamiliar art-based practice deliberately exposed the students to a disorienting dilemma (Mezirow, 1978; Darsø, 2016), the context of the live case provided them with a firm foundation. Linking the art-based workshop to the live case was intended to position the event as a serious task and reduce any possible reluctance to the approach.

The workshop took two consecutive days, each with five hours mere working time, and was facilitated by both lecturers. 14 students collaborated on both days; two persons had to skip the second day for urgent reasons; one student missed the first day. Ten students, who did not achieve the minimum attendance required, had dropped out of the course before. Aside from introductory exercises, students organized themselves in four consistent groups with four members each and worked on their painting in pairs. Group size was affected by the afore-mentioned changes on the second day. None of the participants had prior experience with painting on canvas.

On day one, the artist introduced the workshop's core by calling attention to the fact that participants would find themselves in a situation that was like that of the founders they were about to counsel: creating something in an unfamiliar and thus potentially unpleasant setting without any expertise. The concise assignment to each pair was to create a non-figurative painting that would represent a future vision of the exhibition space. The artist instructed the process in terms of craft and gave continuous technical advice. Both lecturers coached students who had lost their flow but did not comment on content-related issues.

Participants were building stretcher frames in format 1.50 X 1.20 meters, cutting and mounting canvas thereon, applying primer and mixing acrylic paint from pigments. The painting process was restricted by a rule on paint: the students were only allowed to paint with one color at a time. Before switching to another one, they had to use it up completely.

At the end of day one, when students had the first layers of paint applied, there was a round of reflection in plenary. Students were asked to share how they approached their assignment without revealing any meaning of the unfinished painting. On day two, students continued working on their paintings. The workshop was finished by a plenary session the lecturers turned into a crit, which is a form of collective critique familiar in art schools. In general, art students communicate their creative intent and enter into a dialogue about their work with lecturers and peers (Healy, 2016) as a form of "meaning making through on-site questioning and discussion" (Schultz, 2021, p. 44). In this case, the groups presented their works, were asked about their work process and shared ideas that shaped the final result (Figure 1).

Figure 1. *Glimpse of the Crit*
Note. *Miguel Hahn* (2022). Untitled [Photograph]. © University of Applied Sciences Berlin.

3. Method

As the theoretical and empirical state of knowledge about art-based learning in entrepreneurship education is low, the present study pursued a descriptive-explorative objective. The case study approach allows hypotheses on learning outcomes of art-based teaching events to be developed (Eisenhardt, 1989); although initially, the painting workshop was created for learning and not for research purposes.

Data collection started with an unstructured survey on students' expectations and concerns towards the painting workshop. Students anonymously provided short statements on a virtual pinboard that was accessible for all participants three days before the workshop. Immediately after the event and via a virtual pinboard again, students were requested to anonymously answer several open questions. They were asked to evaluate the workshop and share their main personal takeaways.

During the whole workshop, both lecturers took on an additional role as partially participating observers, who tried to understand the students' work processes. They applied an unobtrusive, unstructured approach to direct observation (Ciesielska et al., 2018), continually taking notes on students' activities, behavior, and remarks.

At the end of day one, the author took notes of the half-hour conversation while focusing on how students dealt with the unfamiliar situation and approached their assignment. The 90-minute crit at the end of the workshop was recorded and transcribed according to scientific rules (Dresing et al., 2015). To condense and structure the information in the data, student posts, notes, and transcript material were submitted to a thematic content analysis (Attride-Stirling, 2001).

Because art-based entrepreneurial learning lacks conceptualization, the content analysis followed an inductive approach. A preliminary examination of the material resulted in a set of data-driven codes. Through second-cycle coding, logical relations in the data and related themes were identified (Saldaña, 2013). Following the procedure introduced by Attride-Stirling (2001), the categories were interpreted and grouped into basic, organizing and global themes. The analysis resulted in a thematic network with the creative process as a global theme and its phases as subthemes.

4. Results

Students were looking forward to the painting workshop because it was a lovely change to the usual lecture format. Participants were eager to transition from research to doing. Every second statement entailed the words "create" or "creative". Statements and field notes reveal that, during the workshop, all groups passed through four phases, albeit not simultaneously:

1) master plan, 2) play, 3) struggle, and 4) revival.

4.1. Phase 1: Master Plan

Facing potential failure, all teams approached the unfamiliar situation with some sort of planning, trying to give some structure to their activities.

"In the beginning, we were scared to mess it up right away."

"We wanted to plan a lot."

"Yesterday, we worked much more structured."

The students' initial approach was rational and characterized by more or less extended conversations on qualities they wanted the space or painting to have. Although they were not prompted to do so, some began with brainstorming on adjectives. They linked those words to colors (e. g., warm, strong) and approached the blank canvas with a color concept in mind. Other students began with structure instead of color. They thought of image elements such as interrelated fields or geometrical figures that were meant to symbolize certain issues. Some students took the cue cards, which had been used to kick off the workshop, as a visual model. Others thought of well-known artworks to find themselves a direction.

Starting from that, all students developed image ideas, which were relatively pronounced and related to the future of the exhibition space they imagined (e. g., bringing arts and structure together). Consequently, in phase 1 participants followed preconceived ideas that they tried to transfer onto canvas.

4.2. Phase 2: Play

Already on the first day, the students became increasingly playful with their task. On their own, they tested colors, replaced paintbrushes with other tools and explored different ways of applying paint (dripping, scattering color pigments, etc.). In doing so, they not only imitated each other but also discovered how to evade the given color restriction (e.g., painting on the canvas' backside). Playfulness was supported by accident and pleasant surprise. Some students deliberately picked up flaws and extended them.

"There were two, three moments when you randomly tried something while painting and it looked cool, and you were surprised by the result."

"The [paint] cup tipped over and started rolling, and we're like: 'Oh, this is awesome! We do that with every color now.'"

Students enjoyed abandoning contemplation in favor of working intuitively. Some discovered that, in action, a solution emerged they would not have achieved through conversation and execution. This attitude would turn out to be helpful in phase 4.

4.3. Phase 3: Struggle

All teams experienced a lean period when realizing that their plan did not work out or they did not know how to proceed from their first and only designed step. This phase caused reflections on the benefits and pitfalls of planning and control.

"I think we probably planned too hard."

Many participants were facing technical difficulties with hitting the desired hues. When students realized their result was not harmonious or did not meet their expectations, they became increasingly frustrated. In this situation, some accepted the situation and continued working with what they had. Those with a comparatively pronounced tendency to plan and control, however, initially gave up, stopped working, and were waiting for some hint of inspiration.

In an advanced stage, students also struggled with the space of possibilities narrowing. They had lost the carefree attitude they exuded the day before. Now, they were afraid to fail and did not want to destroy what they had achieved by some false move. All were facing the risk that any alterations would make the emerging painting worse.

"Because of the fact that we already had something that we thought was good in itself, we were more afraid of doing something wrong so as not to make it worse."

4.4. Phase 4: Revival

In a fourth phase, the teams took a new start. For some, a change of perspective was helpful. Looking at an unloved painting from a distance or turning it around propitiated them with their result and encouraged further activity. Notwithstanding the above, many students realized they were able to overcome obstacles by hanging tough.

"We are more satisfied than before. It was definitely worth it to tackle this again."

Dissatisfaction and time pressure created an indifferent mood among students. They realized that even from bad decisions or failed actions new options emerged. Returning to previous hands-on mentality, they also regained playfulness and established rapport with their work.

"That was quite a good lesson, to get back to the fact that you just have to get going, because in doing so somehow you find your way."

"That was a lot of fun, because then you got such an attitude of not caring, because you can't destroy anything now anyway, because it's already–not destroyed, but the picture is now simply what it is. And now we can relax because no matter what we do it's part of that picture."

One team related their process as absolute beginners to the genesis of the exhibition space. They concluded from the failure of the image and forecasted the space's failure. With only half an hour left and in–what they called–an act of desperation they intensely reworked their painting and were more satisfied in the end than they had been before. During the crit, however, they proposed a more radical solution: painting it over and start anew.

5. Discussion

Art-based teaching methods are supposed to initiate a change in perspective by taking learners away from merely rational approaches and analytical frameworks. It is widely assumed that the act of creating an artifact will change the way people perceive things and, consequently, may cause them to do things differently (Taylor & Ladkin, 2009; Barry & Meisiek, 2010).

The creative process that unfolded during the painting workshop offered students learning opportunities regarding an entrepreneurial mindset. The professional field entrepreneurs are moving in, is characterized by an indeterminacy of goals, an unstructured field of perception and the inherent dynamics of complex systems. Successful entrepreneurs rely on intuition and implicit knowledge to maintain their ability to act: They proceed step by step, improvise and work with resources at hand. Effectuation, improvisation, and bricolage are models of entrepreneurial action that are paralleled in the artistic process (Archer et al., 2009; Di Domenico et al., 2010).

In the beginning, students relied on familiar response patterns and tried to minimize uncertainty and risk through planning and imitation. They started out with preconceived ideas, struggled, and failed. As they realized they needed to be flexible in dealing with concepts and standards, they became open to surprise and, finally, surrendered to playfulness. In course of the workshop, their seemingly frightening experience of abandoning control gave way to feelings of self-efficacy and satisfaction. In a similar learning environment that was also based on painting, the same transition from initial disorientation to sensemaking and self-efficacy was observed (Peña & Grant, 2019).

Students captured the essence of the artistic process that is characterized by openness and playfulness (Jacobs, 2018) but often has a dark side. They experienced lean periods and blocks while being aware that their painting was not harmonious yet. Participants went through a state of "productive dissatisfaction" (Sandberg & Reckhenrich, 2021, p. 4), which is typical of the artistic process. Encouraged and supported by the facilitators, students persevered and discovered that hanging on, experimenting with paint, and testing ideas without success being guaranteed would incrementally lead them to a satisfactory result.

The students' reflections reveal that they adjusted to an uncertain situation in a way they were not used to before. Within the EntreComp framework, coping with uncertainty and ambiguity means to "explore [one's] own ways to achieve things" and not being "afraid of making mistakes while trying new things" (Bacigalupo et al., 2016, p. 33). In addition, students had

insights on motivation and perseverance. Their statements resemble EntreComp representations for these skills: "Stay focused and don't give up. … Be prepared to be patient and keep trying to achieve your long-term … aims" (Bacigalupo et al., 2016, p. 28).

The findings on the creative process corroborate the idea that the artistic mindset can be conveyed to learners from other domains. In this particular case, elements of studio practice common at art schools helped foster an entrepreneurial mindset. The workshop's core was modeled on academic art training, with the elements lecture or demonstration, students at work, and crit (Hetland et al., 2013). Modeling studio practice, Hetland and colleagues (2013) introduced "eight studio habits of mind" (p. 6), including engagement and persistence. The teaching event successfully addressed what they call "Stretch and Explore: Learning to reach beyond one's capacities, to explore playfully without a preconceived plan, and to embrace the opportunity to learn from mistakes and accidents" (Hetland et al., 2013, p. 6).

Although the findings of this case highlight the potential art-based teaching may have in entrepreneurship education, their generalizability is limited by the qualitative method. The act of taking notes entails a subjective selection process that inevitably restricts objectivity. However, the different professional backgrounds of the observers resulted in partially overlapping and partially complementary notes. The students' written statements, the audio recording and the lecturers' notes provide methodological and data triangulation with different perspectives on the teaching event (Alvesson, 2003).

It was beyond the study's scope to examine if participants were able to transfer insights from the exceptional circumstances of the teaching event to other situations, let alone entrepreneurial activities. The case is situated in academic entrepreneurship education and involves participants with little or no professional experience. Circumstances do not necessarily apply to an advanced training for entrepreneurs. In another context and with different group dynamics, competence development may take a different route. Measuring the extent and sustainability of skill development would need a quantitative approach.

6. Conclusion

The teaching case under scrutiny links art-based learning to entrepreneurship education. During a painting workshop, students were simulating an artistic process thereby approaching business planning through visual thinking. Oral and written student reflections on the workshop, as well as field notes from two lecturers, were analyzed in order to explore learning outcomes.

The qualitative data show that students went through phases of planning the image, playing with tools and colors, struggling with unwanted results and mistakes and, by using persistence tactics, finally achieving a satisfactory result. The art-based assignment caused a change in perspective by taking learners away from rational plan-based approaches to a more intuitive and flexible mode. Statements made by the students revealed a transition from initial disorientation to sensemaking and self-efficacy. Students experienced the characteristics of entrepreneurial action such as effectuation, improvisation, and bricolage. They reflected on entrepreneurial attitudes such as openness, risk-taking, fault tolerance, and perseverance.

In a case study, results are limited to the particular setting including the visual arts-based approach. Future quantitative research as well as longitudinal studies should be used to assess learning outcomes in terms of sustainable skill development. However, the findings in this work corroborate the assumption that entrepreneurship education will benefit from artistic impulses. In this case study, it was found that the art-based approach helped foster an entrepreneurial mindset. For teachers with an interest in art-based approaches the teaching event offers a starting point for similar endeavors.

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