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# **How can Higher Education Institutions (HEIs) support the development of Entrepreneurial Mindsets in Local Communities?**

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## **Questions we care about**

Promoting an entrepreneurial culture through the development of entrepreneurial mindsets has become an important mission on the education and enterprise policy agenda of many governments and supranational organisations. Higher Education Institutions (HEIs) have responded to this call by developing entrepreneurship / enterprise education pedagogies that now place a greater focus on engendering entrepreneurial competencies within individuals rather than on the creation of new ventures. Such competences are relevant for all aspects of an individual's life and may assist them in navigating the ever changing, chaotic, global world in which they live. However, some commentators have argued that this development is elitist as HEIs have primarily focused their support on better educated individuals and high-technology based enterprises. Indeed, it has also been suggested that HEIs are less proactive in the development of entrepreneurial mindsets more broadly in society, particularly amongst disadvantaged communities. This paper explores how HEIs can move outside of their formal education setting and dynamically support the development of entrepreneurial competencies and mindsets amongst people within their local communities.

## **Approach**

Based on an interdisciplinary review of the literature covering entrepreneurship / enterprise education and community engagement, the concept of developing entrepreneurial mindsets is explored and discussed. Identifying a gap in the literature, this theoretical review builds a knowledge base that culminates by offering future researchers a series of considerations from which they can shape their research on this topic.

## **Implications**

Investigating current practice in entrepreneurship / enterprise education and community engagement, this paper facilitates a synthesis in knowledge in this emerging research area. It maps existing knowledge in terms of the relationship between entrepreneurship / enterprise education and community engagement and it highlights the necessity to include the perspectives of multiple stakeholders in considering future practice.

## **Value/Originality**

While the literature is abundant with various pedagogies, models and frameworks that support the development of entrepreneurial mindsets and entrepreneurial capabilities in the formal education setting, there is little evidence of how entrepreneurial mindset may be developed more broadly in society, particularly in disadvantaged communities. This paper addresses this gap in the literature by identifying the roles that HEIs may play in this regard.

## **Key Words**

Entrepreneurial Mindset, Community Engagement, Higher Education Institutions, Enterprise / Entrepreneurship Education

## Introduction

In recent decades, governments and supranational organisations have increasingly endorsed the importance and benefits of entrepreneurship / enterprise education strategies. This has resulted in a significant growth in entrepreneurship /enterprise education in Higher Education Institutions (Fayolle and Kyro, 2008), from a handful of courses in the 1970s to thousands around the globe today (Kuratko, 2014). In the early years of academic debate on this topic, Jamieson (1984) made a distinction between entrepreneurship education and entrepreneurship training which he categorised as follows:

1. Education about enterprise (aspiring entrepreneurs),
2. Education for enterprise (aspiring entrepreneurs),
3. Training in enterprise (established entrepreneurs).

The first category is focused on awareness creation and is academic in nature, the second is aimed at the preparation of aspiring entrepreneurs who want to set up and run their own business, while the third category, training in enterprise, is an extension of the second category and provides further entrepreneurial development to growing or established entrepreneurs. More recently there has been much confusion regarding the differentiation between entrepreneurship education and enterprise education with little agreement being reached concerning these terms, although they are frequently used interchangeably. For the purposes of this paper, the debate regarding the terms will not be considered but instead ‘entrepreneurship education’ will simply be adopted given that principal area of investigation is concerned with the development of entrepreneurial mindsets.

Traditionally entrepreneurship education in HEIs had a strong business or new venture creation focus, but more recently contemporary pedagogy has become more focused on engendering entrepreneurial competencies within individuals. Developing such competences is often referred to as fostering ‘an entrepreneurial mindset’. These competencies can help individuals to behave in an entrepreneurial fashion in many different aspects of their lives. Indeed, the European Commission has made continuing calls for the development of entrepreneurial mindsets and entrepreneurial competencies more broadly in society, particularly within disadvantaged communities (European Commission, 2013). Developing such competencies requires a comprehensive lifelong learning approach that incorporates formal, non-formal and informal learning environments. However, Fayolle (2013) acknowledged that whilst initiatives in entrepreneurial training are emerging in primary and secondary education, most entrepreneurship education initiatives are offered in higher level education. Given this expertise within HEIs, how might they support the development of entrepreneurial competencies more broadly in society?

Historically, there was a public perception of universities as ‘ivory towers’ whose main mission focus was on research and teaching in isolation from their communities (Anderson, 2009). However, recent decades have borne witness to a closer alignment between higher education and society with many universities embracing their ‘third mission’ of community engagement (Hazelkorn, 2016). HEI Community Engagement is a multi-faceted and multidimensional concept that may be applied to a vast range of activities and initiatives. One aspect of this is to be found at the emerging research nexus between community engagement and enterprise (Kingma, 2011; Morris et al., 2013). Developments in this field to date include outreach initiatives that focus on technology commercialization, university seed fund programs and engagement with the entrepreneurial community. Other initiatives involve entrepreneurial training in the traditional sense (new venture creation) aimed at under-represented communities such as disabled or social/economically disadvantaged. Despite such developments, Williams and Williams (2011) highlighted that the fostering of entrepreneurial activity and mindsets in

communities that have previously lacked a critical mass of entrepreneurs is under researched. Compounding this, Galloway and Cooney (2012) emphasised that despite the continuing call for the development of entrepreneurial training programmes more broadly in society, particularly amongst disadvantaged groups, very little is known about the relationship between such groups and the development of entrepreneurial competencies.

This paper sets out to address this gap in the knowledge base. It begins by exploring the contemporary understanding of entrepreneurship, which leads to a review of the term 'entrepreneurial mindset' and then an examination of contemporary pedagogies underway in HEIs to support the development of entrepreneurial competencies. This is followed by an investigation of the concept of HEI community engagement, a concept that could become a mechanism for HEIs to move outside their formal education setting and support the development of entrepreneurial competencies within their local communities. By identifying best practise in this field, the paper concludes by considering a contemporary framework for HEI Community engagement through entrepreneurship education. Questions are raised throughout this paper and this review will inform future researchers who wish to engage with this under-explored contemporary research area.

## **Understanding Entrepreneurship and Entrepreneurial Mindsets**

It is widely accepted that entrepreneurship is explicitly linked to economic and societal growth and development. This has resulted in significant growth in entrepreneurship research across several disciplines and fields (Carlsson et al., 2013; Fagerberg et al., 2012). In the literature, the phenomenon of entrepreneurship is defined from various perspectives and approaches. From its earliest origins, the term entrepreneur has been associated with business enterprise, someone who starts a business and produces economic growth (Kirzner, 1973; Schumpeter, 1934). Historically, this was the dominant approach (Morselli, 2015) but over time, research became more focused on understanding the entrepreneur and their traits and characteristics as an individual (e.g. Filion, 1997). However, criticisms of this perspective (e.g Gartner, 1988) gave way to the development of the process view, which defined entrepreneurship as a complex phenomenon that should be considered holistically rather than through a narrow focus on specific human traits or economic functions. The field broadly agreed with the view of Shane and Venkataraman (2000) who argued that the phenomenon of entrepreneurship can best be understood as an "individual-opportunity nexus", where enterprising individuals meet valuable opportunities.

By the dawn of the 21<sup>st</sup> century, entrepreneurship was understood as a specific mindset which resulted in many different types entrepreneurial initiatives. This broadened the narrow business or economic understanding of entrepreneurship to incorporate new fields of study, including areas such as social entrepreneurship. In this way, entrepreneurship began to be considered as a societal rather than an economic phenomenon taking place in the everydayness of life, in both social interactions and every day practises (Steyaert and Katz, 2004). Korsgaard and Anderson (2011) summarised this perspective when they highlighted that entrepreneurship can result in the creation of multiple forms of value and that it is as much a social as it is an economic phenomenon. Cooney (2012) suggested that more recently, entrepreneurship is being viewed as a way of thinking and behaving that is relevant to all parts of society and the economy. Blenker et al. (2012) developed this further and argued the case for 'entrepreneurship as an everyday practice', where opportunities do not exist independently of entrepreneurial individuals, but rather are inextricably linked to individuals. They describe this as a 'general entrepreneurial mindset' which can find expression in many endeavors.

From the early 2000s onwards, entrepreneurship researchers posited that a better understanding of the mind of the entrepreneur would give people a greater understanding of

the processes that lead to the creation of new ventures (Carsrud et al., 2009). This approach led to the generation of multiple definitions of the term ‘entrepreneurial mindset’. Some researchers focused specifically on traits and characteristics common in habitual entrepreneurs such as Gunther McGrath and MacMillan, (2000) who defined the characteristics of an entrepreneurial mindset as: opportunity seeking; discipline in pursuit of opportunities; selection of only best opportunities; adaptive execution and ability to engage many in pursuit of an opportunity. Building upon the concept of entrepreneurial mindset as the manner in which entrepreneurs identify opportunities, Ireland et al.(2003) defined such a mindset as the ability to sense, act, and mobilize under uncertain conditions. From an attributes perspective, Taatila (2010) explored some of the key attributes of the entrepreneurial mind-set and found them to include perseverance, trust, determination, risk management, a positive attitude toward change, tolerance of uncertainties, initiative, the need to achieve, understanding of timeframes, creativity and an understanding of the big picture. More recently, Krueger (2015) assessed that an entrepreneurial mindset is a deeply cognitive phenomenon and that common traits associated with this mindset include: opportunity recognition, comfort with risk, creativity and innovation, future orientation, flexibility and adaptability, initiative and self-reliance, critical thinking and problem solving and communication and collaboration. More broadly an entrepreneurial mindset has been referred to as an enterprising approach to life (Blenker et al., 2012).

Developing an entrepreneurial mindset has become a key policy issue for EU member states and the EU highlighted that this is a ‘key competence for all’ (European Commission, 2012). The EU’s ‘Europe 2020 Strategy’ suggested that nurturing entrepreneurial mindsets involves developing not only business skills but also essential skills and attitudes including creativity, tenacity, teamwork, understanding of risk and a sense of responsibility which supports individuals, not only in their everyday lives at home and in society, but also in the workplace and beyond (European Commission, 2013). Conceptualising an entrepreneurial mindset and entrepreneurial competencies in this way builds upon the work of Gibb (2002, 2006, 2011), who argued for the need to widen the entrepreneurship concept beyond the traditional business school-driven model to appeal to all students, no matter what their future careers and personal experience. The European Commission (2013) argued that this approach necessitates a paradigm shift from entrepreneurship education as teaching a person how to run a business to instead educating people how to develop a general set of competencies applicable to all walks of life. The European Commission (2012, 2013) further advocated that the education system in member states, particular entrepreneurial learning in higher education, has a key role to play in developing such entrepreneurial mindsets.

### **Entrepreneurship Education in Higher Education Institutions (HEIs)**

A review of entrepreneurship literature will highlight evidence of a shift in focus in entrepreneurship education in HEIs in recent years, arguably in response to the political agenda. An understanding of this shift, is probably best understood through a pedagogical lens. It is generally accepted that there are three distinct approaches to enterprise education (Hannon, 2005; Pittaway and Cope, 2007; Rae, 2010). The first is ‘about’ entrepreneurship – such theoretical orientated courses increase awareness of entrepreneurship by exploring its history and theory, the second is ‘for’ entrepreneurship – a more practical approach encouraging students to consider entrepreneurship in their future through business plan development and associated skills. The third is ‘through’ entrepreneurship where students reflect on their own identities with a focus on developing the entrepreneurial competence within individuals. The “about” is described as the traditional model of enterprise education which was strongly influenced by the economist’s perspective with a heavy business management focus. Merging

the “for” and “through” approaches has given way to the development of a more dynamic pedagogy which promotes a range of entrepreneurial behaviors, skills and attributes that are applicable for a wide variety of contexts (Gibb, 2010). Indeed, there have been increased calls for developing this type of pedagogy more broadly in society, not just in HEIs.

The World Economic Forum (2009) advocated that entrepreneurship education which focuses on shifting mindsets and developing skills that can be applied in many forms and entrepreneurial settings should foster wider participation, particularly amongst those that are socially excluded. The European Commission similarly propounded that entrepreneurship education should be offered to disadvantaged groups, in particular, young people at risk of social exclusion (European Commission, 2012). Furthermore, in recognition of the important contribution that entrepreneurship education can make to social and economic regeneration and renewal, the OECD argued that inclusive entrepreneurship offers an opportunity for individuals to become more active members of society, increasing their self-confidence and building and strengthening their local community - including women, youth, older people, ethnic minorities and immigrants, people with disabilities and the unemployed (OECD, 2015). Could HEIs, with their expertise in entrepreneurship education, address these challenges? The literature highlights some evidence of Higher Education Institutions addressing this situation where HEI's embrace their ‘third mission’ of community engagement.

### **Higher Education Institutions (HEIs) and Community Engagement**

Through their teaching and research agenda, HEIs make significant contributions to society in providing human capital through education and training, expanding access to education and the creation and timely application of new knowledge (e.g. research commercialisation) (Watson et al., 2011). However, the past two decades has seen HEIs become even more deeply embedded in society through significant growth in HEI Community engagement. This new trend involves universities building upon their teaching and research expertise and working with communities to address pressing societal needs (Hollister et al., 2012). The closer alignment between higher education and society occurs for a myriad of reasons including: (1) the move from capital intensity to knowledge intensity as the basis for successful economies; (2) global economic instability; (3) rising Higher Education costs, and (4) reduced public spending on social programs. Indeed, some researchers have suggested that the philosophy and practise of community and HEI engagement is historic and resonates with the foundations of many universities (e.g McIlrath, 2014).

HEI Community Engagement has contemporarily been defined by Escrigas et al. (2014) as a collaboration between the university and a targeted community (regional, national or global) for the mutually beneficial exchange of knowledge and resources in a context of partnership and reciprocity. The concept is often referred to as service learning, engaged scholarship, community university partnerships, civic engagement and of knowledge mobilisation and knowledge impact. It is also frequently referred as HEIs’ ‘Third-Mission’ which describes a wide range of activities from social and cultural, to continuing education, technology transfer and innovation which are additional to the first mission of teaching and the second mission which is research (Hazelkorn, 2016). As such, HEI Community Engagement is a multifaceted and multidimensional concept that may be applied to a vast range of activities and initiatives. One aspect of this is to be found at the intersection between community engagement and enterprise. Pittaway and Hannon (2008) suggested that community engagement in entrepreneurship education is demonstrated in many forms including guest lectures, placements, outreach, student projects, internships, endowments, investment in student ventures, sponsorships, courses for local entrepreneurs, and entrepreneurial fellows and champions. Kingma (2011) suggested that linking HEIs with communities through enterprise is a powerful value generator, creating value for students, faculty and local communities. In

this regard, some HEIs in Europe and the US have returned to their historical roots and are serving as anchor institutions for community regeneration, addressing both local and global needs (Hodges and Dubb, 2012; Soska, 2015). One contemporary example of this is the development of the campus-community entrepreneurial ecosystem at Syracuse University, New York. Over a five-year period (2007-2012), funded by the Kauffman Foundation, Syracuse developed 165 programmes in entrepreneurship linking campus and community. Initiatives ranged from high-technology spinouts to economic regeneration projects to working with disabled veterans in developing training programs in entrepreneurship. For example, significant value has been created through the Entrepreneurship Bootcamp for Veterans with Disabilities (EBV) which, since 2007, has produced more than 1,300 graduates, with 68% launching a new business after completion (EBV, 2016).

Yet, despite these developments, much of the literature around HEI community engagement and enterprise continues to focus on high-technology enterprise, university spin-outs and engagement with the entrepreneurial community. At the grassroots level, evidence of informal entrepreneurial training in communities is through traditional formats and pedagogies with a predominantly new venture creation focus. There is scant evidence in the literature of HEIs introducing contemporary enterprise education pedagogies in their local communities, despite the acknowledgement that one of the aims of entrepreneurship education is in part to break the cycle of the culture of poverty and to bring about socio-economic and community regeneration (Jones and Iredale, 2014). Addressing this gap in knowledge, this paper draws from the literature on HEI community engagement and entrepreneurship education to propose a number of considerations that may influence the development of such initiatives, particularly in the context of the future of enterprise education outside HEIs.

## **Considerations for HEI Community Engagement & Developing Entrepreneurial Mindsets**

Based on a detailed review of the literature, the following considerations were determined to be of significant importance when HEIs wish to create programs that will develop entrepreneurial mindsets through community engagement.

### 1. Community and Culture

In engaging with targeted communities, HEIs need a deep appreciation of the nature of community. The concept of community is linked to aspects such as territory and geographical location, identity, the circumstances of a common problem, interest in and affiliation to a group, occupation and professional practise, faith, and kin (Granados Sanchez and Puig, 2015). Communities by their nature have a shared set of values, norms, meanings and a shared history and identity (Etzioni, 1996) and HEIs need to understand this. This is particularly important in the context of developing entrepreneurial competencies in a community given the link between entrepreneurship and culture ((Hofstede and Hofstede, 2001). In this regard, Vorley and Williams (2015) advocated for establishing a community of practise when engaging with communities through enterprise.

### 2. Type of Engagement

HEI community engagement takes place along a spectrum. Not all ways of engagement are equal as some are more complex than others and some are more transactional than transformative (Goddard, 2009; Hazelkorn and Ward, 2012). Transformative engagement is considered the most superior type of community engagement. This type of engagement moves beyond symbolic engagement activities and relies on authentic dialogue and critical reflectivity. This approach is typified by shared sense making and problem framing (Bowen et

al., 2010). In entering collaborative partnerships, HEIs must consider what type of engagement strategy they will pursue which will provide the best outcomes and impacts for all partners involved in the collaboration.

### 3. Partnerships

Escrigas et al. (2014) advocated that there are mutually beneficial outcomes for both HEIs and community when they engage in collaborative partnership, but stressed that programs need to be done ‘with the community, not to the community’. Therefore, having equity in partnerships between HEI and communities is key. Granados Sanchez and Puig (2015) acknowledged that there must be reciprocity and mutual benefit for all partners involved. HEIs must realise that the academic monopoly on knowledge creation has ended and that civil society is increasingly involved in the creation of knowledge (Escrigas et al., 2014). the co-creation of knowledge for public good between HEIs and communities is a powerful output of HEI community engagement. At the foundation of all equitable partnerships is an understanding of what constitutes outputs for all parties involves, with distributed leadership and shared ownership of the initiative (Vorley and Williams, 2015).

### 4. Pedagogy

Fayolle (2013) suggested that the client of entrepreneurship education is the society in which it is embedded. This means that entrepreneurial learning and outcomes should adequately meet the social and economic needs of all stakeholders involved. This needs to be considered in the context of entrepreneurial learning in communities, especially with adults. In fact, Knowles (1984) suggested that learning in adult and non-formal education should be conceptualised as andragogy and not pedagogy. Learning theories in adult learning are characterised by active and participative and experiential learning. This is complementary to the dynamic entrepreneurship education pedagogies that are underway in HEIs and provide a good foundation to build upon.

### 5. Multiple Stakeholders

Kania and Kramer (2011) proposed a multifaceted approach to community engagement that of ‘collective impact’. This involves the commitment of a group of actors from different sectors working to a common agenda for solving specific social problems. McNall et al. (2015) explored the concept of collective impact through a HEI-community engagement lens and proposed an alternative approach entitled systemic engagement (SE). Such approaches involve universities as partners in systemic approaches to community and systems change. In this paradigm, the HEI is the link between top-down government and industry policies and practises and bottom-up civil society and grassroots initiatives and priorities (Hazelkorn, 2016). Fitzgerald and Zientek (2015) suggested that incorporating multiple stakeholders in HEI community engagement will stimulate the development of learning cities or regions. In the context of developing entrepreneurial competencies in local communities, this places HEIs in a unique position to act.

These considerations offer a good foundation from which HEIs can begin discussions with local communities when designing and developing programs that seek to engender entrepreneurial mindsets.

## **Conclusion**

Through this review, it is evident that entrepreneurship education in HEIs is undergoing a significant paradigm change. Moving away from a solely business and economics focus, the primary aim of entrepreneurship education is now to develop entrepreneurial mindsets and

entrepreneurial competencies which foster an enterprising approach to life. This equips individuals with a toolbox of skills to adapt to the challenges of 21<sup>st</sup> century life and encourage them to be masters of their own future. Arguably, the development of such life skills is applicable to all in society and not just to those who have access to higher level education. When seeking to develop entrepreneurship education programs that will engage with local communities, Table 1 outlines stakeholders that might be included in the development of such initiatives.

**Table 1 - Proposed Stakeholders in HEI Community Engagement in Entrepreneurship**

Project Stakeholders	
HEI Presidents & Management	Entrepreneurs
HEI Technology Transfer Offices	Entrepreneurship Educators & Academics
HEI Community Engagement Offices	Students & Trainees
Local Community Groups	Disadvantaged Community Representatives
Government Agencies	Enterprise Support Agencies

Although this review did find evidence of HEIs engaging with communities in entrepreneurial outreach, the current work primarily focused on entrepreneurial learning in a traditional (new venture creation) format. Combining their expertise in education and embracing a ‘third mission’ of community engagement, this paper suggests that HEIs are in a unique position to support the development of entrepreneurial mindsets more broadly in society. Such a development requires HEIs to leverage their relationships with government, industry and civil society including communities and grassroots organisations. Looking outside HEIs for insight into enhancing entrepreneurship education is a key element for the future regeneration of many local communities and broader national economies.

## References

- Blenker, P., Frederiksen, S.H., Korsgaard, S., Müller, S., Neergaard, H. and Thrane, C. (2012) “Entrepreneurship as everyday practice: towards a personalized pedagogy of enterprise education”, *Industry and Higher Education*, Vol. 26 No. 6, pp. 417–430.
- Bowen, F., Newenham-Kahindi, A. and Herremans, I. (2010) “When suits meet roots: The antecedents and consequences of community engagement strategy”, *Journal of Business Ethics*, Vol. 95 No. 2, pp. 297–318.
- Carlsson, B., Braunerhjelm, P., McKelvey, M., Olofsson, C., Persson, L. and Ylinenpää, H. (2013) “The evolving domain of entrepreneurship research”, *Small Business Economics*, Vol. 41 No. 4, pp. 913–930.
- Carsrud, A.L., Brännback, M., Elfving, J. and Brandt, K. (2009) *Motivations: The Entrepreneurial Mind and Behavior, Understanding the Entrepreneurial Mind*, Springer, London
- Cooney, T.M (2012) *Entrepreneurship Skills for Growth-Orientated Businesses*, OECD Publishing, Paris
- Escrigas, C., Granados Sanchez, S., Hall, B. and Tandon, R. (2014) “Editors Introduction: Knowledge, Engagement and Higher Education Contributing to Social Change.”. In GUNi (Ed.) *Higher Education in the World 5: Knowledge, Engagement & Higher*

- Education: Contributing to Social Change*, Palgrave Macmillan, London
- Etzioni, A. (1996) *The New Golden Rule*, Basic Books, New York
- European Commission, (2012) *Building Entrepreneurial Mindsets and Skills in the EU*, European Commission, Brussels
- European Commission, (2013) *Entrepreneurship 2020 Action Plan: Reigniting the Entrepreneurial Spirit in Europe*, European Commission, Brussels
- Fagerberg, J., Landström, H. and Martin, B.R. (2012) “Exploring the emerging knowledge base of ‘the knowledge society’”, *Research Policy*, Vol. 41 No. 7, pp. 1121–1131.
- Fayolle, A. (2013) “Personal views on the future of entrepreneurship education”, *Entrepreneurship & Regional Development*, Vol. 25 No. 7–8, pp. 692–701.
- Fayolle, A. and Kyro, P. (eds.) (2008) *The Dynamics between Entrepreneurship, Environment and Education*, Edward Elgar Publishing, Cheltenham
- Filion, L.J. (1997) “From Entrepreneurship to Entreprenology”, *Journal of Enterprising Culture*, No. 1, pp. 1–23.
- Fitzgerald, H.E. and Zientek, R. (2015) “Learning Cities, Systems Change, and Community Engagement Scholarship”, *New Directions for Adult and Continuing Education*, No. 145, pp. 21–33.
- Galloway, L. and Cooney, T.M. (2012) “Introduction”, *The International Journal of Entrepreneurship and Innovation*, Vol. 13 No. 2, pp. 77–79.
- Gartner, W.B. (1988) “‘Who is an Entrepreneur?’ Is the Wrong Question”, *American Journal of Small Business*, Vol. 12 No. 4, pp. 11–32.
- Gibb, A.A. (2002) “Creating conducive environments for learning and entrepreneurship: living with, dealing with, creating and enjoying uncertainty and complexity”, *Industry and Higher Education*, Vol. 16 No. 3, pp. 135–148.
- Gibb, A.A. (2006) “Entrepreneurship: Unique Solutions for Unique Environments Is it possible to achieve this with the existing paradigm?”, *International Council for Small Business World Conference*, Vol. 44, pp. 1–41.
- Gibb, A.A. (2010) *Toward the Entrepreneurial University*, NCGE, Birmingham
- Gibb, A.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*, Vol. 17 No. 2, pp. 146–165.
- Goddard, J. (2009) *Re-Inventing the Civic University*, NESTA, London
- Granados Sanchez, S. and Puig, G. (2015) “Community-University Engagement Initiatives: Trends and Progress”. In GUNi (Ed.) *Higher Education in the World 5: Knowledge, Engagement & Higher Education: Contributing to Social Change*, Palgrave Macmillan, London
- Gunther McGrath, R. and MacMillan, I.C. (2000), *The Entrepreneurial Mindset -Strategies for Continuously Creating Opportunity in an Age of Uncertainty*, Harvard, Brighton
- Hannon, P.D. (2005) “Philosophies of enterprise and entrepreneurship education and

- challenges for higher education in the UK”, *The International Journal of Entrepreneurship and Innovation*, Vol. 6 No. 2, pp. 105–114.
- Hazelkorn, E. (2016) “Contemporary debates part 1: theorising civic engagement”, in Goddard, T., Hazelkorn, E., Kempton, L. and Vallance, P. (eds.), *The Civic University: The Leadership and Management Challenges*, Edward Elgar, London
- Hazelkorn, E. and Ward, E. (2012) “Engaging with the Community”, in Bergan, S. (Ed.), *Handbook on Leadership and Governance in Higher Education*, Raabe Verlag, Stuttgart.
- Hodges, R.A. and Dubb, S. (2012) *The Road Half Travelled: University Engagement at a Crossroads*, Michigan State University Press, East Lansing, MI.
- Hofstede, G.H. and Hofstede, G. (2001) *Culture’s Consequences: Comparing Values, Behaviors, Institutions and Organizations across Nations*, Sage Publications, Thousand Oaks, CA.
- Hollister, R.M., Pollock, J.P., Gearan, M., Reid, J., Stroud, S. and Babcock, E. (2012) “The Talloires Network: A Global Coalition of Engaged Universities”, *Journal of Higher Education Outreach and Engagement*, Vol. 16 No. 4, pp. 81–102.
- Ireland, R.D., Hitt, M.A. and Sirmon, D.G. (2003) “A Model of Strategic Entrepreneurship: The Construct and its Dimensions”, *Journal of Management*, Vol. 29 No. 6, pp. 963–989.
- Jameison, I. (1984) ‘Schools and Enterprise’, in A.G. Watts and P. Moran (Eds) *Education for Enterprise*, pp 19-27, CRAC, Cambridge, MA
- Jones, B. and Iredale, N. (2014) “Enterprise and entrepreneurship education: towards a comparative analysis”, *Journal of Enterprising Communities: People and Places in the Global Economy*, Vol. 8 No. 1, pp. 34–50.
- Kania, J. and Kramer, M. (2011) “Collective Impact”, *Stanford Social Innovation Review*, Winter 2011, pp. 36–41.
- Kingma, B. (Ed.) (2011) *Academic Entrepreneurship and Community Engagement*, Edward Elgar Publishing, Cheltenham.
- Kirzner, I.M. (1973) *Competition and Entrepreneurship*, The University Press, Chicago.
- Knowles, M. (1984) *Andragogy in Action. Applying Modern Principles of Adult Education*, Jossey Bass, San Francisco.
- Korsgaard, S. and Anderson, A.R. (2011) “Enacting entrepreneurship as social value creation”, *International Small Business Journal*, Vol. 29 No. 2, pp. 135–151.
- Krueger, N.F. (2015) *Entrepreneurial Education in Practice Part 1 - The Entrepreneurial Mindset*, OECD, Brussels.
- Kuratko, D.F. (2014) *Entrepreneurship: Theory, Process, Practice*, 9th ed., Cengage Publishing, Mason, OH.
- McIlrath, L. (2014) “Community-University Engagement- Global Terms and Terrain”, in GUNi (Ed.), *Higher Education in the World 5: Knowledge, Engagement & Higher Education: Contributing to Social Change*, Palgrave Macmillan, London
- McNall, M.A., Barnes-Najor, J. V., Brown, R.E., Doberneck, D.M. and Fitzgerald, H.E. (2015) “Systemic Engagement: Universities as Partners in Systemic Approaches to Community

- Change”, *Journal of Higher Education Outreach and Engagement*, Vol. 19 No. 1, pp. 1–26.
- Morris, M.H., Kurakto, D.F. and Cornwall, Jefferey, R. (2013) *Entrepreneurship Programs and the Modern University*, Edward Elgar Publishing, Cheltenham.
- Morselli, D. (2015) *Enterprise Education in Vocational Education - A Comparative Study between Italy and Australia*, Palgrave Macmillan, Hampshire.
- OECD (2015) *The Missing Entrepreneurs 2015- Policies for Self Employed and Entrepreneurship*, OECD Publishing, Paris.
- Pittaway, L. and Cope, J. (2007) “Entrepreneurship Education: A Systematic Review of the Evidence”, *International Small Business Journal*, Vol. 25 No. 5, pp. 479–510.
- Pittaway, L. and Hannon, P. (2008) “Institutional strategies for developing enterprise education: A review of some concepts and models”, *Journal of Small Business and Enterprise Development*, Vol. 15 No. 1, pp. 202–226.
- Rae, D. (2010), “Universities and enterprise education: responding to the challenges of the new era”, *Journal of Small Business and Enterprise Development*, Vol. 17 No. 4, pp. 591–606.
- Schumpeter, J.A. (1934) *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*, Vol. 55, Transaction publishers, New Brunswick
- Shane, S. and Venkataraman, S.D. (2000) “The Promise of Entrepreneurship as a Field of Research”, *The Academy of Management Review*, Vol. 25 No. 1, pp. 217–226.
- Soska, T. (2015) “Universities and communities in partnership”, in Jacob, W., Sutin, S., Weidman, J. and Yeager, J. (Eds.), *Community Engagement in Higher Education*, Sense Publishers, Pittsburgh.
- Steyaert, C. and Katz, J. (2004) “Reclaiming the space of entrepreneurship in society: geographical, discursive and social dimensions”, *Entrepreneurship & Regional Development*, Vol. 16 No. 3, pp. 179–196.
- Taatila, V.P. (2010) “Learning entrepreneurship in higher education”, *Education + Training*, Vol. 52 No. 1, pp. 48–61.
- Vorley, T. and Williams, N. (2015) “Creating and sustaining a model of community-based enterprise learning: a participatory case study of ready hubs”, *Community Development*, Vol 46, No.5, pp 559-579
- Watson, D., Hollister, R.M., Stroud, S. and Babcock, E. (2011) *The Engaged University International Perspectives on Civic Engagement*, Routledge, New York.
- Williams, N. and Williams, C.C. (2011) “Tackling barriers to entrepreneurship in a deprived urban neighbourhood”, *Local Economy: The Journal of the Local Economy Policy Unit*, Vol. 26 No. 1, pp. 30–42.
- World Economic Forum (2009), *Educating the Next Wave of Entrepreneurs*, a report of the Global Education Initiative, World Economic Forum, Geneva.