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The texture of entrepreneurship programs: Revisiting experiential entrepreneurship education through the lens of the liminal-liminoid continuum

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Abstract:	Positioning the liminal and the liminoid on a continuum, we define a 'space' within which practice-led, experiential learning occurs. The more liminal processes within this space are associated with familiarity, wide social recognition and relative security; the more liminoid are allied with risk-taking, innovation, creativity, and higher levels of uncertainty. Our research was conducted amongst student/founders on M-Entrep, an integrated Masters and venture creation program. Our findings suggest it is the co-existence of the liminal program experiences, such as the 'rite of passage' of obtaining a Masters qualification, that act as a safety net as students embrace the fluidity and lack of security associated with the more liminoid experiences many associate with the venture creation endeavor. We argue that M-Entrep is an example of a program that interweaves liminal and liminoid processes, creating a texture that is both open and containing, facilitating 'entrepreneuring' and encouraging students to re- imagine themselves in new roles and statuses. By exploring entrepreneurship education (EE) through the lens of the liminal and the liminoid contimuum, facilitators of EE programs can better appreciate, design and influence the texture of this space to benefit the student learning experience.			

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I. Introduction

Despite the growth in experientially-orientated entrepreneurship courses, the literature contains very limited details of these programs, the challenges they face and suggested solutions for overcoming them (Mandel & Noyes, 2016). By working with the concept of the liminal-liminoid continuum, this article contributes to the growing call for a more robust critical debate and unsettling of experiential entrepreneurship education (Berglund & Verduyn, 2018) based around the action of *entrepeneuring*, more than the fact of *entrepreneurship* (García-Lorenzo, Donnelly, Sell-Trujillo and Imas, 2018).

The notions of liminal and liminoid have been extensively theorized by anthropologists when explaining the construction of meaning during critical events, like birth and death, and the rituals and ceremonies (baptisms, circumcisions, funerals) usually associated with them. Building on the seminal works of van Gennep (1960 [1909]) and Turner (1967, 1969, 1987 [1967]), the liminal and the liminoid have been used in multiple ways to make sense of change, mobility, transition, transit, in-betweenness, any state of hybridity or transformation (Thomassen, 2009).

Positioning the liminal and the liminoid on a continuum creates a lens through which practice-led, experiential learning can be explored. We suggest the lens of the liminal and the liminoid continuum provides new insights into the ways students transition to a new status as entrepreneurs, placing them in a position of 'in-betweenness' (Nielsen & Gartner, 2017).

Experiential spaces are the scenarios for a multiplicity of displacements and transfigurations that can sometimes be identified as visible phases collectively experienced, but more usually are intrinsically ambiguous, non-chronologically performed and have a meaning as a critical event for the individual. Many traditional approaches to teaching entrepreneurship emphasize being *about* entrepreneurship rather than teaching *for*

entrepreneurship (Hannon, 2005) or *doing* entrepreneurship reflexively (Sarasvathy & Dew, 2008). However, there is a growing interest in entrepreneurship education that emphasizes *doing* entrepreneurship reflexively, and with it in experiential approaches (Lackéus & Williams Middleton, 2015; Mandel & Noyes, 2016).

An increase in entrepreneurship practices and the development of EE is seen as a priority by policy makers, linked both to employment and economic benefits, and to the development of democracy and entrepreneurial citizenship (Kyrö, 2015; Urbano & Guerrero, 2013). These courses contain both *content work* looking to achieve specific outcomes, such as venture creation, and *process work* aimed at the development of personal qualities (Fayolle & Gailly, 2008). The nature and intensity of the experiential design features can though vary extensively, at one end of the spectrum comprising small projects or guest lectures from entrepreneurs to full blown venture creation programs at the other. Experiential interventions are seen by their advocates as beneficial to the development of entrepreneurial attributes (Corbett, 2005; Sukavejworakit, Promsiri & Virasa, 2018), though their views are not uncontested.

In this paper we explore how the concepts of liminality and liminoidity and the liminal-liminoid continuum can be applied to experiential learning in the context of an EE program. In bringing new insights into participants' experiences and the texture of the learning space they are inhabiting, we suggest this lens can also reveal hidden implications for our interventions. To illustrate our argument we draw on the experience of an integrated Masters and venture creation program: 'M-Entrep' (name changed).

The M-Entrep program was selected as it sits close to the experiential extreme of the taught provision-experiential learning continuum, with participants studying a full-time Masters in parallel with creating a new venture throughout the program. M-Entrep's positioning on the continuum offered a clear opportunity to surface and explore influences, interventions, tensions

and contradictions that contribute to the texture of the learning space participants may occupy in experiential EE programs.

Participants embrace a variety of roles and statuses during the program, for example: student; founder; product developer; illustrator; employee; etc. Often these roles and statuses are held and experienced concurrently and participants may switch between them more consciously than is typically the case. This increases the complexity and ambiguity of negotiating their roles. Nonetheless, whilst the moniker of 'student' does not fully recognize this complexity, we adopt it in this paper for the sake of clarity.

In the light of this complexity, the research question we seek to address in this paper is: "How might the lens of the liminal-liminoid continuum provide new insights into the texture of the experiential EE learning space, the interplay of the processes within such programs and and how this may influence the learning and development of students as emerging entrepreneurs?"

Our findings have implications for educators delivering integrated venture creationeducation programs as well as those involved in delivering executive and non-accredited education to entrepreneurs beyond the higher education boundary.

In this paper, we first introduce our contextual framework and the concepts of liminal and liminoid. Then, we review relevant literature, making the case for the interrelationship of these notions as useful in broadening our understanding of experiential learning for entrepreneurship.

Next, we describe the M-Entrep program, our research methodology and limitations and how we understand M-Entrep through the lens of a liminal-liminoid continuum, before discussing our findings and their implications. We conclude by noting how our research contributes to the evolving field of EE.

II. A review of the theoretical framework

II.1. The liminal and the liminoid

The term *liminality* was introduced by the anthropologist Arnold van Gennep (1960 [1909]) to refer to the experience of crossing the spatial and temporal limits (from Latin, *limes*) that exist in a rite of passage (liminal events) in traditional societies. Liminality is produced socially and individually. The anthropologist Victor Turner (1967), discussing Van Gennep, further introduced the concept of *liminoid* to refer to how liminality operates in contemporary societies. When traditional rites are diluted, the liminoid (individual, ambiguous, not socially constrained transfigurations in spaces and time) occurs. Both authors focused in particular on the inbetween spaces and transfigurational moments when apparent distraction and ambiguity are experienced, but Turner emphasized the capacity of the subject in the liminoid to "elude or slip through the network of classifications that normally locate states and positions in cultural space." (Turner, 1967, 98). Liminoid states encourage reflexivity by representing ourselves, in contrast with liminal rituals. Unlike rituals, they are not obligatory but voluntarily chosen. What is considered a liminoid state from the anthropological tradition, is usually understood as a "present-day extension" (Ibarra & Obodaru, 2016) from the organizational behavior perspective or as "relational processes of enactment" (García-Lorenzo, et. al, 2018, 391) in organizational studies.

The liminal and the liminoid are part of a continuum (Turner, 1982 [1974]; St John, 2008). Turner himself considered the liminoid "historically continuous with ritual" (1982 [1974], 72). Whereas liminal is integrated into the established order of the social world, the 'liminoid' challenges these structures by offering optional alternatives to the social order (Daskalaki and Simosi, 2018). In their recent study of unemployed adaptation, Daskalaki and a Simosi argued that unemployed people oscillate between liminal and liminoid states; they adapt to a new condition from an old one, but they also develop a "reflexive state of being", placing

themselves in a non-fixed "liminoid position" which allows for alternative selves to be performed (Daskalaki and Simosi, 2018, 1157). Indeed, anthropologists have described liminoid as populated, in contrast with rituals, by moments "where creativity and uncertainty unfold" (Thomassen, 2009, 15).

Literature has found inspiration in the concepts of liminal and liminoid to explain changes in everyday life. Bridges (1980 [1974]) has referred to the liminal as a "neutral zone", a space of reconstruction, an empty space where a new sense of the self could gestate. In a more sophisticated elaboration, Rosi Braidotti (1994) suggested acknowledging transformational status - the liminal and mobile, nomadic transitions - as existential conditions of social regeneration. From the point of view of Braidotti, we are in a permanent liminoid state, even without intending or noticing, as we are subject to the transformations of the (organizational) communities we belong to. Researchers of organizing processes like Case and Gaggiotti (2014) are also beginning to learn how to move with actors (Latour, 2005) - to follow flows and apprehend reticular processes and assemblages that emerge. Actors/actants enter into relations with one another while also being separable, moving constantly between van Gennep (liminal) and Turnerian (liminoid) spaces.

Indeed, rather than considering liminal and liminoid as distinct categories, Andrew Spiegel (2011) positioned them on a linear continuum, proposing that events have varying degrees of liminality or liminoidity. Spiegel describes 5 attributes that differentiate the more liminal from the more liminoid: 1) degree of transformative potential (rebellion may typically reverse to status quo or more revolutionary potential); 2) degree of permanency/predictability (existing within social structures); 3) nature of occurrence (cyclical social processes to erratic around individual interest); 4) meaning (retrospective with meaning for society-future orientated with meaning for individual/interest group); 5) context (centered on tradition with 'mechanical' solidarity to centered on fluent relationships with organic solidarity). Spiegel applies this

continuum model to explore the potential for events to be misinterpreted by participants and observers as truly liminal in the pre-modern sense, thus raising unrealistic expectations of the magnitude and longevity of the transition it can create. Ibarra & Obodaru (2016) propose an alternative interpretation and define six characteristics of liminal experiences (finite time bracket, socially-guided, legitimate narrative to support sense-making, progressive outcome, simultaneous objective/subjective state, and obligatory nature), applying the first 4 to reflect more accurately less-institutionalized, contemporary experiences, such as portfolio careers. We observed both overlaps and differences in these two models and in our discussion we draw on 4 characteristics that our research revealed are most relevant to the case of M-Entrep: meaning/sense-making; obligatory nature; temporality; and rhythm and social guidance.

II.2. Roles, role transitions and entrepreneurial learning

Neck and Corbett (2018) argue that EE programs aim to prepare students to start new ventures through the development of an entrepreneurial mindset and associated skills and practices. This development process, particularly in the case of educational programs that involve real venture creation, can involve students undertaking several roles - student, founder, product developer, leader, etc. In a manner not dissimilar to those seeking a voluntary career change, in a passage through the program, students will dwell in liminal-liminoid experiences. They explore, trial and may eventually integrate their new selves using the entrepreneurial activities and the new relationships and networks associated with these activities as means of elaborating possible selves (Donnellon, Ollila & Williams Middleton, 2014; Ibarra, 2003). Being betwixt and between these roles, and the influence these liminal-liminoid experiences have on the role-holders are not necessarily smooth or linear. Students may try out, or be required to fulfil, different roles depending on the context. And the context may change and cycle frequently – for example: founder when pitching to investors; student when defending academic

assignments; digital artist when discussing product development - contributing to the existence of multiple selves. This experiential learning takes place in an environment of 'doing it for real' so is not pure 'identity play' (Ibarra & Obodaru, 2016), as students may be claiming or being granted roles in the presence of real customers and investors and be expected to demonstrate an evolving entrepreneurial competence.

In this sense, the student learns to build a story whose narrative thread is both grounded in the present or here-and-now and woven into the imagined future as they develop the capacity for what Lindberg and Schwartz (2018) refer to as a future oriented process of thinking. This way of thinking stands in contrast to traditional education, which emphasizes building a story in the past with the intention of learning from cases, and 'applying' extant theories, examples and literature to 'experiences' as the main vehicle for 'learning' to 'apply' knowledge to situations in the future.

Future oriented processes of thinking require the actor to embrace and dwell in uncertainty and ambiguity (Barnett, 2007), offering deep learning potential and provoking levels of anxiety that, if not sufficiently contained, discourage learning (Vince, 1998). Students need, therefore, to be resilient learners and to experience a learning context that offers "good enough" containment of anxiety (Stacey, 2010). Mitchell (1983) suggests among the reasons for actors not to be resilient are the need to avoid risk due to the instability and inconsistencies produced through social construction of statuses that may or may not fit with individual representations of the selves (Goffman, 1959).

During the production of multiple selves in a liminoid space, a person is "suspended" between statuses (Turner, 1969, 1987 [1967]). Research is abundant on how the construction of multiple selves (Noble and Walker, 1997) instead of a single monolithic representation, is generally socially punished as inconsistent, incoherent, and even dangerous (Ladge, Clair & Greenberg, 2012; Hebl, King, Glick, Singletary & Kazama, 2007). If we want students to

explore multiple selves, the organizational learning space should be supportive of this exploration. Gherardi (2006, 2009) has referred to practice-led organizational learning spaces as "textures", where interrelated practices form an action-net of repeatedly renewing and transforming the self. This is the textural nature of M-Entrep.

Berglund and Verduyn (2018) have referred to the entrepreneurial self as an open "template", from which various kinds of entrepreneurial selves are configured. Analytically, it informs us of the myriad of entrepreneurial 'becomings' that can be produced by combining, say, "education + enterprise + responsibility + creativity + freedom + opportunity + future". (p. 10). Berglund and Verduyn (2018) go on to suggest the capacity of critical entrepreneurship to stimulate the liminal-temporal dimension of the learning experience. Indeed, they claim "entrepreneurship (and the education that follows) is not simply one course among others to choose from, but has paved the way for how we can live the present" (p. 6). What intrigues us when engaging with experiential learning in EE is how the texture of the liminal-liminoid space supports development of these multiple selves and role transitions and what impact this has on students' learning and choices. We argue the lens of the liminal-liminoid continuum, grounded as it is in anthropology, brings a broader perspective which allows us to explore roles and their transitions and the influence of the texture of the learning space.

II.3. Experiential learning and the liminal-liminoid continuum

There is extensive literature exploring the relationship between liminality, learning and associated emotions. Although, in most cases liminality is associated positively with creativity and innovation (Garsten, 1999), the liminal is often considered troublesome for students - a phase during which they grapple with significant 'threshold' concepts, but that once grasped, enable them to emerge with a renewed level of understanding or an outlook that may be

transformational in nature (see, for example: Land, Rattray & Vivian, 2014; Land, Meyer & Flanagan, 2016; Rose, Leisyte, Haertel & Terkowsky, 2018).

Tempest and Starkey (2004) highlight positive and negative impacts of liminality on both individual and organizational learning, adopting Garsten's (1999) interpretation of temporary workers being liminal subjects who exist 'betwixt and between' the temporary employing organization and the world beyond. One benefit Garsten cites is the possibility of increasing their "portfolio of experience" through interaction with multiple communities of expertise. In the context of students on experiential EE programs, they are exposed to a valuable range of new communities from fellow nascent entrepreneurs to seasoned business leaders and investors.

The literature suggests the majority of educational programs that take a more experiential approach expose students to short-term experiences - such as opportunity identification and assessment, industry placements or other types of engagement with experienced entrepreneurs or investors - periodically dispersed within a core didactic, lecture program, whilst other programs involve students creating and operating simple businesses as a short-term assignment (Vincett & Farlow, 2008). It recognizes numerous shortcomings in these attempts to introduce experiential learning at modest levels into EE programs (Henry & Lewis, 2018; Ferreira, Reis & Miranda, 2015; Neck & Corbett, 2018; Pittaway & Cope, 2007). These include: the lack of a curriculum that reflects the dynamic, temporal and iterative nature of real entrepreneurship and its associated learning processes; the limited emotional attachment to tasks; and the lack of critical incidents and crises from which entrepreneurs learn (Johannisson, 2016; Taatila, 2010).

Although still relatively limited in number, over the last decade, there has been an increase in programs that require students to create a new venture as the core learning vehicle for the duration, or a substantial portion, of an entrepreneurial educational program (Lackéus & Williams Middleton, 2015; Ollila & Middleton, 2011; Sadek & Loutfy, 2013; Tosey, Dhaliwal

& Hassinen, 2015). The study and evaluation of these integrated venture/educational programs has been limited to date but has indicated the potential to overcome some of the shortcomings listed above as well as bridging the 'valley of death' between developing a concept for a potential venture and securing investment (Lackéus & Williams Middleton, 2015).

With the literature advocating experiential learning for entrepreneurship development so strongly, it is easy to conclude that 'more is better' in this regard, and venture creation could be positioned as the ultimate in experiential EE. However, potential challenges have been highlighted in programs that encompass substantial venture creation activity suggesting they are not without potential challenges. These include: multiple stakeholders possessing differing, and sometimes conflicting, measures of success (Matlay, 2005, 2006, 2009) or fundamentally different philosophies (Hannon, 2005); recruiting and/or training suitable faculty (Mandel & Noyes, 2016); ensuring a suitable culture of enterprise within the host institution (Ollila & Middleton, 2011); a curriculum that lacks both a critique of entrepreneurship and learning and experiences relevant to non-venturing careers (Berglund & Verduyn, 2018); and the potential of the limiting of a safe space to learn through failure and critical reflection (Cope, 2005, 2011).

Exploring these challenges through the lens of the liminal-liminoid continuum brings new insight into the tensions that exist between different aspects of programs like M-Entrep. For example, the prescriptive curriculum-based learning and society-wide recognition associated with a Masters degree may be considered primarily liminal in nature, being less 'troublesome' and less transformative than the more self-directed experiential learning associated with new venture creation that can be considered more liminoid in nature. The intriguing question is: how does the coexistence of these elements impact the students' overall learning in an integrated Masters/venture creation program?

III. The case of M-Entrep

The primary source of data for this research was a UK University-based program - referred to as M-Entrep. M-Entrep combines an incubation program with a full-time Masters in entrepreneurship. The program, influenced initially by the Alacrity Foundation scheme in British Columbia (Alacrity Canada, 2019) is an economic development initiative aimed at increasing the level of technology-based entrepreneurship and new venturing in a geographical region of economic deprivation in the UK.

The host University works with a range of industry partners to identify challenges that represent market opportunities - market gaps with potential commercial value. The industry partner provides guidance and mentorship to the team that takes on its challenge, although financial investment is not a requirement.

Students in the program are typically software engineers or digital creatives, often with little or no previous venturing experience. After some initial cohort team-building and observation the students are formed into teams of typically four members. Team composition (including psychometric profiling and technical competence in areas relevant to the opportunities offered) is a consideration from recruitment onwards.

The funding model is also non-traditional. Students are not charged fees for undertaking the Masters and receive a one-year stipend. In return for this investment the University takes an equity stake in each incorporated business. The University's strategy is to exit as an investor after a business has grown sufficiently and reinvest the funds back into subsequent cohorts and ventures. Notable consequences of this funding model include: a favorable ratio of applications to places allows for real granularity in recruitment to align students with available challenges; the stipend negates the need to take a part-time employment for the vast majority of students

reducing time pressures; and, unlike most start-ups, students are not exposed to the personal financial risk of investing their own funds¹.

The overall initiative has three phases. In Phase 1, the students undertake a one-year full time Masters in entrepreneurship in combination with an incubation process that aims to develop a business opportunity to the point of minimum viable product (MVP), with a business plan the team can pitch to investors. The rigidity of the Masters timetable and assignment deadlines reinforce the pace of the incubation program and introduce added complexity in balancing the unpredictability of the business incubation process with fixed deadlines for academic work. The core assignments align to the venture creation process across the three product/project semesters, namely, market assessment, management business/investment plan. Phase 1 - which is the subject of this paper - takes place in a dedicated building on campus and all students who reach a suitable academic standard, graduate at the end of this phase. Teams that have made satisfactory progress with their business can enter Phase 2. Here they remain on campus as incorporated businesses, typically for a further year as they get established. Successful businesses emerging from Phase 2 enter Phase 3 where they are supported in integrating with the local business infrastructure and secure premises off campus. Although this paper only covers Phase 1, Table 1 provides an overview of the overall program for context.

Table 1

The M-Entrep Program

[insert Table 1 about here]

¹ There is however a real opportunity cost for many who have forsaken, or at least postponed, the opportunity of securing full-time salaried employment or, in some cases, resigned from employment to enroll on the program.

IV. Methodology and Research Design

Studies of EE programs, including those with integrated venture creation programs have, in the main, collected their data via interviews with relevant faculty staff (Mandel and Noyes, 2016), with some adding data collected from students' written assignments. However, the everyday experience of students on these integrated programs has received very little attention.

Aileen Collier (2016) argues for more research methodologies and practices that acknowledge the relational, spiritual, moral and ethical dimensions of knowing instead of an acquired, specific knowledge. Our methodological choice in this research article was to give more attention to the ongoing sense-making of the entrepreneurial learning experience. Our approach was inductive and aimed to gain insights into students' everyday experience of the program. We followed Van Maanen's (2011) suggestion of "exploring", allowing the theoretical framing of our analysis to emerge from the data, using a lens that helped make sense of what we were finding.

The M-Entrep research was built around discussion groups (Given, 2008) conducted with students on two program cohorts. The choice of discussion groups as a method for data production was primarily motivated by our interest in students' broader storytelling of the M-Entrep experience. Rather than producing a collection of individual stories of experiences, we sought to provoke a dialogue and observe how multiple stories emerged from this. Researchers took the role of facilitators, guided by a semi-structured questioning route, but minimizing their interventions as much as possible. The discussion groups, were informal, though focused, conversations, and were influenced by the information gathered from previous conversations, as well as from observations made outside the discussions by the program team. The latter were collected through depth discussions and access to two staff team members' reflective journaling.

The student discussion groups lasted between 45-80 minutes encouraging students to explore their motivations for enrolling on the program, their shifting roles and how they were making sense of their everyday experience of the program. Facilitators were external to the M-Entrep host university. The discussion groups were recorded and recordings were fully transcribed by a third party. Transcripts were anonymized and coded, with only the external members of the research team holding the coding key.

Each cohort comprised 20 students, the first completing their Masters May 2014-May 2015, and the second May 2017-May 2018. Participation in the research was voluntary. All 20 students from Cohort 1 took part and the discussion groups were conducted as follows: nine in April 2015 (one session with each of the five intact business teams and four sessions with five students in each from mixed business teams). In February 2016, nine months after completion of the Masters program, one discussion group was held with six participants from a mixture of business teams from Cohort 1. 17 students from Cohort 2 participated in the discussion groups all with participants drawn from different teams: June 2017 (four groups), February 2018 (five groups) and May 2018 (five groups).

Co-ordination of the availability of students and facilitators impacted on the timing of the discussion groups, so although the discussions followed similar structures and topics the timings in terms of the stage at which the students were at in the program differed across the two cohorts. Copies of the transcripts were analyzed by two of the authors independently and the agreed themes were used as a basis for initial coding of the transcripts in NVivo v12. The coding of the transcripts generated the following interlocking themes of relevance to this paper: negotiating multiple roles; juggling the venture creation and academic processes; identifying with key events and milestones; working in the physical environment; reflecting on personal development; negotiating the transition from workgroups to teams; and interacting with stakeholders.

The challenge of transitioning statuses and negotiating multiple roles assigned to participants emerged strongly from the data, alongside the importance of the 'texture' of the space students were experiencing. This provided the inspiration for our decision to explore the data through the lens of the liminal-liminoid continuum.

Our paper has some limitations. Our research was limited to two cohorts and it would be interesting to study several consecutive runs, over a longer time period, and to explore the experience of new and old actants (academics, entrepreneurs, founders). Our findings are derived from a single program in an English university and would benefit from being explored in other entrepreneurship development programs, different environments and cultures.

The Findings section that follows presents the data from the discussion groups, focusing on the four strongest themes to emerge from coding the transcripts: multiple roles; the venture creation and academic processes; key events and milestones; and physical environment. Other themes are touched upon under these headings, where appropriate. Analyzing through the lens of the liminal-liminoid continuum revealed new insights, and four characteristics - meaning/sense-making, obligatory nature, temporality and rhythm and social guidance - derived from the work of Spiegel (2011) and Ibarra & Obodaru (2016) proved particularly illuminating.

V. Findings

Negotiating multiple roles

M-Entrep students associated themselves with multiple roles including student, product developer, software engineer, founder, director, employee, shareholder. Initially many struggled with meaning/sense-making in newer roles; particularly in the early months, many gravitated towards roles they arrived with upon enrollment, such as 'artist' or 'gamer' and found holding and switching multiple roles challenging. The multiplicity of roles carries with

it tensions between using existing craft skills and developing new skills associated with being a business person:

"I'm a 3D artist so I've got to get this done. This needs finishing. You kind of like go, oh no we've got to think business now. It's kind of like having two minds and sometimes that's a bit of a struggle for me" (1st Cohort, April 2015).

"Yeah. I was told recently that my time was now too valuable to be a developer. But I'm the only developer on our team. So I was sort of thinking, "If I stop developing, we don't have a business" (2nd Cohort, May 2018).

Over time and as critical reflection encouraged their meaning/sense-making, students began to notice the pros and cons of different roles, many becoming adept at referring to the one that brought most advantage in a given situation:

"That's one thing if you communicate as a student you can make a mistake and go back again. Like for instance when we showed off our product a couple of people said this isn't so great, it would be better if you did this. If you went as a business they would probably just disregard you there and then. But because you're a student they're more willing to help you" (1st Cohort, Dec 2015).

"That's one of the big things, learn how to use, like if you're talking to anyone in the Games Industry you won't use the University tag because of the perception, but when it comes down to the academic you definitely want to use it." (1st Cohort, Dec 2015).

Students could not always choose which role was assigned to them, with factors such as being located on a campus or the presence of the University branding logo when off campus, playing a part.

"It means when people come around, potential publishers, they look at us as a University team, that's not the best thing" (1st Cohort, Dec 2015).

The challenge is increased when members of the staff team, external partners and stakeholders do not interpret and enact their role in a way that is congruent with students' expectations; students typically fall back on social guidance and past experience and thus the nature of these relationships influences the roles assigned. For example, a *mentor* taking up the role of an *employer* could be experienced as unhelpful:

Student: "We showed it to our boss"

Researcher: "And your boss being"?

Student: "XX" (non-academic member of the incubation staff) (1st Cohort, April 2015).

"At times there were people who ran to "YY" [non-academic lead of the incubation staff team] like he was a teacher" (1st Cohort, April 2015).

Nor was it only staff-student relationships that shifted over time, students were also negotiating shifts in their teams and their growing sense of 'cohortness'; there was an indication they began to view themselves as a *communitas* (Turner, 1969):

"It was actually quite weird when 20 of us would go down to lunch at the same time, the whole office would be empty and we would kind of be walking around as a posse on the campus. We'd also go out to the beach together and stuff as well. I think that really helped

in bringing everyone together so it wasn't just within teams that we had to think we are a team" (1st Cohort, April 2015).

Towards the end of their first year as they approached the stage of incorporating their business, students tended to step more readily into the role of entrepreneur and to shed their student role. This is reflected in their relationship with others:

"The good thing now is that we're talking to investors and they treat us like that as well, they don't treat us like students who are just experimenting, they actually treat us like we're really companies and we do know what we're talking about, which is good, without us even consciously having to say anything either. They just sort of get that" (1st Cohort, April 2015).

Juggling venture creation and academic processes

Students tended to categorize elements of the program as *either* academic *or* product/business-related and often saw the fixed temporal rhythm and compulsory nature of academic deadlines and the fluid and organic rhythm of business development as being in tension. In these cases, the Masters was typically seen as getting in the way of the 'real' work:

"So, we were going through a really busy time. My colleague bashed one [assignment] out literally over a weekend because we had so much on ... he failed it by 5% and had to redo it. He just thought, "Are you serious?" We're trying to start a company and you're making him do another diary entry" (2nd Cohort, May 2018).

However, particularly in the early months, some students viewed the Masters as a safety net should their venture not succeed:

"I'm pretty confident that we're going to do well but you come out of it with a Masters anyway so you can still apply as a PG to a lot of jobs anyway" (2nd Cohort, Jan 2018).

There was evidence of the positive impact on their personal development of the tensions inherent in studying for a Masters whilst incubating a business, of reflecting in and on action: "The thing that went best from my personal point of view was the personal development that I went through over the program and I do see myself as a very different person from a year ago in terms of the way I talk and the way I think" (1st Cohort, April 2015).

"The biggest learning for me is the jump between being, the different working, running a business, doing the project management, building a product, the whole real-life process of doing it" (1st Cohort, April 2015).

"I suppose it's maybe important to look at it in regards of if the MA wasn't there or the 9-5 wasn't there, what would you come out with? Because it's interesting to think ok so maybe I worked 9-5 in the studio, I had the funding of £16,000 to run a studio I didn't have the MA now where would I be, like. I would have a product. Would it be to the level that it is now? No, because part of the MA and the program really is the fact that all these mentors are coming in and giving you feedback on your product and helping you grow in the right directions and maybe consider things you never thought about ..." (1st Cohort, April 2015).

The co-existence of studying the Masters whilst incubating their businesses encouraged students to engage with failure as a rite of passage in their personal growth:

"And now I'm kind of much more prepared. And actually I was going to say even the negative side of things has put me through like a personal journey which I would do over

again even if I knew the business was going to fail because it's been really good personal growth for me" (2^{nd} Cohort, May 2018).

"It's like trying to put this constantly changing shape into a square box ... there's no book, there's no answers, there's no, no-one can tell you what to do" (2nd Cohort, May 2018).

As students progressed through the program, whilst the 'academic' and 'incubation' aspects of the program were still seen as distinct and separate, increasing value was attached to the contribution that the structures and disciplines associated with the Masters made to their entrepreneuring practices. The requirement on the Masters program to engage with critical reflection encouraged students to take the stance of participant-observers.

"I hate to say it but the learning journal, the critical evaluation, which I hated doing them as much as we talked about them being a hindrance, they did force me to verbalize my ideas or write down my ideas and then to critically look at them" (1st Cohort, April 2015).

"The irony is that we don't actually need the Masters but you do need the learning so it kind of like goes hand-in-hand" (1st Cohort, April 2015).

"I would like to think that we didn't need the MA but if you look realistically the MA helped us evolve from University head set to business-like behavior" (1st Cohort, April 2015).

Identifying with key events and milestones

Within their venture teams, students highlighted key milestones, events and team-wide decision points as influential. Although to some extent the nature and timing of these goals were set by the program design, they did, in general, involve a degree of choice, creativity and

decision-making and impacted on their development, motivation and confidence both individually and collectively. One key milestone was agreeing on a project to develop:

"I think our team sort of settled into this status quo but I don't think we were actually properly comfortable with each other until we settled on a project we could focus on" (1st Cohort, April 2015).

"When we actually decided what product ... I think that's when we properly went cool, we're now a team, this is us, we're focusing on, this is why we're going to make something awesome and we know each other now. It did take a little bit of time" (1st Cohort, April 2015).

Other significant events which were common across most of the teams, included: deciding on their industry partner and market opportunity to pursue; their first product demonstration; deciding on the branding of the business; delivering their first pitch to investors; and surviving their first real argument.

Working in the physical environment

The students were housed in a dedicated space on campus, which they generally perceived as supporting their emerging roles as entrepreneurs labelling it as 'the office' or 'the studio'. The open-plan nature of the space contributed towards a sense of cohort, as well as to meaning and sense-making, setting them apart from other students whilst simultaneously benefitting, for example, from facilities and resources.

"I think it's like that close communication, that's something that's quite good about the office being small and compact. It's that close communication within the environment

allows to have that constant hands on talking amongst yourselves as a team" (1st Cohort, April 2015).

"And the fact that the studio is open plan, so although you've got your team, we still interact with the other teams and you can still get help and advice and stuff from other teams" (2nd Cohort, June 2017).

Some students recognized the influence the physical space had in practicing transitioning from one role to another.

"The brilliant thing about that office is it is a bit like a goldfish bowl, you have people looking in, you have people walking by, walking through and from day one we had people coming up who are very important. You have investors, you had potential publishers, MPs, which meant you had to be able to think on your feet and be able to pitch quickly. I could be writing 2,000 lines of code that day and someone goes 'oh by the way can you tell us about your finances and what investment you're looking for and what sales you reckon you will achieve'; you have to be able to do that. And to begin with that was difficult and definitely stuttering and kind of, but every single person in there has had to do that. That skill, I thought that would be something that everyone would have problems with, but no one has problems with it now" (1st Cohort, April 2015).

Some teams were using their status as students and their campus location to access resources:

"For my team, in particular, we've really heavily used the University network in that we've been able to validate our research that we're doing for our own stuff. We have some systems and people at this University who have PhDs who have been able to talk to us in

that way. That's been really good for us. I think if we weren't Masters students at this University then we wouldn't be able to talk to them" (2nd Cohort, Jan 18).

In the discussion that follows, we firstly present the four characteristics that define our liminal-liminoid continuum. We then proceed to create a 'texture' of the M- Entrep program by positioning on this continuum, processes of the M-Entrep program that reflect the themes presented above. We then go on to discuss the insights gained from the liminal-liminoid nature of M-Entrep's texture.

VI. Discussion: The texture of M-Entrep through the lens of the liminal-liminoid

Associating our interpretation of Ibarra & Obodaru (2016) and Spiegel (2011) with the themes that emerged from our data, we have developed an interpretation of the liminal-liminoid based on four characteristics (meaning/sense-making, obligatory nature, temporality and rhythm and social guidance). Placing aspects of students' experiences on a continuum, provided us with new insights and understandings into how they make sense of M-Entrep. An explanation of the four characteristics used to define our liminal- liminoid continuum follows:

- (i): *Meaning/sense-making*: the degree to which the significance of an experience is constructed retrospectively and with meaning to the society (more liminal) or prospectively and with meaning for the individual (more liminoid). For example, securing a role in their newly-incorporated venture has more meaning for the individual and could be interpreted as more liminoid than the act of securing a Masters qualification that is widely recognized by society but may at the time be seen to be of limited value to a student who is their own employer.
- (ii) *Obligatory nature*: the degree to which the student has a choice in participating in, or influencing the experience. Producing a critical reflective academic assignment for the Masters

is compulsory in nature (liminal), whereas volunteering to lead, and then delivering the team's pitch to investors is more liminoid.

- (iii) *Temporality and rhythm*: the degree to which the timing or duration of the experience is fixed and predictable for the entire cohort or more fluid and erratic, based on the readiness of the team/individual. The timing of the graduation ceremony is set, so contributes to a more liminal experience than say, the timing of when a team decides it is ready to demonstrate their product to potential investors.
- (iv) *Social guidance*: the degree of rigidity of a supporting narrative derived from social structures or emerging more organically from a particular/individual experience. Highly-guided and predictable experiences such as attending and being given input at lectures are more liminal than self-initiated product development brainstorming events.

The four characteristics serve to describe a continuum that defines the texture of a 'space' within which learning and practicing entrepreneuring occurs. Experiences at the more liminal end of the continuum are obligatory, with their nature, meaning and timing dictated and guided mechanistically, not by the students, but by others. In contrast, the nature, timing and meaning of experiences at the liminoid end are more at the discretion of students.

Thus, the liminal provides a sense of stability and continuity derived from social recognition and tradition, whilst the more liminoid supports risk-taking, creativity and the generation of new insights. The nature and aims of the program will influence its design and the balance between the more liminal and more liminoid processes. However, it is the presence of processes at different points along the length of continuum and the interrelationship between them that facilitates movement. Figure 1 below provides an example, locating a number of student experiences of M-Entrep on the continuum. These experiences are drawn from the transcripts of the discussion groups and the use of italics indicates terminology used by the students.

Figure 1

The texture of M-Entrep and the liminal-liminoid continuum

[insert Figure 1 about here]

The figure gives an overall indication of the liminal-liminoid nature of M-Entrep, taking into account the four characteristics collectively. The vertical positioning of the processes is purely for ease of reading and is not related to any individual characteristic. Our aim is not to include every program aspect but rather to give a flavor of M-Entrep's texture.

As Universities could be viewed as pre-modern institutions with rituals, norms and rites of passage "attending lectures", "marking", "graduation", the simplistic conclusion would be that it is an inherently liminal experience in van Gennep's (1960 [1909]) terms; students are moving further towards the goal of emerging as a self-sufficient, independent, member of society. The time/space boundary of the educational experience is clearly defined by the ceremony of graduation and the bestowing of a qualification recognized by the higher education system on behalf of society at large; students are showered with messages from both the educational and political systems which set expectations of a more successful life, enhanced opportunities of employability and income (Mason, Williams, Cranmer & Guile, 2003; Khalifa, Dukhan & Mouselli, 2018).

At first sight it seems natural to categorize the Masters elements of M-Entrep and their associated processes and rituals as inherently more liminal and the incubation process as more liminoid. However, our findings suggest this is over-simplistic. Rather, we suggest, it is the coexistence of the two, the process of accommodating them, and the quality of conversations and relationships between different actors that has the greater influence on the texture of the liminal-liminoid space.

For example, the more liminoid experience of students having free rein to develop their

emerging venture is happening within the context and relative safety of the more liminal experience of gaining a Masters qualification; the more liminal experience of being on a University campus and graduating supports students' more liminoid experience of growing confidence in their entrepreneurial capacities. This coexistence of the more liminal and the more liminoid may be more easily recognized *between* the Masters and the venture creation elements of M-Entrep. However, as their positioning on the continuum highlights, they also coexist *within* these elements.

The complex texture of M-Entrep is evidenced in many ways, including through the program design, the interaction of staff and stakeholders with students and the physical location. For the texture to be conducive to transformation, conversations and relationships need to support negotiating multiple roles. The sense of *communitas* (Turner, 1969), exhibited, for example, in students forming a "posse" as they walked around the campus or the active coaching of team development and dynamics are two examples of this. Being pushed to develop new skills through critical self-reflection is a third.

The staff, external stakeholders and the physical space can be viewed as both contributors to the liminal-liminoid texture as well as enablers supporting the students to navigate through it. When these enablers are less aligned, the texture suffers. For example, as highlighted in the negotiating multiple roles section above, the behavior of some staff and the physical space being interpreted as an office, contributed to their perception of being 'employees' of the incubation staff team, rather than emerging employers. In another example, the level of guidance and team coaching varied across the two cohorts due to staff changes, with the second cohort receiving less of a supporting narrative on what to expect as a team 'forms and storms' and movement from work group to team was slower and patchier.

The metaphor of a "safety net" was used by a number of students and speaks to the texture of the learning space engendered by the coexistence of the liminal and the liminoid; the safety

net is a 'good enough' container (Stacey, 2010) that protects against the damage of a hard fall, without limiting movement. The existence of these more liminal experiences, with their widespread societal recognition, allowed students to feel safer in experimenting and taking more risks with their new venture development, supporting the development of an entrepreneurial mindset and their entrepreneuring capacities.

Students also experienced events which acted as mini rites of passage, albeit that recognition was limited to a narrower range of interest groups, more closely associated with their new venture creation. These included: deciding on their industry partner and market opportunity to pursue; their first product demonstration; deciding on the branding of the business, delivering their first pitch to investors and surviving their first real argument.

The more liminal and the more liminoid also coexist in the assessments on the Masters program. For example, whilst the formal assessment processes are seen as more liminal, the nature of assessment - based as it is on critical reflection (including an emphasis on team and team dynamics) and taking a participant-observer stance – and the learning that derives from it are viewed as more liminoid. As our findings show, whilst the assessments were often viewed at the time as a "hindrance" and getting in the way of the "real work" of setting-up their venture, the discipline of reflecting on experience (including 'failure') came to be seen as making a valuable contribution to the future development of students' ventures, as well as to their personal development.

The more liminal obligatory nature of the Masters is reinforced as undertaking the Masters is a pre-requisite for students receiving their stipend. This added to the incentives to submit to the discipline of submitting assignments even when under significant time pressures from other sources. Tempest and Starkey (2004) note the impact operating in a liminal-liminoid space can have on time available to reflect on experiences and we gathered substantial evidence that the pressure to drive the businesses forward impacted negatively on many students' reflection time.

This pressure was both self-imposed by the students, and reinforced by the incubation staff (understandably as their performance was judged on the number of incorporated businesses produced and level of investment secured), which chimes with Hannon's (2005) warnings around the potential for different philosophies and measures of success between staff on entrepreneurship programs. Our findings suggest that without the presence of the compulsory assignments of the Masters (putative liminal) it is unlikely that much of this critical reflection (putative liminoid) would have happened. It is precisely the liminal-liminoid nature of the M-Entrep texture that encourages reflection, sense-making and promotes informed action.

The obligatory nature of aspects of preparing a business for legal incorporation can also be viewed as more liminal. For example, the gaining of incorporated status and directorships are roles that have been bestowed by the British legal system on behalf of society for many years and both are garnished with tradition and expectations of what is to follow. The tempo and timeframes implicit in the different phases of M-Entrep also err towards the more liminal, encouraging the teams to apply for incorporation as soon as possible after completing their Masters. The motivation behind this is primarily to create a legal vehicle suitable for investment, so to some extent the time boundary for gaining the academic qualification, the directorships and the incorporated status are dictated to the teams.

Equally, "settling on a project" contains both more liminoid and more liminal facets. On the one hand, it can be interpreted as a rite of passage for the team and its development, a point at which they experience a strong sense of belonging and whose importance is recognized by both the staff team and the wider program cohort. On the other, each project is unique and will pivot multiple times, so that there is no handbook or rule book that should be followed. And whilst the program may encourage students to adhere to their timeframes for venture development, there is no obligation on them to do so, or even to go ahead with the venture at all, creating a textured learning space for students to re-imagine themselves and their futures.

In looking through the liminal-liminoid lens we are encouraged as entrepreneurship educators to think more creatively about the 'texture' of the transitional space M-Entrep students are inhabiting, the multiple statuses and roles open to them – and the implications for the roles we step into as educators/staff members. The production of roles in these contexts is more complex than just student and/or entrepreneur (Zhang & Chun, 2018), academic and/or incubation expert. Students see the benefit to their personal and business development of being flexible and in control of their multiple roles in an environment where role assignation by others and institutions can be prevalent.

In experiencing and working with the tensions and contradictions inherent in juggling the competing demands of academia and incubation, of doing business and performing as a skilled 'technician' (coder, digital artist, programmer, etc.) students repeatedly 'rub up against' both their own preconceptions and those others impose on them. It is an unnerving and dislocating experience, requiring them to dwell in ambiguity and uncertainty and to engage in the struggle of moving between roles and statuses – as one student described it, "having two minds". Where the texture of the liminal-liminoid space is conducive, it is a fertile developmental space for, in the words of Victor Turner (1982 [1974]), "free or ludic recombination" (61) and an "independent domain of creative activity, not simply a distorted mirror-image, mask, or cloak for structural activity" (65).

And it is here that the conversations and relationships with staff and external partners exert their strongest influence. For whilst students may engage in fruitful exploration emerging from tensions and contradictions in taking up their own roles, when staff enact their roles in ways that are incongruent with the context, the texture of the space is compromised and the potentiality of the liminoid reduced. For example, when the student is in the vulnerable, unsettling space of re-imagining their future (self), taking up an expert stance, telling them 'how to' do x, can be deeply damaging; no matter how helpful the intent, in 'rescuing' them

from the ambiguity and uncertainty their learning is diminished and the risk is they revert to a new dependency. By contrast, fostering adaptive, more fluid relationships that shift shape to fit the context whilst maintaining their integrity can make both transitioning and dwelling in the ambiguity easier for students to bear and for stakeholders to accept.

VII. Conclusion

The lens of the liminal-liminoid continuum encourages us to revisit our approaches to teaching and pedagogies and gives us a framework for unsettling and challenging our program practices and assumptions. As all educational contexts can be considered opportunities for experiment, learning and transitioning to a new status, viewing through this lens may have wider applicability.

Drawing on research on the M-Entrep program, in this paper we have shown how a liminal-liminoid continuum allows us to explore the texture of the learning space. In doing so, we have argued that this lens brings new insights into students' experience and their implications for program design and the conversations, relationships and practices that take place within them. This contributes to the debate around unsettling entrepreneurship education in six ways. Firstly, we have identified four characteristics of a liminoid-liminal continuum that provide insight into and understanding of integrated Masters and venture creation programs and explored them through the M-Entrep case study. Secondly, the liminal-liminoid continuum makes the relationships between various program design elements and how their coexistence influences the texture of the learning space more visible. The metaphor of the 'safety net' with its open yet containing texture that provides support without inhibiting movement emerges from this and provides a helpful concept for entrepreneurship educators and program designers.

Thirdly, in making these relationships more visible, we highlight how the struggle that students may have negotiating the tensions and opportunities associated with this coexistence is a feature of experiential learning approaches; how these tensions and relationships are handled can benefit or impede their learning.

Fourthly, and associated with this, the staff are contributors to the liminal-liminoid texture as well as supporting students to navigate through it. We begin to appreciate that to support students' exploration of their potential future selves there needs to be congruence between student and staff roles. Staff need to be flexible and adaptable in enacting their roles to support students in transitioning between roles and statuses, particularly where these roles are unfamiliar and uncomfortable for students to inhabit.

Just as roles need to be congruent, we observe fifthly, the physical space(s) should support students in a range of liminal-liminoid processes and experiences. Where this is a single space, it needs to defined but open plan, distinctly identified but accessible, rigid but malleable, on campus but detached from other programs' spaces.

Finally, in differentiating between the liminoid potential of developing an entrepreneur, and the more liminal potential of developing an entrepreneurial business venture, we highlight the need to consider the interconnection between educational and venture creation program elements and their measures of success. Supporting students to navigate through these experiences can be further complicated by the presence of external stakeholders with very different views on measures of program success.

Our more nuanced exploration of the liminal and the liminoid in relation to the M-Entrep program has uncovered both the liminal aspects of incubation and entrepreneurship and the more liminoid aspects of the MA program, avoiding the over-simplification of 'either/or' and recognizing that each is 'both/and'. It is in the coexistence of, and the tension between, being

more in the liminal and more in the liminoid that encourages students to question and reimagine themselves out of pre-defined roles.

The lens of the liminal-liminoid allows us to see different program elements (venture creation, Masters degree program) not in opposition to each other, but as interconnected and co-existing. Therefore, we invite other researchers to explore other EE contexts, including executive and non-accredited entrepreneur development initiatives, as well as educational contexts beyond the EE arena.

When viewed through the lens of the liminal-liminoid continuum, programs of a similar nature to M-Entrep, with a diversity of experiential and taught processes, are likely to have similarly rich textures and accompanying challenges for students and other stakeholders. All EE programmes may have (or perhaps should have) rich liminal-liminoid textures due to the very nature of the subject of entrepreneurship. The approach described in this paper equips entrepreneurship educators and the entrepreneurship community with a fresh approach to understand more deeply, to critique and to refine, their approaches to the development of entrepreneurial capacities.

Note: This paper is the result of a genuine collaboration between the three authors, with each making an equal intellectual contribution. Authorship is attributed alphabetically.

References

Alacrity Canada (2019). Uniting passionate entrepreneurs, expert mentors and top investors.

Retrieved from https://www.alacritycanada.com/. Accessed 9/2/2019.

Barnett, R. (2007). A will to learn: being a student in an age of uncertainty, Maidenhead: Open University Press.

- Berglund, K. & Verduyn, K. (Eds.). (2018). *Revitalizing Entrepreneurship Education*. London: Routledge.
- Braidotti, R. (1994). Nomadic Subjects: embodiment and sexual difference in contemporary feminist theory. New York: Columbia University Press.
- Bridges, W. (1980[1974]). Transitions. Reading, MA: Addison-Wesley.
- Case, P. & Gaggiotti, H. (2014). Organizing through displacement, travel and movement.

 Culture and Organization, 20(3), 179-184.
- Collier, A. (2016). Practice development using video-reflexive ethnography: promoting safe space(s) towards the end of life in hospital. *International Practice Development Journal*, 6(1), 1-16.
- Cope, J. (2005). Toward a Dynamic Learning Perspective of Entrepreneurship. *Entrepreneurship Theory and Practice*, 29(4), 373-397.
- Cope, J. (2011). Entrepreneurial learning from failure: An interpretative phenomenological analysis. *Journal of Business Venturing*, 26(6), 604-623.
- Corbett, A.C. (2005). Experiential Learning within the Process of Opportunity Identification and Exploitation. *Entrepreneurship Theory and Practice*, *29*(4), 473-491.
- Daskalaki, M., Simosi, M. (2018). Unemployment as a liminoid phenomenon: Identity trajectories in times of crisis. *Human Relations*. 71(9), 1153-1178
- Donnellon, A., Ollila, S. & Williams Middleton, K. (2014). Constructing entrepreneurial identity in entrepreneurship education. *International Journal of Management Education*, 12(3), 490-499.
- 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.

- Ferreira, M., Reis, N. & Miranda, R. (2015). Thirty years of entrepreneurship research published in top journals: analysis of citations, co-citations and themes. *Journal of Global Entrepreneurship Research*, *5*(1), 1-22.
- Garcia-Lorenzo, L., Donnelly, P., Sell-Trujillo, L. & Imas, J.M. (2018). Liminal Entrepreneuring: The Creative Practices of Nascent Necessity Entrepreneurs.

 Organization Studies*, 39(2-3), 373-395.
- Garsten, C. (1999). Betwixt and between: Temporary Employees as Liminal Subjects in Flexible Organizations. *Organization Studies*, *20*(4), 601–617.
- Gherardi, S. (2006). Organizational Knowledge: The Texture of Organizing. London: Blackwell.
- Gherardi, S. (2009). Knowing and learning in practice-based studies: an introduction. *The Learning Organization*, 16(5), 352-359.
- Given, L.M. (2008). The SAGE Encyclopedia of Qualitative Research Methods. Thousand Oaks, CA: Sage.
- Goffman E. (1959). The Presentation of Self in Everyday Life. New York: Penguin Books.
- Hannon, P.D. (2005). *Graduate entrepreneurship in the UK: defining a research and education policy framework*. Paper presented at the 28th ISBE National Conference "Illuminating Entrepreneurship". Blackpool.
- Hebl, M. R., King, E. B., Glick, P., Singletary, S. L., & Kazama, S. (2007). Hostile and benevolent reactions toward pregnant women: Complementary interpersonal punishments and rewards that maintain traditional roles. *Journal of Applied Psychology*, 92, 1499-1511.
- Henry, C. & Lewis, K. (2018). A review of entrepreneurship education research. *Education* + *Training*, 60(3), 263-286.
- Ibarra, H. (2003). Working identity: Unconventional strategies for reinventing your career.

 Boston, MA: Harvard Business School Press.

- Ibarra, H. & Obodaru, O. (2016). Betwixt and between identities: Liminal experience in contemporary careers. *Research in Organizational Behavior*, *36*, 47-64.
- Johannisson, B. (2016). Limits to and prospects of entrepreneurship education in the academic context. *Entrepreneurship & Regional Development*, *28*(5-6), 403-423.
- Khalifa, B., Dukhan, O. & Mouselli, S. (2018). Master degree under crisis. *International Journal of Educational Management*, 32(4), 538-549.
- Kyrö, P. (2015). The conceptual contribution of education to research on entrepreneurship education. *Entrepreneurship & Regional Development*, 27(9-10), 599-618.
- Lackéus, M. & Williams Middleton, K. (2015). Venture creation programs: bridging entrepreneurship education and technology transfer. *Education + Training*, *57*(1), 48-73.
- Ladge, J. J., Clair, J. A., & Greenberg, D. (2012). Cross-domain identity transition during liminal periods: Constructing multiple selves as professional and mother during pregnancy. *Academy of Management Journal*, 55(6), 1449-1471.
- Land, R., Rattray, J. & Vivian, P. (2014). Learning in the liminal space. *Higher Education*, 67(2), 199-217.
- Land, R., Meyer J. & Flanagan, M. T. (2016). *Threshold Concepts in Practice*. Rotterdam: Springer.
- Latour, B. (2005). *Reassembling the social: an introduction to actor-network-theory*. Oxford: Oxford University Press.
- Lindberg, J. & Schwartz, B. (2018). Entrepreneurship in Societal Change: Students as Reflecting Entrepreneurs?, In K. Berglund & K. Berduyin (Eds.). *Revitalizing Entrepreneurship Education* (pp. 43-61). London: Routledge.
- Mandel, R. & Noyes, E. (2016). Survey of experiential entrepreneurship education offerings among top undergraduate entrepreneurship programs. *Education* + *Training*, *58*(2), 164-178.

- Mason, G., Williams, G., Cranmer, S., & Guile, D. (2003). *How much does higher education* enhance the employability of graduates? London: Higher Education Funding Council for England (HEFCE).
- Matlay, H. (2005). Researching entrepreneurship and education (Part 1). *Education* + *Training*, 47(8/9), 665-677.
- Matlay, H. (2006). Researching entrepreneurship and education (Part 2). *Education* + *Training*, 48(8/9), 704-718.
- Matlay, H. (2009). Entrepreneurship education in the UK. A critical analysis of stakeholder involvement and expectations. *Journal of Small Business and Enterprise Development*, 16(2), 355-368.
- Mitchell, G. (1983). *Mountain experience: The psychology and sociology of adventure*. Chicago: Chicago University Press.
- Neck, H & Corbett, A. (2018). The Scholarship of Teaching and Learning Entrepreneurship. *Entrepreneurship and Pedagogy, 1*, 8-41.
- Nielsen, S.L. & Gartner, W.B. (2017). Am I a student and/or entrepreneur? Multiple identities in student entrepreneurship. *Education* + *Training*, *59*(2), 135-154.
- Noble, C.H. & Walker, BA (1997). Exploring the relationships among liminal transitions, symbolic consumption, and the extended self. *Psychology & Marketing*, *14*(1), 29-47.
- Ollila, S. & Middleton, K.W. (2011). The venture creation approach: integrating entrepreneurial education and incubation at the university. *International Journal of Entrepreneurship and Innovation Management*, 13(2), 161-178.
- Pittaway, L. & Cope, J. (2007). Entrepreneurship Education: A Systematic Review of the Evidence. *International Small Business Journal*, 25(5), 479-510.

- Rose, A., Leisyte, L., Haertel, T. & Terkowsky, C. (2018). "Emotions and the liminal space in entrepreneurship education", *European Journal of Engineering Education*, 1-14. Retrieved from https://www.tandfonline.com/doi/full/10.1080/03043797.2018.1553937
- Sadek, T. & Loutfy, R., (2013). Experiential Entrepreneurship Education in Canada new Venture Creation While Earning a Masters Degree. *Proceedings of the European Conference on Innovation & Entrepreneurship*, 555-563.
- Sarasvathy, S.D. & Dew, N. (2008). Effectuation and over-trust: Debating Goel and Karri. Entrepreneurship Theory and Practice, 32(4), 727-737.
- Spiegel, A. (2011). Categorical difference versus continuum: Rethinking Turner's liminal-liminoid distinction. *Anthropology Southern Africa*, 34(1-2), 11-20.
- St John, G. (2008) (Ed). Victor Turner and Contemporary Cultural Performance. Oxford:
 Berghahn Books, 2008
- Stacey, R.D. (2010). Complexity and Organizational Reality. London: Routledge.
- Sukavejworakit, K., Promsiri, T. & Virasa, T. (2018). Increasing Entrepreneurial Intention with the Application of Experiential Learning Theory: An Innovative Learning Method and Empirical Test. *Asia-Pacific Social Science Review*, 18, 1-15.
- Taatila, V.P. (2010). Learning entrepreneurship in higher education. *Education* + *Training*, 52(1), 48-61.
- Tempest, S. & Starkey, K. (2004). The Effects of Liminality on Individual and Organizational Learning. *Organization Studies*, *25*(4), 507-527.
- Thomassen, B. (2009). The Uses and Meanings of Liminality. International Political Anthropology, 2(1), 5-27.
- Tosey, P., Dhaliwal, S. & Hassinen, J. (2015). The Finnish Team Academy model: Implications for management education. *Management Learning*, 46(2), 175-194.

- Turner, V. (1967). *The forest of symbols: aspects of the Ndembu ritual*. Ithaca, NY: Cornell University Press.
- Turner, V. (1969). The ritual process: structure and anti-structure. Chicago: Aldine.
- Turner, V. (1982 [1974]). Liminal to liminoid, in play, flow, and ritual: An essay in comparative symbology. From ritual to theatre: The human seriousness of play (pp. 20-60). New York: PAJ Publications.
- Turner, V. (1987 [1967]). Betwixt and between: The liminal period in rites of passage. In I. C.Mahdi, S. Foster, & M. Little (Eds.) *Betwixt and between: patterns of and feminine initiation* (pp. 3-19). La Salle, IL: Open Court.
- Urbano, D. & Guerrero, M. (2013). Entrepreneurial universities: Socioeconomic impacts of academic entrepreneurship in a European region. *Economic development quarterly*, 27(1), 40-55.
- van Gennep, A. (1960 [1909]). *The rites of passage*. (M.B. Vizedom & G.L. Caffee, Trans.) Chicago: The University of Chicago Press.
- Van Maanen, J. (2011). Ethnography as Work: Some Rules of Engagement. *Journal of Management Studies*, 48(1), 218-234.
- Vince, R. (1998). Behind and Beyond Kolb's Learning Cycle. *Journal of Management Education*, 22(3), 304-319.
- Vincett, P.S. & Farlow, S., (2008). Start-a-Business": an experiment in education through entrepreneurship. *Journal of Small Business and Enterprise Development*, 15(2), 274-288.
- Zhang, Z. & Chun, D. (2018). Becoming entrepreneurs: how immigrants developed entrepreneurial identities, *International Journal of Entrepreneurial Behavior & Research*, 4(5), 947-970.

		Phase 1 (0-12 months)		Phase 2 (13-24 months)	Phase 3 (25 months >)
	Semester 1	Semester 2	Semester 3		
Physical space	Dedicated space on campus			Adjacent dedicated space on campus	Commercial space in locality
Incubation activities	Opportunity Assessment and selection:	Prototyping: Iterative phase to	Minimum viable product (MVP):	Incorporating/early stage start-up	Continued growth/ recruitment;
	Team formation	support concept	Prepare for		
	Each team offered 3	development. Team	incorporation.		
	challenges from industry	development progresses	Management roles		
	partners – assess, pivot as	and start to form	formalised		
	needed;	identity and			
		management roles			
Typically incubation	Select one challenge and	Generate proof of	Demonstrate MVP to	Secure initial investment	Further round of
milestones	communicate to industry	concept	partner/investors	and first orders	investment
	partners	-	Pitch for investment		
Masters taught input.	Market research; project	Product development	Business and investment		
	management; critical	and project	planning and pitching;		
	reflective practice; team	management; team	team coaching.		
	coaching.	coaching.	- Ch		
Masters assessments.	Feasibility report;	Project management	Business and investment		
	Reflective journal	report; reflective journal	plan/ pitch deck		

Table 1: Overview of the M-Entrep Program

