Preface to
Innovation and Entrepreneurship in Education

Editors: Pantelis M. Papadopoulos, Roland Burger, Ana Faria,

In the mid-twentieth century, political scientist Joseph Schumpeter developed a theoretical basis for the business phenomenon he called 'Creative Destruction', where (typically technological) advances launch the game-changing disturbances that cause significant economic upheaval and introduce new patterns to cyclical business activities. In doing so, he drew heavily upon the fundamental notions of Marxism and integrated them with the concept of entrepreneurship, which he defined as "the doing of new things or the doing of things that are already being done in a new way" – in other words, innovation.

Schumpeter also noted the observations of others that "the spirit of adventure and the element of innovation" are essential for a complete formulation of the entrepreneurial function. He characterized entrepreneurs as people who see new possibilities and can deal with the resistance that "doing new things always meets with outside of the ruts of established practice." However, being a macroeconomist, Schumpeter was primarily focused on interpreting the longer-term effects of innovation and entrepreneurship on entire nations and large corporations. His interests lay in understanding the broad role of creativity in terms of economic history and theory over time. So he was less concerned with examining the practical day-to-day business aspects of "getting new things done", or identifying innovative ways to promote such venture activity through education and socio-cultural policy.

Fast-forward several decades to the 1970s, and we begin to see signs of the emergence of modern-day start-up culture, especially in the information and communications technology sector. In comparison with most entrepreneurs of a hundred years earlier, it was now becoming feasible to get viable new ventures off the ground with relatively modest early-stage investments. Despite the appreciable risks and high failure rate among such companies, the conspicuous success of the major winners inspired an emerging demand from students for courses in start-ups and ventures, and innovative educators at many colleges and universities started to incorporate such offerings into their business curricula.

However, it took some additional time for another important educational insight to emerge – since key innovations typically take place at the intersection of disciplines, the entrepreneurial ventures curriculum needed to look beyond pure business and marketing, and reach out to embrace multiple specialist fields. The pedagogical process had to adopt approaches like Design Thinking, and encourage meaningful participation by students from different disciplines, in particular from the soft and hard sciences, engineering, creative arts, and elsewhere. Many conventional third-level institutions have found this integration task quite a challenge; the traditional structure of academic organizations, along with professional recognition and reward policies, frequently discourage reaching too far across disciplinary boundaries.

On the other hand, many creative second-level schools and colleges have successfully introduced various types of educational programs and transition year activities that promote entrepreneurial innovations by student-run teams. Such programs are often built upon a format that links business ideas from hobbyist youth venues – such as maker fairs, game-building camps and robotics competitions – with venture visions inspired by popular culture phenomena like crowd-funding and Dragons' Den style reality television. An important outcome of this experiential methodology is that students can discover a great deal about their own personal aptitudes, strengths, and weaknesses in a creative and safe, yet potentially opportunistic, environment. In terms of individual growth, this process can help students to develop more self-confidence and independence, with resultant life benefits beyond just pure business innovations.

It also seems likely that providing young people with entrepreneurial learning experiences of this type offers them an enhanced ability to envision creative app-roaches to achieving social change. Encountering ideas like Designing for Impact can help them to develop a heightened sensitivity to societal needs and an awareness of the potential for community-centric innovation. For educational strategists and policy-makers, the challenge is to find effective ways to deploy such programs well beyond the more affluent schools and academies, and introduce them into the lesser-privileged neighbourhoods and regions of the world where they are most needed.

As we explore these approaches to educating students about innovation and entrepreneurship in the 'real' world, our attention is drawn to the effects that Schumpeter's creative destruction forces are having upon the education system itself. The world's most prestigious universities can well afford to lend their names to global partnerships, online courseware offerings, MOOCs, and other ubiquitous learning initiatives without noticeable impacts on their elite branding. The result has been that faculty members at many of the remaining institutions have had to rapidly adapt to these new realities – by introducing flipped classrooms, online learning management systems, and assessment games and simulations, for example. However, there are significant hurdles associated with doing things "outside of the ruts of established practice", not least because of financial and administrative burdens involved. These changes, which are simultaneously exciting and challenging, are all a far cry from the transition away from printed course materials and towards e-textbooks, that started just a few years ago.

Against this broad background, "Innovation and Entrepreneurship in Education" offers a comprehensive suite of theoretical models, use cases, and experimental studies encompassing all aspects of this important topic. The ideas and insights presented here cast a range of spotlights on this multi-faceted domain, which constitute a very timely set of resources on the enterprise of education for research-ers, innovators, and practitioners alike.

John Murray PhD
Silicon Valley, California
 June 2016