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# Entrepreneurship Education at the Crossroads: Challenging Taken-for-Granted Assumptions and Opening New Perspectives

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and Fabrice Cavarretta<sup>10</sup>

## Abstract

This work presents a synthesis of a debate regarding taken-for-granted assumptions and challenges in entrepreneurship education, matured after a developmental workshop organized to increase the research salience of the field. From the five contributions selected, three challenges emerge. The first is recognizing that participants' representations about entrepreneurship play a crucial role in defining goals and impact of entrepreneurship education; second, integrating new perspectives of conceiving entrepreneurship into the current models of teaching entrepreneurship; and, lastly, facilitating the integration of entrepreneurship knowledge into practice. These challenges opened up to a conception of entrepreneurship education as a dynamic concept reflecting personal values, societal changes, and cultural differences. As a result, learning places of entrepreneurship education promotes exploration and not adaptation to existing schemes, where personal models for practicing entrepreneurship have room to emerge. Defining knowledge priorities, instead of targeting knowledge exhaustiveness, becomes of greatest importance to make entrepreneurship education's impact more relevant.

## Keywords

entrepreneurship education, values, positive stereotypes, happiness entrepreneurship, paradigms

## Introduction

*Michela Loi and Alain Fayolle*

Entrepreneurship has been taught for over 60 years in business schools, engineering schools, and universities (Katz, 2003; Solomon, 2007; Vesper & Gartner, 1997) as it becomes a core pillar of several schools globally. Over those years, teaching entrepreneurship has developed into a field of study, namely, entrepreneurship education (Fayolle, 2013; Frese & Gielnik, 2014; Neck & Corbett, 2018). This research field focuses on understanding what, how, and to whom entrepreneurship should be taught (e.g., Fiet, 2001; Honig, 2004; Neck & Green, 2011), what results should be expected from these kinds of programs (e.g., Bae et al., 2014; Martin et al., 2013; Peterman & Kennedy, 2003; Pittaway & Cope, 2007), the mechanisms and factors by which entrepreneurship education affects business creation (e.g., Bischoff et al., 2020), and the international standards to which undergraduate curricula should adhere (e.g., Katz et al., 2016). Several contributions have focused on entrepreneurship education as a research field, questioning

its maturity and legitimacy (Fayolle et al., 2016a; Katz, 2008; Kuratko, 2005), thus promoting the emergence of a community interested in entrepreneurship education (Landström et al., 2021).

Over time, entrepreneurship education has convinced policymakers of its role and attracted scholars' attention due to the potential impact it has at the individual and societal

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levels, leading us to argue that the field will continue growing. Entrepreneurship is considered essential to economic development and prosperity (Landström & Harirchi, 2018), which increases the relevance of acquiring entrepreneurial competencies in society.<sup>1</sup> Furthermore, the pressure to become more entrepreneurial has pushed universities to consider entrepreneurship education a strategic step to foster economic and societal impact. A symbiotic relationship seems to firmly bind entrepreneurship education and the entrepreneurial university paradigm, allowing the two to converge and influence one another (Gianiodis & Meek, 2020).

Despite efforts to improve the scientific relevance and rigor of entrepreneurship education (Fayolle, 2013, 2018), research in it “[...] has not advanced at the same level of scholarship when compared to general entrepreneurship research” (Liguori et al., 2019, p. 4). There are insufficient theoretical foundations regarding pedagogical or training strategies adopted in the programs (Fayolle, 2013; Neck & Corbett, 2018). Vagueness in true pursued goals persists (Hoppe, 2016), and concerns over how entrepreneurship education impacts entrepreneurial outcomes remain (Fretschner & Lampe, 2019; Loi & Fayolle, 2021; Lyons & Zhang, 2018; Walter & Block, 2016).

To address the above and revamp the debate on the relevance of entrepreneurship education as suggested by Fayolle (2013), in 2018, we invited scholars to reflect on the taken-for-granted assumptions and identify and critically address the dominant perspectives lingering in entrepreneurship education as untested truths. Inspired by previous critical approaches in entrepreneurship (e.g., Fayolle et al., 2016b; Frank & Landström, 2016), we considered propositions offering alternative ways of knowing, understanding, and acting in entrepreneurship education to be critical. Then, we organized a developmental workshop in a French business school and discussed a selected number of propositions. From the fifteen submissions received, we selected the five papers that responded to the call by highlighting specific taken-for-granted assumptions and presenting original points of view challenging them.

By gaining insights from entrepreneurial experiences in different countries and life settings, the first challenge is integrating new perspectives of conceiving entrepreneurship into the current models of teaching entrepreneurship. Specifically, van Gelderen, by considering Bhutan, questions what entrepreneurship education would look like in a fundamentally different cultural context. Furthermore, Riot recounts her experience as a member of *Science en Marche*, defending public science and calling for scientists to take a more active role in political decisions regarding innovation. Under the umbrella of thoughts that emphasize the diversified nature of entrepreneurship, where every day experiences constitute informative sources of discovery (Welter et al., 2017), researchers in entrepreneurship education should explore diversity to extrapolate new meanings that enrich teaching practices.

The second challenge is recognizing that, in entrepreneurship programs, participants’ representations about entrepreneurship impact the effectiveness of entrepreneurship education. For example, looking at personal values, Refai, Higgins, Fayolle, & Haloub discuss how entrepreneurship education can offer learners space to reflect on their values in entrepreneurial practice. They suggest that personal values that clash with the predominant profits perspective have repercussions on entrepreneurship education goals and results. Similarly, Salusse, Lamy, & Verzat encourage scholars to discuss challenging positive stereotypes in entrepreneurship that might threaten entrepreneurship education by limiting participants’ self-expression. Thus, complementing existing evidence suggests that opportunity development is a process resulting from the match between individuals’ prior knowledge and situations at hand (Dimov, 2007). Scholars in entrepreneurship education should reflect on the fit between individual values and those within entrepreneurship education programs to enhance its potential benefit for a broader and diversified audience.

The third challenge is to facilitate the integration of entrepreneurship knowledge into practice. Neck and Corbett (2018) claim that the teaching concept, “how to teach entrepreneurship,” is absent in entrepreneurship education; instead, there is an emphasis on content. For instance, “learning by doing” has been widely and uncritically adopted in entrepreneurship education as a panacea to make entrepreneurship teachable (Fayolle, 2013). However, it only surfaces the articulated task of training for/about entrepreneurship, and this void calls for more reflections on how and what should be taught by educators (Morris & Liguori, 2016). In addressing this concern, Cavarretta invites us to look at our theoretical/practical approaches as paradigms to condensate extant knowledge in a self-fulfilling set of understandings.

Addressing these challenges presents an opportunity for entrepreneurship education to increase awareness of training practices and their value. At the same time, they are contrasting normative promotions of beliefs and values surrounding programs’ “hidden curriculum,” which is supposed to embrace unspoken and unchallenged norms linked to particular paradigms (Farny et al., 2016). Acknowledging the myriads of nuances about entrepreneurship and their integration into educational or training programs impacts the legitimacy of the pedagogical tools introduced in entrepreneurship education. Likewise, this continual integration provides new insights at the theoretical level broadening the spectrum of what should be considered entrepreneurship or entrepreneurial.

The five contributions each illustrate specific taken-for-granted assumptions and how scholars/educators can address them in the following sections. The paper concludes by highlighting significant theoretical implications for entrepreneurship education.

## Suggestions for Happiness Entrepreneurship Education

Marco van Gelderen

What would entrepreneurship education look like in a cultural context where policies and culture promote simple living and contentment, are cautious about cultural change, and seek to constrain individual wealth accumulation?

This context is not just a thought experiment. The kingdom of Bhutan<sup>2</sup> has taken forward an indigenous vision of development, expressed in its Gross National Happiness (GNH) policies. The nation's progress is judged against a variety of happiness indicators, rather than the quantity of production and consumption of goods and services. GNH comprises 9 domains and 33 indicators with sufficiency thresholds (Ura et al., 2012). The Buddhist concept of GNH is holistic. It integrates ecology, economy, social equity, culture, and good governance and recognizes their interdependency (Schroeder, 2017; Schroeder & Schroeder, 2014).

In Bhutan, happiness is regarded as a state of mind characterized by tranquility, calmness, and contentment (Lhamo, 2019). GNH does not mean that material living conditions are disregarded. The economic advancement process is considered to lead to happiness when guided by moral and ethical values. In Buddhist thought, craving is the root of unhappiness. Individuals, including entrepreneurs, are expected to help others to restrain craving. This shapes attitudes toward consumption and the acquisition of individual wealth. Moreover, Bhutan is a traditional, conservative society in which Tibetan Buddhism is pervasive.

Considering these factors, I propose that entrepreneurship education in Bhutan focuses on “happiness entrepreneurship”: entrepreneurship in which consumption is restrained, rather than unconditionally furthered; in which individual wealth accumulations of private sector entrepreneurs are constrained or redistributed; and where innovation is critically and cautiously scrutinized, allowing a traditional society to retain its values and practices. Happiness entrepreneurship incorporates these aspects while recognizing the primacy of moral and spiritual values and the interdependence of all living beings (cf. Schroeder, 2017). What can entrepreneurship education look like if entrepreneurship proceeds from such a set of values?

### Opportunity Recognition and Innovation

An important task is to align business proposals developed by students with GNH principles. In a country seeking to conserve its Buddhist traditions, opportunity recognition and innovation need to give specific attention to what may be lost, alongside what may be gained. One way to ensure that entrepreneurial initiatives are aligned with Bhutanese culture and the GNH framework is to make use of challenges.

Any organization whose goals are aligned with GNH, including governmental organizations, can put out their aims and invite start-ups to submit proposals helping to achieve these aims. Those with the best ideas can then have the organizers as their launching customers or investors. Such challenge-based programs are successfully implemented internationally (e.g., [www.startupinresidence.com](http://www.startupinresidence.com)).

### Value Creation and Enterprising Competencies

Given the parameters set by the values underpinning happiness entrepreneurship, education and training could focus more on value creation than value appropriation. Value creation can be of any kind (economic, cultural, social, psychological) and achieved in a variety of forms (not necessarily through a venture). A relevant distinction is between enterprising and entrepreneurial competencies (Gibb, 1993; Lackéus, 2015; van Gelderen, 2020). Enterprising competencies take on a wider meaning than entrepreneurial competencies and can be decoupled from the commercial business context, being more geared toward creating than appropriating value.

### Growth, Value Appropriation, and Exit

In the GNH view, *growth* refers to moral and spiritual growth, leading to further increases in happiness. Growth models can be directed to aspects other than increased consumption or production per se, such as increases in product or service quality, or increases in stakeholders' (e.g., consumers, employees) well-being or happiness. Growth can also refer to value appropriation by the entrepreneur. Western entrepreneurship textbooks often conclude with a chapter on “exit.” In happiness entrepreneurship education, the story additionally includes a discussion and explanation of different models of what happens next with acquired wealth, such as sharing the wealth and utilizing it in new ventures.

The suggestions above are not exclusive to Bhutan. They equally belong in Western curricula. However, in Bhutan, they would not be subthemes within a larger, economic-centric entrepreneurship curriculum, but speak to the core of how entrepreneurship is taught (Schroeder & Schroeder, 2014). Proceeding from a different set of assumptions, happiness entrepreneurship education needs to adapt imported educational resources to reflect its cultural and social conditions and environment or develop its own.

## Lessons for Entrepreneurship Education From an “Active Experience” in the Streets

Elen Riot

While experimenting with entrepreneurship education, I recently experienced how my assumptions about my role as

an educator were open to debate. In 2015, I moved from a French business school to a public university just across the street. I soon realized that the audience in my new class was quite different from before, with many of my students coming from Africa or Asia to study here. I also noted that our business incubator was kept busy, as many of these students have a drive, praised long ago by Schumpeter (Riot, 2019), corresponding to the description “entrepreneurs by necessity.” I was soon to measure the limits of this categorization when I came to play that role myself. Defining would be entrepreneurs only in terms of means and needs impoverishes entrepreneurship education and downplays the role of bricolage and cooperation (Janssen et al., 2018). Because of a chronic lack of means to teach and do research in French institutions, I soon joined a social movement called “*Science en Marche*.” Our goal was to inform public decision-makers concerning the realities of underfunded research institutions. In recent years, public support has increasingly come from short-term grants to projects, preferably including private partners. Although universities and research centers do contribute to the creation of new businesses, many argue that spin-offs and start-ups should emerge from real opportunities rather than the lure of public subsidies. Besides, the distinct missions of public science and private ventures must be taken into account. The discoveries I made as an institutional entrepreneur came from a series of experiences I have had over the last five years. I will mention just three to show that the goals and performance of the entrepreneurial process should not be assessed by standard tools only (Honig & Karlsson, 2004) as they tend to frame the field about rare “unicorns and gazelles” (Aldrich & Ruef, 2018) and downplay everyday entrepreneurship, the very fabric of society.

While actively organizing a “*Tour de France*” of research, I also engaged in a task force comprising a few researchers who were determined to demonstrate our needs via fact-checking and publicity. Event-organizing and conveying information required skills I had not yet developed. I discovered I had much to learn from the “skilled individuals” who were able to access key decision-makers and get us the attention of the general media. I soon realized that being heard by public officials had nothing to do with the quality of one’s scientific demonstration and cogency of one’s argument. That was my first finding; I had to stop applying my principles by the book to experience the gameplay.

My second finding was realizing that diverse initiatives in an enterprise must converge toward the same goal if they are to pay off. Having failed to gain enough support from political representatives, we engaged in parallel long-term actions such as supporting a researchers’ cooperative, founding a federation of academies of sciences, and orchestrating public demonstrations such as the “*March for Science*” and “*March for the Climate*.” While the first initiative targeted “temps,” the last initiatives involved us all reflecting on our

role in sharing scientific knowledge in an age of fake news and “bullshit” (Frankfurt, 2005). We built online platforms to imagine new research practices, ones that were more sustainable and aware of the climate crisis. This contributed to expanding our movement, but it also had members taking off in different directions. Divergent opinions on strategic choices in the face of grand challenges (Gray & Purdy, 2018) suddenly became salient. To this day, although we have many ideas in common making us a community, we are still looking for common ground.

My third finding is possibly the most relevant. While working with colleagues from other disciplines, I discovered that entrepreneurship did not have good press. It was at best “your average cretin’s education” and at worst a Trojan horse strategically positioned inside public institutions. For Parker (2018), who agonizes over business school education, and more recently Chambard (2020), who warns against the new “business model ideology” pervading educational structures, entrepreneurship education promotes opportunism and survival of the fittest. Whereas, until recently, entrepreneurship education sought legitimacy (Fayolle et al., 2016a), it may now be a victim of its broad and rapid success. As any other discipline, its assumptions and intentions must be in debate so they no longer sound like power and ideology (Berglund et al., 2020) against knowledge. Does entrepreneurship education threaten academic freedom? I do not think so, yet I do not think that our actions are neutral. I agree with Anteby (2013), who insists on the situated nature of business choices and the impossibility of dissociating strategy from politics. As I experience it every day while helping my students, entrepreneurship education does involve debates about social justice and democratic principles.

## Value Perceptions in Entrepreneurship Education

Deema Refai, David Higgins, Alain Fayolle, and Radi Haloub

A commonly cited definition of an entrepreneur is “a person who habitually creates and innovates to build something of recognized value around perceived opportunities” (Bolton & Thompson, 2000, p. 5), yet the perception of this value remains vague. For decades, business has been associated with economic growth and “profit-first” perspectives (Slater & Dixon-Fowler, 2010) that disregard moral or social considerations of practice. This profit focus is evident in definitions of entrepreneurs. Perren (2003) criticizes the dominant view of entrepreneurs as “economic machines,” who are often noted “significant because they have an important effect on world economies, and they play a critical role in maintaining and developing the economic order we live under” (Wickham, 2006, p. 9).

This ideology has hindered Higher Education Institutions' contributions toward social entrepreneurship (Ghoshal, 2005; Mitroff, 2004) and deemed them in certain instances responsible for the economic crisis (e.g., Corbyn, 2008). We view that this dominant economic business school orientation negatively impacts learners' perceptions of value in entrepreneurship education by supporting a capitalist-based society focusing on profits gained, and impeding learner's engagement in embracing and capturing social and environmental outcomes.

While supporting the importance of sustainable outcomes in entrepreneurship education, we raise concerns around the focus of these outcomes on the needs of external stakeholders (Frank & Landström, 2016), thus focusing on what a "good" outcome of entrepreneurial practice would be, not what a "good" way would be. We, therefore, relate to axiological discussions. Axiology views judgments about value as conducive to life itself since "*anything that shapes perceptions of the world becomes potentially eligible for estimation as an existence value*" (Rosenthal & Nelson, 1992, p. 117). Axiology shapes peoples' moral decisions and value judgments by allowing them to connect to what they value and consequently understand how they perceive value (Demarest & Schoof, 2010). However, how does axiology help us understand the challenges facing entrepreneurship education?

In entrepreneurship education, the educational philosophy underpinning how we educate future entrepreneurs can be viewed in light of how learners enact their individual values into their understanding of the entrepreneurial world. We, thus, stress the need to offer learners space to recognize questions related to their value perceptions around the right way and outcomes of entrepreneurial practice through more focus on core reflective techniques, which address learners' core qualities, strengths, and values (Refai & Higgins, 2017). Here learners reflect on how and to what extent their experiences contribute to their entrepreneurial practice and utilize these values to receive/gather information and interpret, reflect, judge, and organize meaningful actions.

Our discussion proposes that the lack of clarity in understanding axiological underpinnings of entrepreneurship education has weakened its legitimacy. This has been worsened by entrepreneurship education institutionalization, the functionalist nature of business schools and their related course structures and content (Frank & Landstrom, 2016), and dominant "profit-driven" models (Slater & Dixon-Fowler, 2010). Entrepreneurship education that excludes deontological underpinnings can have implications on learners' value perceptions, particularly those with regards to what a right way of entrepreneurial practice would be, in which case a dominant consequentialist axiology would likely disengage these learners, rendering their learning less, or possibly non-meaningful.

Our view offers a more encompassing conceptualization of entrepreneurship education, viewing it as the processes and activities that enable learners to develop the knowledge and skills to create new enterprises, envisioning value through core reflections that engage their individual values, alongside external stakeholders' needs, in determining the means and outcomes of their entrepreneurial practice. So, instead of trying to "create" certain types of learners, we offer space for entrepreneurs to "emerge" into their unique and diverse forms (Refai & Higgins, 2017). Our call to draw attention toward deontological and moderate consequentialist underpinnings in entrepreneurship education does not necessarily develop ethical practitioners, but rather practitioners who are mindful about their individual values and their relevance to their entrepreneurial practice. Our view sets ground for further research investigating the nature of learners' values among different audiences and exploring entrepreneurship education programs that address these individual values.

## Exposing and Limiting Positive Stereotyping in Entrepreneurship Education

Marcus Alexandre Yshikawa Salusse, Erwan Lamy, and Caroline Verzat

Stereotypes are traits that we view as characteristics of social groups (Stangor, 2016) and an essential cognitive resource to organize social reality (Augoustinos & Walker, 1998). However, stereotypes are commonly negative, resulting in a discriminatory effect. For example, research has shown that entrepreneurship is mostly associated with men; hence, women are usually absent or cast in marginal roles, hindering their entrepreneurial intentions and influencing opportunity evaluation due to stereotype threat (Gupta et al., 2009, 2014).

Interestingly, stereotypes regarding entrepreneurs are often positive. They are the models we have students follow to become legitimate entrepreneurs, commonly associated with characteristics like confidence, risk-taking, and economic achievement (Gupta et al., 2014). We find them in idealized views about entrepreneurial traits, values, or business models that are promoted by role models, business case studies, the media, or entrepreneurship education programs.

Our discussion postulates that positive stereotypes introduce potential biases in entrepreneurship education at the individual, program, or institutional levels because stakeholders in entrepreneurship education might use them as reference frameworks when designing educational programs, establishing learning goals, making recruitment decisions, or assessing results (Fayolle et al., 2016a; Kay et al., 2013). This can undermine the academic legitimacy and practical

relevance of entrepreneurship education (Fayolle et al., 2016b). First, self-censoring would be entrepreneurs may not apply to entrepreneurship education programs because they do not fit the stereotypical entrepreneurial model (Hsu et al., 2019). Second, students may adopt the institutionalized model even if it contradicts their intrinsic motivations, potentially inviting short-term failure or long-term impostor syndrome (Ladge et al., 2019). Third, programs, classes, or incubators recruit too similar profiles, making it difficult to build complementary teams and promote entrepreneurship diversity (Welter et al., 2017). Lastly, educators and other stakeholders can downgrade individuals' legitimacy based on positive stereotypes, with negative impacts on their social and economic contributions to society (Berglund & Johansson, 2007).

Given that stereotypes are “*a natural and inevitable consequence of categorization: the need to simplify and organize social reality*” (Augoustinos & Walker, 1998, p. 634), everyone stereotypes and organizations, business schools, and the media have supported attention research and the need to be mindful of our biases to reduce undesired influences on judgment (Duguid & Thomas-Hunt, 2015). However, because entrepreneurial stereotypes are often positive and flattering, they go unnoticed, being unconsciously accepted, or treated as harmless (Kay et al., 2013). Indeed, the media representation of entrepreneurs suggests a distinctive presence in society and often presents stereotypical entrepreneurial identities (Anderson & Warren, 2011). Concurrently, entrepreneurship education acknowledges that conforming to group norms and being accepted by the entrepreneurial community is necessary for would be entrepreneurs in building their entrepreneurial identity (Donnellon et al., 2014).

The challenge for entrepreneurship education is to find the right balance between promoting a legitimately shared vision of entrepreneurship among scholars and entrepreneurship education stakeholders and simultaneously encourage individuals to acknowledge entrepreneurial possibilities that fit one's reasons, purposes, and values (Welter et al., 2017). To accomplish this goal, we suggest three main approaches for entrepreneurship education. The first approach is to focus on self-awareness and control of one's own biases, either by critically analyzing stereotypes against factual information or promoting intergroup contact to encourage a more realistic and diverse image of entrepreneurs (Meyer et al., 2017). The second approach is to focus on controlling stereotype application through social regulation, by designing institutional settings that highlight the pervasive willingness of entrepreneurship education stakeholders to exert effort against unconscious stereotypes (Duguid & Thomas-Hunt, 2015). Finally, third is to focus on the categorization process by inviting students to engage in various groups and have them develop common in-group identities. This tends to reduce prejudice as it creates superordinate categorizations (Stangor, 2016).

Our reasoning offers a critical reflection of stakeholder's practices in entrepreneurship education to challenge undesired influences of positive stereotypes that hinder entrepreneurship education legitimacy and diversity. By tackling positive stereotypes, entrepreneurship education stakeholders can reduce potential bias either by controlling stereotyping, stereotype application, or the categorization processes. Therefore, challenging positive stereotypes in entrepreneurship education enhances the field legitimacy and increases practical relevance by embracing and encouraging diversity.

## Modeling Entrepreneurship Education Through Paradigms

Fabrice Cavarretta

Should we consider entrepreneurship education through a *less knowledge* approach? We often assume more valid knowledge as the sound basis for entrepreneurship education, for instance, as advocated by evidence-based management (Pfeffer & Sutton, 2006). Under such common assumption, priority is given to internal validity and extensiveness of knowledge. Yet, although pedagogues do care about retention constraints, such extensive approach to entrepreneurship education is mute to whether and how entrepreneurial actors enact knowledge.

The advocacy of “less is more” (as formalized in the heuristics literature, e.g., Gigerenzer & Brighton, 2011) derives from the *bounded rationality* constraints on entrepreneurial actors (Simon, 1947) and their *limited attentional capabilities* (Ocasio, 2011). Even when acknowledging that actors can only carry a limited set of beliefs, scholars underestimate that the choice of *which combination to retain* constitutes a hard problem (Bettis, 2017).

Instead of risking institutionalizing entrepreneurship education by over-relying on accumulation of theoretical productions (Frank & Landström, 2016), how can we factor in the difficulties for human actors to enact many theories in the field? Such *pragmatist* concern (Dewey, 1903) has been recently revived in management scholarship (Farjoun et al., 2015; Sandberg & Tsoukas, 2011). It suggests wondering *which* and *how* knowledge gets enacted in field conditions, how it *interacts with norms*, and how action gets *socially constructed*. It responds to practitioners' need to conduct entrepreneurship through *small and cohesive sets of beliefs and practices*.

When approaching entrepreneurship education as a sum of extensive knowledge items, one could mix many perspectives. Typically, it could include principles from the *causation* and *effectuation* perspectives that have been documented by Sarasvathy (2001). The principles of effectuation (e.g., do with what you have, through your relationship, the future comes from what people do, etc.) capture how real entrepreneurs have been observed to think and act (Read &

Sarasvathy, 2005). The principles of causation (i.e., organizing action through prediction, plan, validation, fund, etc.) embody the contemporary *managerial culture* of large firms (Perrow, 1986).

However, it often occurs that mostly one of them—e.g., causation—gets subsequently enacted in the field due to managerial culture (Djelic & Amdam, 2007; Khurana & Spender, 2012). If one crucial part—e.g., effectuation—gets systematically under enacted, this signals a problem with approaching entrepreneurship education by adding up knowledge, however valid and legitimate this may seem.

Instead of chasing extensiveness, what matters is whether entrepreneurship education knowledge leads to *entrepreneurial outcomes*. Entrepreneurship education, therefore, needs to provide future entrepreneurs with a *self-fulfilling knowledge set*, hence to become a *performative science* (Spicer et al., 2009), i.e., actors actually enacting entrepreneurship.

These issues can be addressed by approaching entrepreneurship education as the selection and/or construction of *paradigms*. Humans practicing entrepreneurship are like scientists—at least *naïve scientists* (Kelley, 1973)—in their need to build cohesive and causal representations of the world. Therefore, they form sets of beliefs, attributions, and practices matching what Kuhn labeled as paradigms (1970).

As a construct, a paradigm fits nicely with the objectives of entrepreneurship education. It embodies knowledge designed for some form of efficiency, associated with practices leading to socially legitimized performance. The construct also implies temporal and social dynamics—for instance, when recognizing the crucial role of *paradigm shifts*. A paradigm approach to entrepreneurship education allows modeling the evolution of entrepreneurship knowledge and practices, across communities and over time (Cavarretta & Furr, 2013).

Effectuation (vs. causation) comes to mind as the potential relevant paradigm for entrepreneurship education, but we can identify and engineer others in the future. Paradigms often appear in such duality and can therefore be tested in comparison and allow optimization of entrepreneurship education strategies. In that spirit, Campos et al. (2017) test the comparative performance of entrepreneurs in Togo, after subjecting them to two different and mutually exclusive entrepreneurship education interventions: “personal initiative” training vs “traditional business” training. Beyond demonstrating the superiority of personal initiative, this study illustrates a paradigm approach as it tests compact knowledge sets that interestingly strongly echo the duality of causation vs. effectuation.

By defocusing entrepreneurship education away from the accumulation of piecemeal knowledge, a paradigm approach encourages the aggregation of knowledge items—i.e., selected for their conjunction and compatibility with each other—producing holistic perspectives fitted to the human mind. By modeling pedagogy in terms of which set of knowledge gets subsequently enacted in field conditions, a paradigmatic

approach filters, validates, and constructs performative theories designed for the social and pragmatic experience of entrepreneurs.

Paradigms have driven human actions since the beginning of humanity, especially when it comes to uncertain future contexts and experiences. The study and design of entrepreneurial paradigms are long due in our scholarly and pedagogical jurisdictions.

## Conclusions

### *Michela Loi and Alain Fayolle*

This work synthesizes five contributions that stimulate a debate on taken-for-granted assumptions in entrepreneurship education to enhance research relevance and the field’s legitimacy. The contributions presented helped identify three challenges for entrepreneurship education that have relevant implications for the field’s development. Table 1 reports the five contributions highlighting the taken-for-granted assumptions with their respective challenges and implications.

The opened challenge emphasizing the contextual and experiential valence of entrepreneurship education draws attention to its dynamic nature that, besides individual values, also contemplates cultural differences and societal changes. Claiming that entrepreneurship can be better understood by considering both the temporal and contextual dimensions (Welter, 2011) brings attention to the relevance for entrepreneurship educators to critically reflect on societal and cultural pressures that might affect what to consider a priority. For example, inequalities’ exacerbations are relevant and actual problems of developed economies, and the Silicon Valley model has proved unable to contrast them (Audretsch, 2021). Nevertheless, it represents “the model” of entrepreneurship exported and applied everywhere, making it difficult to understand other models linked, for example, to social phenomena that do not have growth and scalability objectives (Aldrich & Ruef, 2018; Audretsch, 2021). Furthermore, poverty, disparities, and climate change call into question our conception of environmental sustainability, defined by Goodland and Daly (1996) as development without growth. Human welfare improves by acknowledging the limits of resources and natural regenerative processes. Entrepreneurship is anchored to these realms that set constraints and opportunities for trained entrepreneurs shaping entrepreneurship education as a dynamic phenomenon that necessarily evolves with times and cultures. Therefore, entrepreneurship educators should not rely on immutable models of practicing entrepreneurship. Looking at different cultures and actual problems can help educators find ideas and inspiration to train future entrepreneurs.

Pondering on the fit between individual tensions and defined models of practicing entrepreneurship drives our reflection toward a conceptualization of entrepreneurship



**Table 1.** Taken-for-Granted Assumptions, Challenges and Implications for Entrepreneurship Education Originated From a Critical Perspective.

Contributions	Taken-for-granted assumptions	Challenges	Implications
Suggestions for Happiness Entrepreneurship Education ( <i>Marco van Gelderen</i> ) Lessons for Entrepreneurship Education from an "Active Experience" in the streets ( <i>Elen Riot</i> )	The comprehensiveness and correctness of our knowledge on entrepreneurship have been questioned, and new models and knowledge could be developed by reflecting on cultural differences and teachers' experiences	Integrating new perspectives of conceiving entrepreneurship into the current models of teaching entrepreneurship	Entrepreneurship education as a dynamic concept reflecting personal values, cultural differences and societal changes
Value Perceptions in Entrepreneurship Education ( <i>Deema Refai, David Higgins, Alain Fayolle, and Radi Haloub</i> ) Exposing and Limiting Positive Stereotyping in Entrepreneurship Education ( <i>Marcus A. Y. Salusse, Erwan Lamy, and Caroline Verzat</i> )	A unique and valuable way of practicing entrepreneurship and a general emphasis on positive stereotypes about entrepreneurship are questioned and considered potential threats for self-expression	Recognizing the relevance of participants' representations about entrepreneurship and the impact they have in making entrepreneurship education more effective	Entrepreneurship education as a learning space for the emergence of personal models for practicing entrepreneurship and being entrepreneurial
Modeling Entrepreneurship Education Through Paradigms ( <i>Fabrice Cavarretta</i> )	Chasing knowledge extensiveness when teaching entrepreneurship is questioned as it does not help students decipher what they need when immersed within the practice	Facilitating the integration of entrepreneurship knowledge into practice	Entrepreneurship education as a learning context that consciously prioritizes knowledge depending on the chosen approach of practicing entrepreneurship

education as a learning space that stimulates the emergence of personal models for practicing entrepreneurship and being entrepreneurial that considers personal beliefs and values. When fostering students to adapt to existing schemes, educators should be aware of their personal beliefs and biases about entrepreneurship and encourage students to unveil theirs by cultivating personal entrepreneurial views. This approach reduces the emphasis on stigmatized conceptions overly focused on economic issues and positive stereotypes about entrepreneurs. Thus, educators must be aware of the multiple manifestations of entrepreneurship and design space that "[...] strives for the emergence of consciousness and critical intervention in reality" (Freire, 1970, p. 81). Embracing a critical action learning approach encourages reflection upon experience and active experimentation rather than accepting the educators' knowledge and expertise (Ram & Trehan, 2010). Educators may help students balance

knowledge acquisition with their tensions to develop autonomy (van Gelderen, 2012).

In relation is integrating entrepreneurship knowledge into practice by possibly defocusing the attention on knowledge exhaustiveness as a criterion to define entrepreneurship education curricula. Identifying knowledge priorities is a compelling effort for educators that requires awareness about the paradigms in which their teaching activities are inscribed. A situational approach, for example, requires students to develop, modify, and adapt their knowledge, depending on the given scenario (Billett, 2008; Boldrini et al., 2014). It is valuable in work contexts, where different perspectives are required to cope with the mutable nature of the problems at hand (Tynjälä, 2008). In that respect, and in light of the recent efforts to extend entrepreneurship education reflections to include adult learning perspectives (Hägg & Kurczewska, 2020; Jones et al., 2019), educators should


include workplace learning theories in their theoretical reflections (e.g., Illeris, 2003). The need to develop efficient routines is central in these theories (Poortman et al., 2011).


These challenges and implications require to be linked together in an overarching research lens that allows for continuous refinements that build to unifying the diverse models, societal issues, and learning situations into a more comprehensive theory. We claim that the contemplation of the diversities should not come at the expense of a deep comprehension of entrepreneurship and entrepreneurship education meanings from a theoretical perspective. McMullen et al. (2020) suggested that it seems urgent to converge on a unified theory of entrepreneurship that underlines the common denominator of the diverse manifestations of entrepreneurship. Therefore, while acknowledging the inherent complexity of entrepreneurial learning environments, entrepreneurship educators should also make sense of the diversity elaborated by and with their students to avoid pointless eclecticism, theoretical fragmentation, and conceptual ambiguity. As stated with Berglund's words (2015, p.480), this task of making sense demands "[...] that such efforts proceed very cautiously, building from rich appreciation of individual cases and working gradually up toward generalization, so that essential aspects of the experience studied are not overlooked." Overall, entrepreneurship education emerges as an optimal research context to promote a theoretical synthesis of what we can consider entrepreneurship and entrepreneurial.

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### Notes

1. See, for example, the European Union Youth Strategy 2019–2027 (2018/C 456/01).
2. In 2017 and 2019 I spent time at Sherubtse College, Gedu College of Business, and Royal Thimphu College, teaching in entrepreneurship courses, holding staff development seminars on entrepreneurship education, and conducting a workshop on incubator design.

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