



# Introduction: The ‘Why’, the ‘What’ and the ‘How’ of Entrepreneurship Education

*Guillermo J. Larios-Hernandez*<sup>ID</sup>, *Andreas Walmsley*<sup>ID</sup>,  
*and Itzel Lopez-Castro*

It is no longer possible to convincingly argue that entrepreneurship education (EE), its practice or underpinning theory are nascent. As interest in entrepreneurship on the part of policymakers and scholars has grown rapidly in the last two decades, so has the literature on entrepreneurship education (EE). A growing body of literature in the form of academic articles, books and even journals are now dedicated specifically to EE. Following in the footsteps of a surge in interest in entrepreneurship, scholarship in the area of EE has proliferated since

---

G. J. Larios-Hernandez (✉) · I. Lopez-Castro  
Universidad Anáhuac, Mexico, Mexico  
e-mail: [guillermo.larios@anahuac.mx](mailto:guillermo.larios@anahuac.mx)

I. Lopez-Castro  
e-mail: [itzel.lopez@anahuac.mx](mailto:itzel.lopez@anahuac.mx)

A. Walmsley  
Plymouth Marjon University, Plymouth, UK  
e-mail: [awalmsley@marjon.ac.uk](mailto:awalmsley@marjon.ac.uk)

© The Author(s), under exclusive license to Springer Nature  
Switzerland AG 2022

G. J. Larios-Hernandez et al. (eds.), *Theorising Undergraduate  
Entrepreneurship Education*,  
[https://doi.org/10.1007/978-3-030-87865-8\\_1](https://doi.org/10.1007/978-3-030-87865-8_1)

calls were made to seek to further its legitimacy (Kuratko, 2005), more recently seeing the creation of dedicated journals such as the *Journal of Entrepreneurship Education and Pedagogy* (its first issue being published in January 2018). Special issues on entrepreneurship education in other journals similarly point to a lively interest in EE (for example Vol. 6, No. 5 of the *International Journal of Entrepreneurial Behaviour and Research*, or several special issues in the journal *Education and Training*). This mirrors interest in the teaching of entrepreneurship where globally growth in entrepreneurship programmes has taken off. However, despite recent advances, the scholarship of EE has not kept pace with practice (Morris & Liguori, 2016), whereby entrepreneurship educators are still grappling with the ‘how’, ‘what’, ‘why’ and ‘for whom’ of EE (see, for example, Lackéus, 2015; Fayolle & Gailly, 2008).

Nonetheless, though it seems that we are reaching a tipping point in EE (Neck & Corbett, 2018), many scholars appear to have neglected, at least explicitly, the type of EE that focuses on the largest group of university students: undergraduates, their needs and ambitions (e.g. psychological needs, career developmental needs, generational needs [role of generation theory], experiential needs, etc.). As such, these needs are likely to be quite different from the requirements of other cohorts, e.g. postgraduate students, mid-life and mature entrepreneurs, pre-university students. It is upon this backdrop that we are delighted to have been able to pull together 19 chapters covering a range of topics relating to EE set within the context of the undergraduate student specifically.

A focus in particular on the undergraduate student of higher education is offered for a number of reasons. Firstly, alongside entrepreneurship’s potential in driving economic renewal, it offers a means for many people to join the economic mainstream. Although this is usually understood as entrepreneurial firms creating jobs, it also relates to graduate entrepreneurship. Setting up a business upon graduating, or even during one’s studies, should be seen as an alternative to traditional labour market entry. It is too early to say what the impact of the COVID-19 pandemic will have on self-employment rates: on the one hand it has raised awareness among the self-employed of the risks of ‘going it alone’ (Strauss, 2020) but at the same time it may serve as a wakeup call to those unsatisfied in their current positions, or worse, who have been made redundant as a result of digitalisation and organisational change, situations that may have encouraged a type of necessity entrepreneurship. Nonetheless, UEE is instrumental not as a result of lack of opportunities in local labour

markets, but because the business start-up is now increasingly recognised as a legitimate goal of higher education alongside the traditional route into employment.

More generally, even before the pandemic or the 2007/2008 financial crisis had arisen, attention was being drawn to the changing nature of the world of work. In fact, notions of Boundaryless (Arthur & Rousseau, 1996) and Protean careers (Hall, 1996) that characterise the fluidity of modern careers, and indeed lives, were coined some time ago. Yet continued rapid advances in technology, shifting societal norms and expectations, economic structures and sustainability considerations shape the nature of work and young people's career aspirations. Hence, beyond a simple response to unemployment, the need to be enterprising in one's career is likely to grow in the foreseeable future.

Rather than a sole focus on business start-up, EE can develop enterprising graduates who can contribute to the dynamism of firms (via intra- or corporate entrepreneurship). This relates to a distinction sometimes clarified by the use of explicit terminology: entrepreneurship education pointing to business start-up and enterprise education a more general development of enterprise skills and attributes; in this book we are interested in both, especially considering the rise of enterprise education in disciplines other than business.

Benefits to the individual aside, policymakers may be keen to promote EE as a form of human capital development. Thus, despite underlying complexities, a positive relationship between human capital development via education and economic growth is widely accepted (Barro, 2001; Mincer, 1984). Theoretically, if EE adds to a nation's human capital stock individuals with an enterprising mindset, then there is a strong case to be made for EE as a driver of economic growth and renewal, even more so at a time of rapidly changing, uncertain, environments that call for those able to adapt, identify and evaluate new opportunities. In a fast-paced business environment, the benefits to the individual and also to society of having an entrepreneurial mindset are clearly augmented. The potential of EE to support the development of these mindsets in undergraduates is something worthy of study (Gibb, 2011).

A further reason we wanted to focus on undergraduates is because they constitute the most widely reported group of individuals who have received EE. Because of this, their specific needs and circumstances are not always directly acknowledged, however; they are simply assumed. In

pulling together the contributions for this text we wanted to draw attention to the fact that they are a distinct analytical category, deserving of a deliberate rather than accidental focus. Here, although higher education is not exclusive to young people, especially if we consider the promotion of the idea of lifelong learning, the majority of undergraduates are still youth (taking the UN definition of youth as those aged between 15 and 24). This period in an individual's life presents a number of challenges as they transition from childhood to adulthood, so-called rights of passage (Irwin, 1995): finding one's place in the world, developing one's identity and career interests are all associated with this phase. Donald Super's work on the theory of career development (1957, 1990) calls this period an exploration phase, where the individual experiments with different career options, something reflected also in Gottfredson's theory of career development (2002) where the individual seeks to identify suitable career options and then makes compromises based on personal ability and congruence with self-concept. Generation Theory (Mannheim, 1952), which has attracted much scholarly interest, draws on the notion that youth are more open and impressionable, and that experiences gained in youth may shape our values and outlook even later in life.

Moreover, transitions to adulthood are becoming longer and more complex (Keep, 2012), a situation brought about by rapid change in many spheres of life, in an era termed 'liquid modernity' by Baumann (2000). In many respects youth today are offered more opportunities than ever before and yet there are fewer certainties. Frequently we hear about technological obsolescence, about preparing youth for jobs that do not even exist yet, about being in a state of constant disruption. Statistics vary, of course, but according to one Canadian source Generation X spends over 20% longer in each job they hold than Gen Y does. The US Labour Bureau said Late Baby Boomers (those born between 1957 and 1964) held on average 12 jobs in their lifetime; nearly half of these jobs were between 18 and 24. The general view now is that young people will have even more jobs, and indeed careers, than this.

Youth (un)employment continues to pose a serious challenge to society. Young people are three times more likely to be unemployed than adults, a statistic that has worsened since the COVID-19 crisis struck (ILO, 2021); unsurprisingly it is something policymakers are keen to address. The extent to which EE can provide youth with the skills and attributes needed to navigate the shifting sands of the world of work is an important question. It seems youth today are going to have to be more

self-reliant, adaptable, willing to take calculated risks and generally adopt an ‘opportunity identification logic’ (Lackéus, 2018). Nowadays, these skills are essential considering the grand challenges that this generation would have to face in the foreseeable future, whose entrepreneurial action turns out necessary for sustainable change. Only such an entrepreneurial mindset might be in position to develop bottom-up value-creation initiatives that tap into opportunities to act. In that regard, alternative proposals to solve problems (value creation) are required to incorporate a higher market value proposition, which becomes a compulsory requirement if the entrepreneurial initiative is to survive. This is another message that EE intends to convey to HE students, who must be trained to understand that created value can also be captured.

*Theorising Undergraduate Entrepreneurship Education* aims to tap into and extend ongoing debates about the nature, manifestation and purpose of EE. This is a book intended for a global audience, which presents state-of-the-art contributions on the challenges and opportunities that entrepreneurship educators face around the world to equip undergraduate students with entrepreneurial skills, develop their entrepreneurial mindsets and capabilities, and more generally, take advantage of programmes and curricula available in their ecosystem. This is why this book has been organised in three parts. The first part has compiled a variety of theoretical perspectives that emphasise distinctive theories, reflections, ideas and models that build an Undergraduate Entrepreneurship Education (UEE) scaffolding.

In the second chapter, entitled “[Setting the Scene: The Student-Process-Educator Nexus in Entrepreneurship Education](#)”, Wraae has emphasised the social process that supports EE, in which educators and students relate to each other through a dialogic experience that takes place in a safe learning space. According to the author, it is the educator’s responsibility to encourage the creation of such a space (together with each student), which is determinant to assist UEE in developing their entrepreneurial identity, inviting scholars to reinterpret the role of the educator in EE. Following a cognitive approach to instruction, Hägg and Kurczewska propose the concept of Odigogy in chapter “[Guiding the First-Year Student Entrepreneur: A Conceptual Map to Nudge Towards the Reversal Effect in Learning](#)”, which is an approach to UEE that takes into consideration students’ developmental stage, identifying guidance and precise instructions as the educator’s expected effort, who orchestrate activities according to the learner’s absorptive capacity. In their

proposal, Odigogy considers youngsters' limited experience and knowledge, offering a practical framework, which progressively guides the HE student, particularly in the first year, to execute activities that help them accomplish responsibility for learning according to a particular context.

In other words, entrepreneurial knowledge is constructed through the educator's intervention, who uses mediating artefacts (a problem or an intended solution) as auxiliary stimulus to guide students towards the development of their own agency. This is the social constructivist viewpoint covered by Morselli and Kakouris in chapter "[Teaching Entrepreneurship to Undergraduates: A Vygotskian Perspective](#)", who base their analysis on the Vygotskian principles of mediation and double stimulation, presenting a socio-cultural approach to UEE exemplified in two instructional case studies. An instance of such a mediating artefact is the function of play, which is exposed by Neck, Grossman, Winkel and Stamp in chapter "[The Elusive Role of Play in Entrepreneurship Education](#)". In this chapter, the role of play is emphasised as an educational tool to foster flexibility and action in the face of uncertainty, leading to self-discovery and learning. Neck et al. have proposed four guiding principles to design scalable play experiences, leading to the development of a shared and co-created curiosity and courage, new perspectives, sense-making, and fun, whose educational outcomes involve the creation of an entrepreneurial mindset (EM) that is developed when students are able to challenge the status quo.

Hence, EE goes beyond enterprising in a pure business start-up sense, and includes other career-related dimensions of particular importance for youth. This is an approach covered by Walmsley, Decker-Lange and Lange in chapter "[Conceptualising the Entrepreneurship Education and Employability Nexus](#)". In this part of the book, the authors review the association between EE and employability, proposing three dimensions of action that include the start-up, the concept of entrepreneurship and career development. From this perspective, EE becomes relevant for a generation that embraces autonomy and career fluidity, challenging the typical employee-employer-society/economy logic to employability for an entrepreneur-society/economy. Also, skills for new venture creation are also useful in established businesses, indicating the upsurge of another type of employability skills that require HE students to be ready for alternative labour market contexts or develop their own employability rather than seek employment.

This part closes with design considerations about the learning space where the EE process takes place, including the educator’s orchestrated activities as mediating artefacts, according to the learning objectives and needs of young HE students. Based on the maturity level of young learners, chapter “[Dual Learning Space in Undergraduate Entrepreneurship Education: A Framework Proposal](#)” focuses on the development of a framework to describe the advancement of UEE in a dual learning space: one led by the educator and another one taking place in a business-like real situation, with implications in didactic methods and instructional design. The model emphasises the role of subjective mentorship to guide divergent and convergent thinking in UEE.

On the other hand, EE has particularly emphasised a variety of techniques, methods and processes with little consideration to the context and psycho-educational qualities of the young university recipients. In particular, today’s young undergraduate students have adopted and are keen to explore perspectives of EE that go beyond the purely economic, i.e. EE for responsible, sustainable, social and transformational entrepreneurship as well as a focus on eco-preneurship. The deliberate focus on broader perspectives of the purpose of EE is fairly novel. For this reason, Part II in this book, ‘Impacting the Mindset of the Undergraduate’, aims to contribute to the discussion of entrepreneurial mindset (EM) from a different approach: that of the typical, young undergraduate student, its characteristic archetypes and needs for entrepreneurial skills development. Chapter “[What Do We Talk About When We Talk About Entrepreneurial Mindset Training?](#)”, by Casulli, introduces the concept of entrepreneurial mindset beyond the typical approach to creativity and ideation, emphasising uncertainty and ambiguity as key components of the construction of an EM. This viewpoint implies that education of the EM involves a psychological intervention to encourage an entrepreneurial behaviour among youngsters, considering the development of skills such as failure tolerance, empathy, team building and openness to feedback. Regarding those EE angles that extend beyond the pure economic logic, Bell in chapter “[Supporting Students and Society Underpinning Entrepreneurship Education with a Humanistic Philosophy](#)” emphasises the relevance of humanistic philosophy to UEE, demonstrating that compassion within entrepreneurship should be a core objective to develop students’ integrative judgement and value-oriented skills. This approach involves learning through human interactions to develop attitudes, morals, values and skills, personal growth, leading to a type of mission-entrepreneurship.

Additionally, Dobson and Dobson in chapter “[Success Through Failure: Towards a Problem-Based Approach to Entrepreneurship Education](#)” find in pedagogical approaches an explanation for why new venture creation hasn’t increased as a result of EE, particularly in the United States. This chapter highlights autonomy and passion over traditional process-based learning for a generation of young students that want to change the world but are risk-averse and overlook their true efficacy. The authors advocate for a type of EE practice that encourages self-reflection and autonomy through a problem-based approach in a learning environment that provides experiences outside the classroom, involving failure as a key element of EE. In this sense, Davies, Urzelai and Ozadowicz in chapter “[Exploring the Professional Identity and Career Trajectories of Undergraduates on a Team-Based, Experiential Degree Programme](#)” warn against programmes that place students into too protective ‘bubbles’, education-safe environments that ignore the reality of failure. They stress the importance of reflective skills, which help students determine their preferred career trajectory, based on their own values and personal drivers that encourage them to create opportunities, not just identify them, away from the venture creation metric and closer to the EM required to navigate uncertainty. Based on an assessment of the impact of an entrepreneurship programme in the UK (Team Academy), the authors conceptualise learning as team-based, self-managed and experiential, leading to the self-determination of career identity.

Pedagogical underpinnings of EM development are provided by Wyer, Kwakvi-Zagbedeh and Welbeck. Informed by the experience of a SME owner, Wyer et al. propose Personal Construct Theory [PCT] to explain the EE learning process, considering it a theoretical framework that implicitly conceptualises learning as embedded in personal constructs, where the role of EE is to reflect on adequacy of existing constructs. Based on knowledge offered by the educator, students identify potential for construction of new meanings, where construct definition and redefinition represent a process of learning to learn. Serendipity and experimentation with real people are resources for what they call a ‘learning conversation’, which lead to personal construing/re-construing processes. In line with this approach, Santini (chapter “[Pedagogy and Andragogy, a Shared Approach to Education in Entrepreneurship for Students in Higher Education](#)”) closes this part, acknowledging that HE students constitute a heterogeneous population, where EE is conceived as



a dynamic and iterative contextualised progression of learning stages that make use of pedagogical and andragogical education techniques, particularly related to experiential learning, mindset develop and mentoring.

Considering that the educator’s perspective has remained somewhat silent in the discussions around EE (Neck & Corbett, 2018; Wraae & Walmsley, 2020), the final chapters included in this title provide educators with a voice to explain how they participate in the topic of entrepreneurship education, how undergraduate students engage and respond to EE, and how institutional frameworks for EE may support it. This is the focus of Part III: ‘Ecosystem Experiences in UEE’, which presents applied research on EE in HE at a global level. To initiate this part (chapter “[Innovative Educators: The State of Undergraduate Entrepreneurship Education in the United States](#)”), Cochran revisits some of the EE programmes in the United States to derive core research topics discussed in this ecosystem, exemplifying relevant programmes and courses, usable techniques types of extra(co)-curricular programmes, and outcomes to realise that educators continue to act entrepreneurially. To exemplify such a scholarly innovation, Gallage, Laferriere and Selvarajah (chapter “[Ecosystem Engagement in Entrepreneurship Education: A View from Sri Lanka](#)”) derive, from case interviews in Sri Lanka, a proposed expansion of the university-based entrepreneurship ecosystem (U-BEE) to include the role of parents, alumni entrepreneurs’ tutorials and student involvement in start-ups/SMEs projects, confronting traditional viewpoints that consider internal stakeholders such as students, faculty or university incubator staff. In the same line of thought, chapter “[University-Based Entrepreneurship Ecosystems: The Role of the Sustainable Family Business Theory and Entrepreneurship Education](#)” makes a conceptual proposal to connect family business principles (based on the sustainable family business theory or SFBT) and the elements of a U-BEE that may provide HE students (the heirs) with integrated formal and informal EE. Business continuity and success is a topic that could arguably be included in more UEE courses, especially in communities where it is quite typical for a son or daughter to take over the family business (in rural communities, for example).

Another instance of innovative EE is provided by Yusof, Murad and Yusof in chapter “[Digital Skills and Entrepreneurial Education in Malaysia: Evidence from Experiential Learning](#)”, who analyse the outcome of the application of a digital business project to a UEE class, documenting the students’ experience in terms of entrepreneurial mindset

and digital literacy. These results are derived from an EE programme study in Malaysia, in which students are required to launch and manage a business developed on a government-supported online entrepreneurial platform. The authors consider that the goal of EE is the creation of the entrepreneur, whose skills should be developed in a controlled environment that allows for experimentation.

To end this book, Mensah, Arthur and Mensah-Williams (chapter “[Experiential Learning in Online Entrepreneurship Education: Lessons from an Undergraduate Entrepreneurship Course](#)”) highlight a case of experiential learning in an online EE programme in Ghana, proposing a framework that combines senses, cognition and experiences to drive reflection. Based on the analysis of audio-visuals and discussion forums, the authors provide a narrative of students’ behaviour, providing examples of experience participation and reflection.

In summary, *Theorising Undergraduate Entrepreneurship Education* offers a variety of reflections and perspectives of EE, e.g. pedagogy, humanism, COVID-19, employability-entrepreneurship liaison, digital skills, etc., that go beyond traditional approaches, considering a global audience with examples from around the world. The deliberate focus on undergraduate students, their needs and ambitions has added novelty, combining theory of EE with its practice, which grants support to undergraduate educators in their efforts to understand why and how entrepreneurship is to be taught to this generational cohort. For the reasons expressed in this Introduction, we maintain it is crucial for educators to continue to explore how to teach entrepreneurship, to consider which outcomes should be achieved, and how these may be measured. How and what we teach must take into account who we are teaching to; this being a consideration that becomes particularly challenging in a field that has been traditionally non-routine activity for universities. Yet, HE and young students have evolved together and UEE continues to extend its influence to more university curricula. Our text seeks to offer insights that may help institutions and educators adapt to this new reality, hoping to contribute to the creation of higher-order skills and competences that interrelate the business, academic and personal worlds that converge nowadays in our university milieu.

## REFERENCES

- Arthur, M., & Rousseau, D. M. (1996). *The Boundaryless career: A new employment principle for a new organizational era*. Oxford University Press.
- Barro, R. (2001). Human capital and growth (Conference proceeding). *American Economic Review*, 91(2), 12–17.
- Bauman, Z. (2000). *Liquid modernity*. Polity Press.
- Fayolle, A., & Gailly, B. (2008). From craft to science - Teaching models and learning processes in entrepreneurship education. *Journal of European Industrial Training*, 32, 569–593. <https://doi.org/10.1108/03090590810899838>
- Gottfredson, L. S. (2002). Gottfredson's theory of circumscription, compromise, and self-creation. In D. Brown (Ed.), *Career choice and development* (4th ed., pp. 85–148). Jossey-Bass.
- Gibb, A. (2011). Concepts into practice: Meeting the challenge of development of entrepreneurship educators around an innovative paradigm: The case of the International Entrepreneurship Educators' Programme (IEEP). *International Journal of Entrepreneurial Behavior & Research*, 17(2), 146–165. <https://doi.org/10.1108/13552551111114914>
- Hall, D. T. (1996). Protean careers of the 21st century. *Academy of Management Executive*, 10(4), 8–16. <https://doi.org/10.5465/ame.1996.3145315>
- International Labour Office. (2021). *Statistical brief: An update on the youth labour market impact of the COVID-19 crisis*. ILO. [https://www.ilo.org/wcms/sp5/groups/public/--ed\\_emp/documents/briefingnote/wcms\\_795479.pdf](https://www.ilo.org/wcms/sp5/groups/public/--ed_emp/documents/briefingnote/wcms_795479.pdf)
- Irwin, S. (1995). *Rights of passage. Social change and the transition from youth to adulthood*. UCL Press.
- Keep, E. (2012). *Youth transitions, the labour market and entry into employment: some reflections and questions*. Skope Publications.
- Kuratko, D. F. (2005). The emergence of entrepreneurship education: development, trends, and challenges. *Entrepreneurship Theory and Practice*, 29(5), 577–597. <https://doi.org/10.1111/j.1540-6520.2005.00099.x>
- Lackéus, M. (2015). *Entrepreneurship in education: What, when, why, how*. Europe: OECD. Recovered from [https://www.oecd.org/cfe/leed/BGP\\_Entrepreneurship-in-Education.pdf](https://www.oecd.org/cfe/leed/BGP_Entrepreneurship-in-Education.pdf)
- Lackéus, M. (2018). Making enterprise education more relevant through mission creep. In G. Mulholland & J. Turner (Eds.). *Enterprising education in UK higher education: Challenges for theory and practice*. Routledge.
- Mannheim, K. (1952). *The problem of generations. Essays on the sociology of knowledge*. Routledge.
- Mincer, J. (1984). Human capital and economic growth. *Economics of Education Review*, 3(3), 195–205. [https://doi.org/10.1016/0272-7757\(84\)90032-3](https://doi.org/10.1016/0272-7757(84)90032-3)

- Morris, M. H., & Liguori, E. (2016). Preface: Teaching reason and the unreasonable. In M. H. Morris & E. Liguori (Eds.), *Annals of entrepreneurship education and pedagogy* (pp. xiv–xxii). Edward Elgar.
- Neck, H. M., & Corbett, A. C. (2018). The scholarship of teaching and learning entrepreneurship. *Entrepreneurship Education and Pedagogy*, 1(1), 8–41. <https://doi.org/10.1177%2F2515127417737286>
- Strauss, D. (2020, November 23). Covid crisis threatens UK boom in self-employed work. *Financial Times*. <https://www.ft.com/content/3d94b170-c6be-44dd-95ac-436284693090>
- Super, D. (1957). *The psychology of careers*. Harper.
- Super, D. (1990). A life-span, life space approach to career development. In D. Brown, L. Brooks & Associates (Eds.), *Career choice and development* (2nd ed., pp. 197–261). Jossey Bass.
- Wraae, B., & Walmsley, A. (2020). Behind the scenes: Spotlight on the entrepreneurship educator. *Education + Training*, 62(3), 255–270. <https://doi.org/10.1108/ET-01-2019-0009>