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COMMENTARY

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No innovation without entrepreneurship: From passion to practice

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Abstract

In his Catalyst article, Kenneth Kahn takes an institutional perspective on innovation and entrepreneurship, arguing that a lack of differentiation between these two terms results in a missing demarcation of entrepreneurship and innovation centers at universities. This leads to research and teaching activities in the respective areas that are not clearly differentiated and therefore create suboptimal results. I reflect on Kenneth's thoughts but argue that we should not aim for two different centers or estranged disciplines of entrepreneurship and innovation but rather take a joint perspective centering on the challenges of creating and bringing the new to the world. I call for a joint core (aka the entrepreneurial mindset) of entrepreneurship and innovation at universities but different curricula and instruments for the individual challenges of entrepreneurship and innovation, differentiating along the source of the problem or idea, the disciplines involved, the instruments and conditions needed, and the ecosystems to be built.

KEYWORDS

entrepreneurship, entrepreneurial mindset, innovation

1 | INTRODUCTION

In his Catalyst article, Kenneth Kahn takes an institutional perspective on innovation and entrepreneurship, arguing that a lack of differentiation between these two terms results in a missing demarcation of entrepreneurship and innovation centers at universities. This leads to research and teaching activities in the respective areas that are not clearly differentiated and therefore create suboptimal results. He argues that with a clear differentiation of the two terms a better understanding of the specific requirements would be reached and hence the overall processes and outcomes better (and more efficiently) supported. Ken further proposes to make the differentiation along four fields, that is, opportunity creation, change orientation, risk incurrence, and funding orientation (p. 1, table 1) and elaborates in the remainder of the article how such a differentiation could unfold.

I appreciate Ken's reflections as they gave me food for thought and let me also disentangle my thinking of where I believe are the similarities and differences of entrepreneurship and innovation. I, however, argue that we should *not* aim for two different centers or estranged disciplines of entrepreneurship and innovation but rather take a joint perspective centering on the challenges of creating and bringing the new to the world. Entrepreneurship and innovation should be regarded as their own disciplines and also lived through their enactment in practice. Here, I follow

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Peter Drucker who wrote in 1985 (Drucker, 1985, p. 19): "Innovation is the specific tool of entrepreneurs, the means by which they exploit change as an opportunity for a different business or service. It is capable of being presented as a discipline, capable of being learned, capable of being practiced." With this perspective, we can define the goals, conditions, and stakeholders involved to determine which perspective, which set of instruments, and which processes to research and teach in order to reach an optimal outcome. I will unfold my commentary in the following, starting with the points where I agree with Ken's arguments, continue with the points where I disagree, and then come to a summary taking my argumentation back to the institutional perspective of the university and address some points for further research.

I agree with Ken that a discussion between the disciplines of innovation and entrepreneurship is long overdue with respect to the underlying knowledge bases, assumptions and beliefs hold, expected outcomes, associated instruments, as well as accompanying or underlying theories and methods for research and teaching. While Drucker argued for a joint perspective in 1985, building on Schumpeter's and Say's work, we have since then observed a rather broadening separation of the two disciplines. A missing theoretical base of entrepreneurship and innovation respectively (e.g., Gartner, 2001) but also a lacking systemic perspective (e.g., Drucker, 2006) has been called out for before. Authors such as Schmitz et al. (2017) conclude based on a systematic literature review of innovation and entrepreneurship in an academic setting that "literature is still fragmented and undertheorized" (p. 386). An understanding of the respective differences and similarities might enable a common language and framework (or different languages and frameworks but with a clear distinction) and lead to a better differentiation of methods and instruments taught—for the benefit of both instructors and learners alike. This would in turn help us, as entrepreneurship and innovation scholars, to carry our message clearer and more strongly into the fields of nature and social sciences, engineering, or humanities with their respective starting points for innovation. Brazeal & Herbert (1999, p. 32) were among the first to develop a joint framework based on an entrepreneurial process model with the respective roles of change, creativity, and innovation. They conclude that innovation either comes from the technology (input) or psychological (process) literature while the entrepreneurial event (outcome) mostly stems from business literature. Another perspective is taken by John Bessant and Joe Tidd who see innovation as a process that can be organized and managed while entrepreneurship is a human characteristic to drive the process of innovation by passion and the propensity to take risks (Bessant & Tidd, 2007, p. 11). The innovation and entrepreneurship programs I have developed over the years have built upon their perspective and I will come back to this later in this commentary.

The second major point Ken is making and that finds my unrestricted approval is that innovation is inherent to an (existing) organization, is a radical change mechanism, and has different degrees. Innovation researchers have for many years addressed these three main aspects of innovation and proposed various instruments and processes to deal with the necessary supporting strategy, culture, and management of innovation. Therefore, students and researchers alike need to understand and get a feeling for the degree of innovation and how an organization thinks, works, and does things. If we see innovation as part of an established organization, it is necessary to know the rules of the game. However, also in entrepreneurship (not only if we look at it in terms of corporate entrepreneurship), students and researchers need to understand how an organization works. Because otherwise the necessary support for pursuing an opportunity and building an organization for it is lacking. And here, the author is contradicting himself a little when he says that innovation is about creating the offering and entrepreneurship is about creating the venture. Entrepreneurship also needs to take care of organizational and strategic development. Entrepreneurs build something new to offer to the market and then create the organization for doing so: "[...] entrepreneurship is about 'organizing'" (Gartner, 2001, p. 30).

With respect to the involved risk of entrepreneurship and innovation, I disagree with Ken's argumentation. Entrepreneurship and innovation both face the risk of not being accepted by the market.

As he correctly points out, different individual skills are needed for developing a technology or starting a business. However, I believe that both perspectives and a joint understanding of the differences need to be present in all team members working on an entrepreneurial venture or an innovation, otherwise the team will not reach its full potential. And while entrepreneurial teams may be different from innovation teams with respect to their short- and mid-term focus (build a venture vs. build the offering), interdisciplinarity is always needed. If the people involved are not working on a joint goal or are not understanding each other, it will not work. Here, an important point comes to the equation that is not touched on by Ken—the individual perspective on risk. Risk is inherent in both entrepreneurship and innovation. However, the implication is that we need to think about risk perception, mitigation, management, and the right mindset to deal with risk. This is one major aspect of teaching entrepreneurship and innovation. Not only in current days, risk and change have become a permanent

supplement to our daily lives. We do not, however, find designated classes or teaching materials on how to deal with these risks individually and collectively. In fact, both accepting ambiguity and uncertainty as well as taking risk, is a concept that is unfamiliar to many students in the western academic world. They enter colleges and universities with not much or no experience on how to deal with ambiguity and master risks. They rather look for a predefined and predictable learning content, trying to minimize tensions (Loon, 2021, p. 194). In our classes on Innovation and Entrepreneurship, we have inherently incorporated risk perception and risk management in the curriculum, starting with narratives of (successful and unsuccessful) entrepreneurs and innovators, an individual risk assessment test, and exercises on how to deal with risks. Over the course of the semester, students learn in interdisciplinary teams working on real-life challenges or entrepreneurial ventures of their own how risk can adequately be recognized, assessed, and mastered. We teach both passion and instruments for entrepreneurship and innovation. From these fundamental classes, students and professionals can then select further classes in either direction, be it technology and innovation management or how to create their own venture. These classes could be offered by centers of entrepreneurship or in the respective science and engineering schools.

2 | OUTLOOK AND RESEARCH IMPLICATIONS

Taking the aforementioned thoughts and reflections together, I aim to find some concluding thoughts for a joint perspective on entrepreneurship and innovation as well as for the implementation in an academic setting. If we approach entrepreneurship and innovation from a system's perspective, it becomes obvious that we should not differentiate these two as they are the interwoven parts of a joint system. This more holistic perspective is also taken by the few studies who have tried to combine entrepreneurship and innovation in conceptual frameworks (e.g., Brazeal & Herbert, 1999; Brem, 2011; Zhao, 2005). These authors point out that entrepreneurship and innovation should in fact be seen as continuous and complementary processes. Innovation as a source of entrepreneurship (Schmitz et al., 2017, p. 371) and entrepreneurship allowing innovation to realize its full economic and social value (Zhao, 2005). Linking it back to Schumpeter (1934) we know that innovation and entrepreneurship share the same roots but have been reflected differently in different sciences (Landström et al., 2015). If we want to find an answer to the challenge how to create something new, we need to answer the question first how to develop passion for innovation? As pointed out before, entrepreneurship requires passionate humans. Over the last 20 years, this passion and risk-taking attitude has been described as an entrepreneurial mindset (Kuratko et al., 2021; McGrath & MacMillan, 2000). It drives curiosity, openness to change, and passion for questioning the status quo "It is the mental perspective that precedes our actions and feeds our emotions, allowing us to innovate" (Kuratko et al., 2021, p. 1681). The entrepreneurial mindset bears similarity to the scientific mindset (Hayter et al., 2021), it can and needs to be developed throughout the academic world. Providing examples and role models of academic entrepreneurs and innovators helps sensitizing students and researchers alike for entrepreneurship and innovation. It is the starting point for the process of innovation, as an open mind, recognizing opportunities and challenges, is the beginning of every problem solution. Furthermore, taking a human- or user-centric perspective from the very beginning helps to develop radical solutions. So, the integration of Design Thinking into the entrepreneurship and innovation curriculum has proven to not only improve the development process but also to create more innovative solutions (Auernhammer & Roth, 2021; Sarooghi et al., 2019).

Once an entrepreneurial mindset is taught, opportunity recognition comes naturally. It also helps to support the courage for radical change as it encompasses the ability to sense, act, and mobilize under uncertain conditions (Haynie et al., 2010). With this starting condition, both entrepreneurship and innovation will come easier, quicker, and a lot more natural to academics (i.e., students, researchers, teachers, members of the university), a trend that can already be observed with the younger generation (Haltiwanger, 2021).

To conquer the challenges of today's world, students and researchers need a curious and brave perspective on the world to recognize opportunities, conquer risks and find solutions. There are successful examples (e.g., Babson College, MIT or Stanford University) where the entrepreneurial mindset has been integrated into the overall DNA of the university and found its way into every lecture. The entrepreneurial mindset should, in an ideal world, be taught by every academic, implicitly and explicitly. They themselves, however, need a discovery of their own entrepreneurial mindset first so that they can reflect and build on it.

The sum of entrepreneurial academics reflects the starting point for the entrepreneurial university as an active driver of innovation (Audretsch, 2014). Entrepreneurship and innovation (or technology transfer) centers at universities can then build on this base to be the platform for students, researchers, entrepreneurs, teachers, companies, society, and politics. They are mediators and enablers for innovation and entrepreneurship. Starting

with the entrepreneurial mindset and then teaching the instruments and processes needed will help students and academic staff to find their respective strengths and weaknesses for entrepreneurship and innovation. With that, I call for a joint core (aka the entrepreneurial mindset) of entrepreneurship and innovation at universities but different curricula and instruments for the individual challenges of entrepreneurship and innovation, differentiating along the source of the problem or idea, the disciplines involved, the instruments and conditions needed, and the ecosystems to be built.

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