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Expanding university entrepreneurial ecosystems to under-represented communities

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Abstract

Purpose – Entrepreneurship education has moved from an elitist view focussing on a start-up and picking-the-winners philosophy towards a broader enterprising behaviour approach; recognising entrepreneurship as an activity of relevance for everybody. The purpose of this paper is to extend this development and identify how university entrepreneurial ecosystems can be expanded to support communities that are under-represented in entrepreneurship.

Design/methodology/approach – Based on an integrative literature review (Torraco, 2005), this paper draws together and synthesises literature from the field of entrepreneurship, higher education studies and under-represented communities in an integrated fashion, leading to the development of a new conceptual model.

Findings – This paper challenges the traditional role of universities in supporting entrepreneurship as focussing mainly on economic growth and new venture creation, and identifies how universities are also positioned to provide greater civic support to entrepreneurial learning amongst under-represented communities. Through a critical analysis of the literature, the conceptual model proposed identifies six key considerations in the expansion of university entrepreneurial ecosystems for under-represented communities.

Practical implications – There are currently 96.6m people at risk of poverty and social exclusion in the EU (OECD, 2017) and an estimated 43.1m Americans (US Census Bureau, 2017). This paper explores how university entrepreneurial ecosystems can be expanded to support minority and disadvantaged communities who are under-represented in terms of entrepreneurial activity.

Originality/value – Given that there is little research regarding how universities might activate inclusive entrepreneurship initiatives amongst under-represented communities, this paper expands existing knowledge as it identifies the key considerations encompassing university-led community collaborative enterprise support.

Keywords Social inclusion, Entrepreneurial education, Public policy, Entrepreneurial ecosystems, Inclusive entrepreneurship, Enterprising behaviour, University–community engagement, Under-represented communities

Paper type Research paper

Introduction

Entrepreneurship is frequently identified as playing a critical role in economic and societal development which has led to the development of a wide range of public policies and initiatives to support entrepreneurial activity (Lundstrom and Stevenson, 2006; Ahmad and Hoffman, 2008). Recently, the concept of an “entrepreneurial ecosystem” has been advanced in the academic literature and generally refers to the dynamic and mutually reinforcing environment between a community of interdependent actors that supports entrepreneurship (Isenberg, 2011; Spigel, 2017). Whilst public policy differs between regions and each national or regional entrepreneurial ecosystem is unique, it is broadly agreed that there are some common pillars within such entrepreneurial ecosystems which include: a conducive culture, finance availability, quality human capital, appropriate market conditions and a wide range of supports. One of the key stakeholders within entrepreneurial ecosystems is universities, but their traditional approach to enterprise education (which has largely focussed on Schumpeter’s, 1942 heroic entrepreneur) has frequently been criticised for being too elitist and neglecting the potential of everyday entrepreneurship performed by a broad variety of people in society. This critique has been further supported

by Sarasavathy and Venkataraman's (2011) seminal article demonstrating entrepreneurship as a general method that can be used by anyone who cares to learn it.

There is an underlying assumption within entrepreneurial ecosystem frameworks that all entrepreneurs will have equal access to resources and support, but evidence suggests that this may not always be true (Brush *et al.*, 2018). According to the OECD's (2017) "Missing Entrepreneurs Report", many social target groups are under-represented in entrepreneurship including women, youth, immigrant/ethnic minority groups, unemployed, seniors and people with disability. Women, for example, are under-represented in successful entrepreneurial ecosystems (Brush *et al.*, 2018; McAdam *et al.*, 2018) and identify a lack of entrepreneurship skills or report a fear of failure as a barrier to entrepreneurship (OECD, 2017), whereas ethnic minority groups may experience social and economic disadvantages which form a barrier to participation in entrepreneurship (Carter *et al.*, 2015). This analysis suggests that under-represented communities experience entrepreneurship differently to the mainstream population and highlights the need for inclusive policies and entrepreneurial support within the ecosystem to be tailored towards their specific needs (Maritz and Foley, 2018). Initiatives oriented towards traditional forms of entrepreneurship, in terms of start-ups or creating high-growth oriented firms, may not be particularly useful for these under-represented groups. Furthermore, existing ecosystems may have the unintended consequence of pushing under-represented groups further away from entrepreneurial activity and ever closer to becoming marginalised by society.

In recent times, some universities have expanded their entrepreneurial ecosystems to include the development of tailored enterprise support programmes for under-represented communities (Haynie and Shaheen, 2011; Kingma, 2014). It is arguable that universities are ideally positioned to support these initiatives given: the cross-disciplinary knowledge and expertise that resides on campus; the rise in university–community engagement; and their position as a link between top-down government and industry policies and practises with bottom-up civil society and grassroots initiatives and priorities (Hazelkorn, 2016). These holistic initiatives may have personal, economic and social impact upon under-represented communities and could address the call for universities to be more inclusive, connected and engaged with their local communities (European Commission, 2017).

With over 96.6m people at risk of poverty and social exclusion in the European Union (OECD, 2017) and an estimated 43.1m Americans (US Census Bureau, 2017), there is a real need for innovative approaches to address the situation. Whilst the expansion of university entrepreneurial ecosystems into under-represented communities could contribute to the solution, it is an unfortunate reality that such initiatives are infrequent and there remains a dearth of research on how universities might best support under-represented communities through entrepreneurship. This paper addresses this gap in the literature and contributes new knowledge to the field by developing a conceptual framework that identifies the key considerations around university-led community collaborative enterprise support.

Inclusive entrepreneurship

It is widely accepted that entrepreneurship plays a crucial role in economic growth and development as a driver of innovation and job creation (Herrington and Kew, 2017; OECD, 2017). Whilst much of this growth has focussed on technological entrepreneurship and economic development in large urban cities and regions, Stephens and Partridge (2011) identified that entrepreneurship may also stimulate economic growth in rural regions. Recently, a broader view of entrepreneurship has emerged whereby entrepreneurship is viewed as a way of thinking and behaving that is relevant to all parts of society and the economy (Cooney, 2012). Sarasavathy and Venkataraman (2011) have suggested that entrepreneurship is a general method that could and should be learned by everyone. Moberg *et al.* (2012, p. 14) defined such a broader view of entrepreneurship as "when you act upon

opportunities and ideas and transform them into value for others. The value that is created can be financial, cultural or social". Within such an understanding of entrepreneurship, the outcome of an entrepreneurial ecosystem would not be limited to the creation of new innovative start-ups, but would also involve broader forms of enterprising behaviour that involves: enhancing self-efficacy; improving the ability of individuals, groups and communities to take control of their own life and situation; or the creation of a more entrepreneurial mindset and identity. Such a broader understanding of entrepreneurship is adopted for the purposes of this study as it broadens the traditional, economic perspective of entrepreneurship and offers a wider relevance for a variety of contexts.

Inclusive entrepreneurship policies suggest that developing entrepreneurial potential within under-represented groups requires specific targeted initiatives that are transparent, inclusive and sensitive to their needs. Yet, despite such policy developments, the OECD (2017) highlighted that women, youth, immigrant/ethnic minority groups, unemployed, seniors and people with disabilities are social target groups that are greatly under-represented in entrepreneurship. These communities each have additional and distinctive challenges in developing their enterprising capabilities that has yet to be fundamentally addressed through the entrepreneurial ecosystem and inclusive policies. In recent times, an increasing number of studies have begun to analyse the additional and distinctive difficulties faced by under-represented groups in entrepreneurship and identified a number of common barriers including: a lack of necessary business skills, a lack of appropriate access to finance, an absence of mentoring and advice and a lack of role models (Galloway and Cooney, 2012). Additionally, deficits in the level and type of social capital and social networks in disadvantaged communities may also be considered barriers to entrepreneurship (Drakopoulou Dodd and Keles, 2014). Many of these barriers are reflected in the pillars of the entrepreneurial ecosystem (finance, culture, capital, markets and other supports). The distinctive and additional challenges that under-represented communities face in entrepreneurship and within the entrepreneurial ecosystem are highlighted through an analysis of selected under-represented communities.

Barriers to entrepreneurship for women

In virtually every country in the world, female entrepreneurship is lower than that of men and women are under-represented in successful entrepreneurial ecosystems (McAdam *et al.*, 2018). There is also evidence that participation, access to resources and outcomes in entrepreneurial ecosystems varies significantly between females and males (Brush *et al.*, 2018). Data from the OECD (2017) demonstrate that in 2016, women entrepreneurs accounted for just under one-third of the number of self-employed. Fielden and Dawe (2004) studied a cohort of nascent female entrepreneurs from socially excluded backgrounds in the UK and identified the following key challenges: fear of failure; lack of start-up capital; partner's unsupportive attitude; lack of skills and knowledge; and lack of affordable childcare. A study by Marlow (2006) identified that lone female parents and young female unemployed were much less likely than other women to have the stocks of human and social capital required to launch successful ventures, while Rouse and Kitching (2006) identified that nascent female entrepreneurs from socially excluded communities may face severe childcare problems. The OECD (2017) also identified numerous institutional, societal and market barriers to female entrepreneurship, with the report highlighting that two-thirds of women believe that they do not have the skills to successfully start a business and more than half of women cited "fear of failure" as a barrier to entrepreneurship. Each of these studies highlight the contextual nature of female entrepreneurship and demonstrate that females are not a homogenous population. Whilst it is apparent that there are several reasons for the gender gap in entrepreneurship (including sexism and occupational segregation), tailored support is clearly required to address women's under-representation in entrepreneurship.

Barriers to entrepreneurship for ethnic minorities and migrants

In 2016, nearly 10 per cent of those reporting as self-employed in the European Union were immigrants, approximately two-thirds of whom were born outside of the EU (OECD, 2017). While the recent figures for immigrant entrepreneurship are similar with the self-employment figures for the rest of the population, ethnic minorities and migrants typically have lower levels of resources and face a number of distinctive barriers to entrepreneurship (such as racism) than endured by the mainstream population. Bates *et al.* (2007) identified these as the “3Ms”: money, market and management skills. According to Blackburn and Smallbone (2014), the most common distinctive barriers faced by ethnic minorities and migrants are their limited social networks, poor information flows, difficulties in access to markets and finance, operating in deprived locations, in addition to linguistic and legal framework barriers in the host country. Given the complexity of needs for ethnic minorities and migrants, it has been argued that tailored entrepreneurship support is required (Galloway and Cooney, 2012). This may require outreach within communities highlighting training and funding opportunities in various languages.

Barriers to entrepreneurship for disabled entrepreneurs

People with disabilities account for 16 per cent of the total working age population in the EU (Blackburn and Smallbone, 2014). Evidence from the UK, USA and Ireland indicated that disabled people have lower rates of employment yet are self-employed in significantly greater proportions than people without disabilities (Cooney, 2008). However, motivation for entering self-employment may be in response to exclusion from labour market opportunities or blocked career mobility (Boylan and Burchardt, 2003). Research has indicated that in addition to their lower levels of educational attainment and social network capital, disabled entrepreneurs face many other obstacles to entrepreneurship, which include: limited access to resources, information and financial support; and fear of losing regular benefit income (welfare benefit trap) (Anderson and Galloway, 2012). In addressing the needs of disabled entrepreneurs, a holistic approach is required that provides tailored training programmes, ongoing business support, microfinance loans and disability awareness training for business advisers (Cooney *et al.*, 2018).

While recent decades have seen significant growth in the rates of entrepreneurship (OECD, 2017), the above brief analysis highlights how some groups in society remain greatly under-represented in terms of entrepreneurial activity. Indeed Galloway and Cooney (2012) and OECD (2017) have related the systemic failures of entrepreneurial ecosystems, government policies and enterprise support agencies to the reduced rates of entrepreneurial activity amongst these communities. Research by Greene and Butler (1996) reinforced the necessity of understanding the institutional underpinnings of various types of business creation processes, as well as the continued importance of characteristics of the business founder. Therefore, whilst there is heterogeneity amongst and within under-represented groups, they all experience significant additional and distinctive barriers to entrepreneurship. Furthermore, it is evident that the mainstream, conventional or “one-size-fits all” approach to entrepreneurial support is inadequate because these social target groups have significant and complex needs, which means that a tailored and holistic support system is required (Sciglimpaglia *et al.*, 2013; Yusuf, 2015). Moreover, these groups may be difficult to reach by regular or mainstream support services (Blackburn and Smallbone, 2014). Studies in the USA, Australia, UK and Netherlands have indicated that despite evidence of “good practice”, government and mainstream business supports have had limited success engaging with under-represented groups such as Black, Minority, Ethnic and immigrant groups (Kloosterman, 2003; Ram and Jones, 2008). The reasons for this may be attributed to: a perceived lack of relevance of enterprise support products; cultural and language difficulties; or a low level of trust in officialdom (Blackburn *et al.*, 2008; Ram and Jones, 2008).

Disadvantaged or under-represented groups may also be sceptical of mainstream enterprise support, as evidenced in Fielden and Dawe's (2004) study of nascent female entrepreneurs from socially excluded backgrounds which highlighted that women did not feel comfortable accessing mainstream business advice and support, particularly when the provision was centrally located rather than community based. If inclusive entrepreneurship is truly an ambition of governments and their enterprise support agencies, then new and different approaches to support need to be experimented and changes in the understanding of what constitutes a good support system is also required.

University entrepreneurial ecosystems

The role of universities in supporting entrepreneurial education is heavily influenced by both general public policy and local entrepreneurial ecosystems. At a general macroeconomic level, the overall economic policy in terms of taxation structure, public bureaucracy, level of corruption, economic incentives, start-up subsidies or grants for young entrepreneurs collectively constitute an overall framework for entrepreneurial activities to unfold. At a microeconomic and local level, public policy would typically seek to encourage the delivery of locally adjusted entrepreneurship education programmes and extracurricular activities such as student growth houses or business incubators. According to the European Commission (2008), the aim of entrepreneurship education at universities should be to develop entrepreneurial capacities and mindsets that benefit economies. Hytti and Kuopusjarvi (2004) also highlighted the relevance of entrepreneurship to economic development, while Taatila (2010) pointed to evidence that academically educated entrepreneurs are more important in developing regional economies than entrepreneurs with a lower level of education. Minniti and Levesque (2008) suggested that it is generally recognised that academic education provides people with the opportunity to develop additional skills and exposes them to new developments, thus resulting in further innovation and the supplementary use of new business models. However, such findings do not identify how universities can support enterprising behaviour amongst under-represented communities. The European Commission (2013) published an "Entrepreneurship 2020 Action Plan" and one of the key pillars highlighted concerned entrepreneurial education and training to support growth and business creation. The plan sought to encourage policymakers in European Union countries to integrate entrepreneurship into their education systems. Some national governments (e.g. Denmark, Norway and Finland) heeded the recommendations and created National Entrepreneurship Education Strategies to promote the development of entrepreneurial skills amongst their young people.

But entrepreneurial education alone will not greatly impact the entrepreneurial activity of a country as a strong entrepreneurial ecosystem is required to provide relevant support to potential, nascent and existing entrepreneurs. Stam and Spigel (2017) defined an entrepreneurial ecosystem as "a set of interdependent actors and factors coordinated in such a way that they enable productive entrepreneurship within a particular territory". This definition does not suggest that ecosystems are developed for the primary purpose of engendering greater levels of high-growth firms or innovation-led enterprises, but instead suggests that ecosystems should enable people of any background to engage in entrepreneurial activity. Cohen (2006) identified multiple components of successful entrepreneurial ecosystems including formal and informal networks, physical infrastructure and culture. Isenberg (2010) argued that entrepreneurs are most successful when they have access to the human, financial and professional resources they need, and operate in an environment in which government policies encourage and safeguard entrepreneurs. According to Isenberg, there are six domains within a successful entrepreneurial ecosystem and these are: a conducive culture; supportive policies and leadership; available and

appropriate finance; high-quality human capital; venture-friendly product markets; and institutional and infrastructural supports. Feld (2012) propounded that start-up ecosystems and communities can be created within one's own city and suggested that four key elements were required: entrepreneurs must lead the start-up community; the leaders must have a long-term commitment; the start-up community must be inclusive of anyone who wants to participate in it; and the start-up community must have continual activities that engage the entire entrepreneurial stack. Feld argued strongly that the role of a university in a start-up community can be a powerful one as it acts as a feeder into the system. Spigel (2017) suggested that ecosystems are composed of ten cultural, social and material attributes that provide benefits and resources to entrepreneurs and that the relationships between these attributes enhances the ecosystem. While the configurations and levels of impact of entrepreneurial ecosystems on entrepreneurial activity have not been definitively agreed, it is broadly concurred that universities are critical members of such ecosystems (Van de Ven, 1993; Hsu *et al.*, 2007; McKeon, 2013). Additionally, a strong entrepreneurial ecosystem can positively stimulate entrepreneurial activity and therefore must be considered a key influencer within the development of any university seeking to enhance enterprising behaviour amongst under-represented communities.

Once considered "Ivory Towers" attended by a small number of intellectual or social elite, in recent decades the role and mission of universities have been substantially transformed. On one hand, the growing number of young people taking a higher education programme has created a situation where universities need to deliver mass-education, while on the other hand, given the requirement to respond to the many challenges of contemporary society, the role of modern universities has evolved to provide knowledge and expertise that meets the needs of local and national economies within the context of national policy and local ecosystems. Similarly, Morris *et al.* (2017) suggested that universities operate at two levels in terms of entrepreneurial ecosystems, since they serve as one of the most valuable elements within regional ecosystems, while also operating their own internal ecosystems. Indeed, Fetters *et al.* (2010) advocated that universities, as knowledge and research institutions and building upon their collective knowledge and expertise, have a responsibility to form their own entrepreneurial ecosystems. Gibb (2012) highlighted the multiple areas within universities where entrepreneurial and enterprise activities may be embedded from mission and governance to entrepreneurship education and stakeholder engagement. Rideout and Gray (2013) suggested that key components of a university-based entrepreneurial ecosystem (UBEE) included entrepreneurial education, engagement with alumni entrepreneurs, incubators, seed funding, scholarly research and other support services. Brush (2014) proposed that the concept of an entrepreneurship education ecosystem is a central component of the UBEE, outlining the dynamic interactions of networks and actors which support entrepreneurial education. Whilst recent studies have positively linked the development of student entrepreneurial intention and entrepreneurial behaviour to UBEEs and entrepreneurship education ecosystems, they do advise tailoring elements within the ecosystem to meet the learning needs and requirements of students (Morris *et al.*, 2017; Ferrandiz *et al.*, 2018).

Traditionally, entrepreneurship education in universities had a strong business or new venture creation focus, but more recently contemporary pedagogy has become more dedicated towards engendering entrepreneurial competencies within all students. In the early years of academic debate on this topic, Jamieson (1984) made a distinction between entrepreneurship education and entrepreneurship training. In the contemporary literature this distinction has been developed further and it is now generally accepted that there are three distinct approaches to entrepreneurship or enterprise education – learning "about" entrepreneurship, training "for" entrepreneurship and learning "through" being involved in entrepreneurial processes (Pittaway and Cope, 2007; Rae, 2010). Each of these are associated with varying learning philosophies and pedagogical approaches.

More recently the debate has widened further and there is 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. Regional differences also exist. American scholars primarily use the concept “entrepreneurship education” and tend to understand the concept rather narrowly as education that is commercially oriented and focussed on creating the competencies needed to perform entrepreneurial start-ups. Within a British tradition the concept of “enterprise education” is dominant and tends to indicate an approach that seeks to support a broad form of “enterprising behaviour”, where the assumption is that if more general enterprising competencies can be learned, these competencies can be useful, not only in the creation of new ventures, but in many different walks of life (Gibb, 2002b; Blenker *et al.*, 2011). Looking at continental Europe, confusion increases further as many North-European scholars use the term entrepreneurship education (like the Americans), but often focus on the creation of broad competencies. Many Nordic researchers (Erkkilä, 2000; Lackéus, 2017; Hoppe *et al.*, 2017) use concepts such as entrepreneurial competencies and entrepreneurial education in ways that are rather similar to the British use of the concepts of enterprising behaviour and enterprise education. Erkkilä (2000) proposed the unifying term “entrepreneurial education” as encompassing both enterprise and entrepreneurship education and this term will be adopted in this study to explore how enterprising behaviour is being developed and supported in universities.

This discussion on concepts may seem academic and futile, but instead of seeing the American and European traditions as competing or opposites, it may be more fruitful to approach them as different elements in a progression of education, training and facilitation that an entrepreneurial ecosystem should deliver. It seems to be highly relevant to identify how the development of entrepreneurial ecosystems for the under-represented and under-privileged would differ from more traditional understandings of entrepreneurship policy systems. Taken together, the British, the Nordic and the American approaches suggest a conceptualisation of entrepreneurial education as a progression model. Such a progression would:

- (1) Begin by using enterprise education or entrepreneurial education to lay the foundations for building broad entrepreneurial competencies that can be used in a variety of enterprising behaviour forms. These competencies may be expressed at a personal and mental level in terms of entrepreneurial intentions, entrepreneurial mindset or as increased self-efficacy, or they may be of a more social and action-orientated nature, focussing on creating a higher level of entrepreneurial education in under-represented communities.
- (2) Follow to a next level that would focus on the creation of more specific entrepreneurial skills. These could be more in line with the traditional understanding of entrepreneurship education as training and preparing for start-ups, it could be specifically orientated towards social entrepreneurship for an under-privileged group or it could be skill-based training of value creation within a specific under-represented group (Blenker *et al.*, 2011; Lackéus, 2015).

This progression approach to entrepreneurial education supports the development of enterprising behaviours, skills and attitudes and it is based on an understanding of the way entrepreneurs live and learn with complexity and uncertainty (Gibb, 1993). Such entrepreneurial capability is 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. Characteristics of enterprising behaviour are outlined as opportunity seeking, creativity, self-reliance, initiative taking, action orientation and dealing with uncertainty (Blenker *et al.*, 2006; Haskins, 2018). Analysis of entrepreneurial education programmes, as guided by authors such as Fayolle (2013) and Maritz (2017), has highlighted the key components of

entrepreneurial education programmes and provides insight into how enterprising behaviour is currently being supported in universities. Key features of entrepreneurial education initiatives which engender enterprising behaviour and competencies include: a student-centred approach (Gibb, 2002a); a humanistic or constructionist philosophy (Hannon, 2006); focus on personal development and growth through value creation (Lackéus, 2015); acknowledgement of participants *a priori* knowledge, skills and experiences (Blenker *et al.*, 2011, 2012); active, constructive and experiential pedagogic or andragogic approaches (Neck and Corbett, 2018); with evaluation that is constructively aligned and focussed on self-efficacy (Morselli, 2018).

Many universities have been engaged in entrepreneurial outreach or “third mission” activities since the early 1990s (Gibb, 2005) through triple helix interactions involving academia, industry and government (Etzkowitz and Leydesdorff, 2000). These “third mission” activities are principally promoted in an economic context, supporting regional or national economic growth through innovation and knowledge transfer (Trencher *et al.*, 2013). In recent times, some universities have broadened their entrepreneurial outreach mission through the development of tailored community-based enterprise support programmes for under-represented communities (Kingma, 2014). These tailored community-based entrepreneurial education and support initiatives create both economic and social value for universities and communities, plus they address the call for universities to become more inclusive, connected and engaged with their local communities (European Commission, 2017). Overall, the role of universities in the entrepreneurial ecosystem has been transformed over the past decade in two key dimensions: activities has developed away from the elitist view on entrepreneurial education to a broader understanding of entrepreneurial education being seen as relevant for a broad range of students; and the activities delivered have changed from a primary “about” entrepreneurship approach in research and teaching, towards a broad range of learning “for” and “through” activities, focussing on training and engagement with a variety of actors in the ecosystem. The following section follows an integrative literature review to examine the specific activities directed towards involving under-represented groups.

A literature review: the methodology

Exploring how University Entrepreneurial Ecosystems may be expanded to support under-represented communities is an emerging dynamic field and there is a deficiency in existing literature to address the research question and inform further research. A literature review was chosen as the method of choice to address the problem and aid the development of a conceptual framework. In contrast to the traditional or narrative literature review, systematic literature reviews (SLRs) use a more rigorous and well-defined approach to reviewing the literature in a specific subject area. Pittaway *et al.* (2014) advocated that, despite some limitations, SLRs may be a useful method to adopt in the field of entrepreneurship, particularly to advance knowledge in the field.

Addressing the research questions in this paper required the analysis and integration of three distinctive bodies of literature, namely: entrepreneurship (enterprising behaviour), higher education studies (university–community engagement) and inclusive entrepreneurship (under-represented communities in entrepreneurship). Given the inter-disciplinary nature of this study and the disparity in knowledge production across the disciplines of this study, a form of SLR called an integrative literature review was deemed most appropriate (Whittemore and Knafl, 2005; Torraco, 2005, 2016). Integrative literature reviews facilitate the review, critique and synthesis of “representative literature on a topic in an integrated way such that new frameworks and perspectives on the topic are generated” (Torraco, 2016, p. 404). Using Torraco’s (2005) guide for conducting integrative

literature reviews, the literature was examined and evaluated with the goal of answering the following research questions:

- RQ1.* How are enterprising behaviours currently being developed within universities?
- RQ2.* How can enterprising behaviour be supported outside universities through university community engagement?
- RQ3.* What are the barriers for under-represented communities in developing enterprising behaviour and how might universities support them?

The review was conducted through a staged process. The first phase involved an electronic database search using a variety of leading electronic databases including Business Source Complete (EBSCO), Educational Resources Information Centre, Scopus, Web of Science and Science Direct. A complementary search on Google Scholar was also performed to cross-reference articles found in the search. Key search terms and associated synonyms were used to find studies included in the review from general terms (e.g. enterprising behaviour) to more specific (e.g. higher education community engagement). The different search terms and phases of the literature research process are presented in Figure 1.

The search yielded 1,074 publications. After removing duplicates, 302 publications remained. The references to these works were then saved electronically in Mendeley (a referencing software package). In addition to the database search, the inter-disciplinary nature of this study required several diverse strategies for locating additional relevant literature. This included website searching, reference list combing and contact with experts across the relevant fields. A limited number of Tier One “grey” or non-standard citations were included in the review (Adams *et al.*, 2017). These sources (reports and book chapters) were identified primarily from the reference lists of peer-reviewed sources and accessed via

Figure 1.
Design of the
literature review

Google Scholar. The inclusion of this material addressed disparities in knowledge production across the disciplines of this study and captured emerging policy trends and debate in this dynamic research stream ahead of theory and empirical research ($n = 324$).

During the review process, the titles and abstracts of the publications were examined and those that did not meet the search criteria were eliminated. The corpus was narrowed based on the following inclusion criteria: describes developing enterprising behaviour; describes university–community engagement with external communities; describes entrepreneurship in under-represented communities; is written in English; published within the period 2000–2018; and covers empirical, theoretical or conceptual work. After this selection phase, 117 articles remained on the list. In the next stage, only publications were included that described: the development of enterprising behaviour in higher education; university–community engagement with under-represented communities; and barriers to enterprising behaviour in under-represented communities.

A detailed inspection of all relevant publications was then undertaken, gradually identifying recurring themes and developing a critique. The analysis was carried out according to principles of qualitative data analysis (Miles *et al.*, 2014) and by utilising the guidelines for analysing data in integrative literature reviews (Whittemore and Knafl, 2005; Torracco, 2005, 2016). NVivo software (Version 12) was used to assist data management and analysis. Initially, a focus was placed on the three research questions and individual analysis of each research area ($n = 117$). Each citation was uploaded in NVivo as a separate document. The abstracts were then content analysed and coded for themes around which the resulting discussion of the findings could be structured. The next round involved inductively coding and comparing across the publications to identify patterns and themes ($n = 59$, 32 in entrepreneurship, 17 in university community engagement and 10 in inclusive entrepreneurship). A list of “nodes” (categories) was developed and then categorised in NVivo to identify emergent themes arising from the literature. Nodes ranged from a phrase, to a complete sentence, to several sentences. Each node was coded by iteratively cycling through the data with the aim of merging similar nodes and creating thematic categories. An exemplar of nodes which were merged into the theme of teaching and learning is provided in Table I.

The last phase involved integrating and synthesising the resulting patterns and themes into a format to address the aims of this study. The review was organised in this inductive way as it involved the integration of findings across several disciplines and there is an absence of previous studies that draw the relevant disciplines on this issue together. According to Torracco (2005), integrative literature reviews provide a holistic understanding of a specific topic and are particularly suited to emerging topics. Elements of the review process are outlined in Figure 2. Through a critical analysis that explored emerging themes and their relationships in the context of extending university entrepreneurial ecosystems to under-represented communities, a holistic interpretation of the literature emerged which challenged and integrated the three fields of study, thereby extending existing knowledge. This critical analysis and synthesis led to the development of a conceptual framework (Torracco, 2016) identifying six central concepts and three proposed outcomes of personal development, social inclusion and economic development for under-represented communities.

Findings

Through this process of analysing the literature, several fundamental discourses were identified. These discourses are present across the discipline of literature investigated and they signify a form of raw material that can be organised in multiple ways. They represent different discourses or themes that are repeatedly discussed in the literature, but they have no pre-given or natural structure. These themes are listed in Table II.

Below each of the nine themes are introduced and the essence of the discourse taking place under the theme is presented.

Table I.
Teaching and learning
theme nodes
from NVivo

Nodes	Sample data	No. of references
Context and audience	Contextualisation is a key consideration in entrepreneurial education programs	13
	Building on the <i>a priori</i> knowledge, skills and experiences	
	In engaging with communities universities need a deep appreciation of the nature of community	
Pedagogy/andragogy	Supporting entrepreneurial thinking and behaviours in disadvantaged regions must have relevance to the regional milieu	18
	Contemporary entrepreneurial education pedagogies are characterised by active and experiential learning styles	
	Active, participative, experiential and subjective pedagogies and a strong student-centred emphasis	
	Entrepreneurial education teaching approaches need to consider the move toward more adult learning approaches of andragogy or heutagogy	
	Learning in adult and non-formal education should be conceptualised as andragogy and not pedagogy	
Evaluation/impact/ outcomes	In adult learning the subjective experience of the participants is considered vital and transformative	23
	Effective measurement methods should be defined for each entrepreneurial education initiative	
	Multiple levels-participant, educators and stakeholders/policy makers in terms of feedback and learning	
	self-efficacy, entrepreneurial intentionality, new venture creation, enterprise skills, start-ups, knowledge or technology transfer	
	Linking outcomes to the learning objectives of the program or intervention	
Faculty and student involvement	Personal development including communication and team work skills, and creativity to adapt to unfamiliar environments	14
	University-community enterprise initiatives which successfully engaged with communities were supported by appropriate academic staff	
	universities need to recognise that third mission activities are not ideal for all faculty and staff	
	appropriate lecturing staff with connection to community and a teaching style that allowed for collaborative and shared learning	
	faculty champions	
	community-based enterprise programs that involved students had a dynamism and vibrancy	

Context/audience

Maritz and Brown (2013) proposed that contextualisation is a key consideration in the development of entrepreneurial education programmes. According to Bécharde and Grégoire (2005), educators need to understand their audience and gather knowledge regarding the characteristics, background and social environment of participants. This is evident in many contemporary university programmes supporting enterprising behaviour where significant focus is placed at the individual or personal level, building on the *a priori* knowledge, skills and experiences that the learner brings with them to the programme (Blenker *et al.*, 2012; Thrane *et al.*, 2016). In engaging with under-represented communities, universities need a deep appreciation of the nature of the target community. This was corroborated by Drakopoulou Dodd and Hynes (2012) when they noted that regional context should be a factor for consideration in entrepreneurial education and their analysis indicated that supporting entrepreneurial thinking and behaviours in disadvantaged regions must have relevance to the regional milieu.

Figure 2.
Elements of the
review process

Context/audience	Academic staff	Core discourses in entrepreneurial education, university–community engagement and under-represented communities
Objectives	Student involvement	
Philosophy	Engagement models	
Outcomes	Partnership	
Pedagogy, andragogy, heutagogy and content		

Objectives

Some commentators have suggested that the objectives and goals of entrepreneurial education should be connected to both learning and local/national economic and social needs (Fayolle and Gailly, 2008). Specifying programme objectives may be the first step in developing an entrepreneurial education programme. In the context of under-represented communities, programme objectives may relate not only to supporting personal development, awareness and self-confidence, and providing a taste for entrepreneurship in its broadest definition, but also to enhance collective entrepreneurial agency together within under-represented communities. Benneworth (2013) noted that excluded communities can be difficult communities with whom universities can meaningfully engage. Benneworth suggested that to foster meaningful interactions with socially excluded communities, universities need to acknowledge the role of these communities when constructing and defining their needs and interests. Communities need to be viewed as actors with agency and interest. Quillinan *et al.* (2018) also highlighted the importance of co-creation between universities and communities in programme objectives and content for community-based initiatives.

Philosophy

Fayolle (2013) outlined a philosophical or ontological level in entrepreneurial education programmes aimed at defining the teaching object and the conceptions of education that guide and determine the roles of educators and participants in an entrepreneurial education intervention. In the context of entrepreneurial interventions in under-represented communities, the overall philosophy may be humanistic or constructionist (Hannon, 2005). The educator role may have a helper or coach/mentor focus (Hannon, 2006). As highlighted above, agency and interest of participants is an important consideration.

Outcomes

Within the university entrepreneurial education ecosystem, the anticipated outcomes after an entrepreneurial education intervention may include self-efficacy, entrepreneurial intentionality, new venture creation, enterprise skills, start-ups, knowledge or technology transfer (Nabi *et al.*, 2017; Morselli, 2018). The outcome of entrepreneurial education interventions within under-represented communities may have a stronger focus on skills development such as developing self-efficacy, communication and teamwork skills and creativity to adapt to unfamiliar environments. Entrepreneurial education may have relevance in many facets of an individual's life, such as gaining employment, community/social enterprise initiatives or new venture creation. Whilst the concept of constructive alignment (Morselli, 2018) was omnipresent in the higher education literature, it is unlikely to have similar resonance in the informal learning setting. Consideration of the progression model concept (Blenker *et al.*, 2011; Lackéus, 2015) of entrepreneurial education linking learning outcomes to the context of the intervention may be more appropriate. Broadly, the literature suggested that the three primary outcomes of entrepreneurial education for under-represented communities were: personal development (individual); social inclusion (collective agency); and economic development (structural).

Pedagogy, andragogy or heutagogy and content

It emerged through the literature review that a central feature of developing enterprising behaviour in university entrepreneurial education programmes was the focus at the individual or personal level. This builds upon the *a priori* knowledge, skills and experiences that participants bring with them to the programme. Blenker *et al.* (2012) described initiatives that support enterprising behaviour as initiatives that utilise the heterogeneity of the learner's everyday practise to reveal his or her individual-opportunity nexus. Supporting the development of enterprising behaviour in this way is characterised by active, participative, experiential and subjective pedagogies and a strong student-centred emphasis (Jones *et al.*, 2014). More recently, Neck and Corbett (2018) argued for entrepreneurial education teaching approaches to move towards more adult learning approaches of andragogy or heutagogy. This conceptualisation has resonance for adult education in a community setting where according to Connolly (2010), the lived experience of the learners provides the starting point for the learning and the subjective experience of the participants is considered vital and transformative. Quillinan *et al.* (2018) reported on a key success factor of a university community adult education initiative being the ability to adapt content to a more student-centred programme of study. This highlights the strength of universities in tailoring adult community education programmes to specific audiences.

Academic staff

Empirical evidence suggests that university enterprise initiatives which successfully engaged with communities were supported by appropriate academic staff. According to Rubens *et al.* (2017), universities need to recognise that third mission activities are not ideal for all faculty and staff. Institutions should identify individuals that not only have the required skill set, but also have the disposition, orientation and perspective to be externally focussed. Quillinan *et al.* (2018) further highlighted the need for appropriate lecturing staff with connections to community and a teaching style that allowed for collaborative and shared learning. Kingma (2014) also highlighted the need for "faculty champions" for community engagement initiatives. However, the growth and long-term success of such initiatives required the faculty champion to lead a team of committed colleagues and programme sustainability required the support of colleagues across the university. Such support may enable programmes to grow, assist with diversifying funding, provide marketing and PR support, and help with HR and budget management.

Student involvement

According to Kingma (2014), community-based programmes that involved students had a dynamism and vibrancy that was a key success factor in the initiative. Kingma advised that the core value generation proposition for any university is to provide quality education for students and that university-based community engagement initiatives that involve students are likely to have long-term sustainability and impact. Universities need to consider how this type of service learning can be incorporated into student degree programmes to provide value for the university, students and community. The growth in the concept of service learning across higher education studies represents the importance that twenty-first century universities place on students learning with communities.

Model/frameworks of engagement

Developing and supporting entrepreneurship is increasingly recognised as part of a university's role in society. This focus has given rise to the concept of "the entrepreneurial university". The "entrepreneurial university" was conceptualised around a third mission focussing on engagement through entrepreneurship and entrepreneurial activities (Etzkowitz and Leydesdorff, 2000). The concept is often referred to as the "triple helix model" and linked with "national innovation systems" or "regional innovation systems" (Cooke, 2001), whereby industry and government work together with academia in supporting regional or national economic growth through innovation and knowledge transfer (Yarime *et al.*, 2012). Triple helix activities are principally promoted in an economic context (Trencher *et al.*, 2013) and the outreach initiatives may focus not only on knowledge transfer and technology commercialisation and university seed fund programmes, but also on engagement with the entrepreneurial community. Concerns that this university model shifts the focus of research and knowledge production away from societal interests towards industry or individual interests (Ssebuwufu *et al.*, 2012), may in part be addressed by the development of the open innovation or "quadruple helix model". This model proposes that government, industry, academia and civil participants work together to address societal challenges and create a sustainable future (Carayannis and Campbell, 2009). The concept of the "civic university" is becoming an increasingly utilised model in trying to describe the mutually beneficial engagement between the community, region or wider world around the university (Goddard, 2009). Hazelkorn (2016) argued that the civic university model provides the best means of meeting the new social contract between universities and society. Features of the "civic university" include: a holistic approach to engagement which is institution-wide; a strong sense of place; engagement is a central feature and overlaps equally with teaching and research; and there is a soft boundary between the university and the community enabling a response to societal needs. The concept of the entrepreneurial "civic university" may be a suitable concept in defining the mission and culture of a university that supports under-represented communities in entrepreneurship.

Partnership

Escrigas *et al.* (2014) noted that the university–community engagement literature is heavily biased towards the university side of the engagement agenda. There are few published studies documenting the perspectives of community members in partnership with universities and the field acknowledged that this area continues to be under-represented in the university–community engagement literature (Birdsall, 2005; Sandy and Holland, 2006). A central theme throughout the engagement literature is that of reciprocity, defined as the "ongoing process of exchange with the aim to establish and maintain equality amongst partners" (Maiter *et al.*, 2008). Escrigas *et al.* (2014) advocated that there are mutually beneficial outcomes for both universities and community when they engage in collaborative partnership, but they stressed that programmes need to be done "with the community, not

to the community”. Therefore, having equity in partnerships between universities and communities is key. Granados Sánchez and Puig (2014) acknowledged that there must be reciprocity and mutual benefit for all partners involved. Universities must realise that the academic monopoly on knowledge creation has ended and that not only is civil society increasingly involved in the creation of knowledge (Escrigas *et al.*, 2014); but in a reciprocal way universities are engaged in creating social change. This approach is often defined as “authentic partnership”, whereby all partners become both learners, teachers and actors in shared efforts to seek solution focussed outcomes (Fitzgerald *et al.*, 2016). However, the partnership approach is not without its challenges in terms of addressing the heterogeneity of community (Dempsey, 2010), digital divide (Dempsey, 2010) and inequalities in power, time, labour and resources (Gelmon *et al.*, 2013).

Addressing the main aim of this study and investigating how university entrepreneurial ecosystems can be expanded to support under-represented communities required the integration and synthesis of three fields of study: entrepreneurial education (enterprising behaviour), higher education studies (university–community engagement) and inclusive entrepreneurship (under-represented communities in entrepreneurship). This required the weaving together of the nine discourses that emerged from the literature to construct relevant elements that can be used as components in a conceptual mode. From this analysis, the key considerations in expanding university entrepreneurial ecosystems to under-represented communities were identified and are discussed next.

Analysis and construction of a conceptual model

Through the critical analysis and synthesis of the literature from which emerged the nine discourses and their inter-relationships (in the context of extending university entrepreneurial ecosystems to under-represented communities), a holistic interpretation of the literature emerged which assimilated the three fields of study to extend existing knowledge. Six key considerations were derived around which the discourses present in the literature can be organised: These are: teaching and learning, multidisciplinary approaches, culture, resources, stakeholders and infrastructure (Table III). These are entitled “key considerations” as they are areas where the actors in a university entrepreneurial ecosystem would need to consider and decide upon.

Teaching and learning

Whilst present throughout the different levels of the formal education system of many countries, entrepreneurial education programmes are predominantly offered in universities with programmes less frequently available at primary and secondary school levels (Fayolle, 2013). In the university setting, a number of commentators have developed frameworks that identify the key components of entrepreneurial education programmes (Fayolle and Gailly, 2008; Maritz and Brown, 2013; Maritz, 2017) including: objectives, audiences, pedagogy, assessment, outcomes, context, content and philosophy. In considering the elements of entrepreneurial education programmes for under-represented communities (who experience barriers to acquiring and developing entrepreneurial skills), programmes should be contextualised towards local community needs, with a focus on personal development and growth through active, experiential pedagogy or andragogy. Empirical evidence suggested

Table III.
Six key considerations
in university
entrepreneurial
ecosystems and
under-represented
communities

Teaching and learning	Resources
Multidisciplinary approaches	Stakeholders
Culture	Infrastructure

that enterprise community engagement initiatives that were supported by appropriate staff and involved students and communities were highly successful (Kingma, 2014; Rubens *et al.*, 2017).

Multidisciplinary approaches

Many commentators speak of the strength of the multidisciplinary expertise which resides on university campus' in supporting community needs (Haynie and Shaheen, 2011; Shaheen, 2016). In addressing the needs of under-represented communities, universities can utilise the strengths and expertise across disciplines and support offices (e.g. Technology Transfer Office, Community Engagement Office, Alumni, etc.) to generate unique offerings for communities. This builds upon the team approach as suggested by Kingma (2014) for long-term programme growth and sustainability. In describing the university education ecosystem, Brush (2014) refers to a "co-curricular" level which enriches student entrepreneurial learning outside the formal degree setting. Broadening access to the multiple types of entrepreneurship support on campus may assist in enhancing the social capital and social networks of under-represented communities. However, Amey *et al.* (2002) noted that developing multidisciplinary programmes in community settings is not without its challenges and may take time.

Culture

Several models and frameworks of university–community engagement are offered in the literature that suggest insight into the core values, mission, attributes, objectives and culture of a university that might engage with under-represented communities in entrepreneurship. Certainly, the concept of the entrepreneurial "civic" university (Goddard, 2009) is a suitable concept in defining the mission and culture of a university that supports under-represented communities in entrepreneurship. Reciprocity between universities and communities is also a key theme in the university–community engagement literature as Escrigas *et al.* (2014) advocated that there are mutually beneficial outcomes for both a university and a community when they engage in collaborative partnership. However, they stressed that programmes need to be undertaken "with the community, not to the community" and therefore, having partnerships between universities and communities is crucially important.

Resources

According to Rubens *et al.* (2017), universities need to invest in both organisational and governance structures that support third mission and enterprise activities. Supportive university leadership and management is critical to the long-term success of such initiatives (Powell and Dayson, 2013). Benneworth (2013) argued that in meaningful university–community engagement, universities value the engagement and have a dependence on it to achieve their missions and activities. Blackburn and Smallbone (2014) suggested that an alternative rationale for supporting under-represented communities is one in which diversity is seen as a potential source of competitiveness. Supportive university measures may include human (faculty assessment process and human resources), financial (seed funding) and physical (incubator spaces, etc.) elements. However, without financial sustainability a programme will not survive. Whilst universities might provide initial seed funding for community engagement initiatives through enterprise, long-term sustainability may require diversification of sources of funding and engaging in grants programmes to support such initiatives. Having access to the myriad enterprise supports within a university entrepreneurial ecosystem (inter-disciplinary faculty, financial, physical, grants, alumni, mentors, etc.) may enhance the social, personal or economic capital accumulation for under-represented communities.

Stakeholders

Vorley and Williams (2015) argued that supporting under-represented communities in developing enterprising behaviour requires a multi-stakeholder approach involving local business, government supports, community groups, civil society organisations and universities. In this partnership, universities can act as the link between top-down government and industry policies with bottom-up civil society and grassroots initiatives and priorities (Hazelkorn, 2016). Through engagement with numerous stakeholders, universities are arguably more appropriately equipped than current enterprise support providers to develop tailored enterprise support initiatives. The involvement of multiple stakeholders in partnership approaches may enhance the social capital in under-represented communities (Huggins and Williams, 2009; Lee and Cowling, 2013).

Infrastructure

Under-represented communities may benefit significantly from some of the infrastructure that may be present on a campus which supports entrepreneurial education. Brush (2014) refers to the multiple components of such infrastructure, including: the physical campus, technological or digital environment, individual or social networks. In the context of supporting under-represented communities in enterprise, this may involve some type of community-based support model which may address the challenge of engaging hard-to-reach groups with tailored enterprise support (Blackburn and Smallbone, 2014; OECD, 2017). In this model, community organisations are empowered to deliver enterprise support within their own communities.

Through the integration and weaving of the three streams of literature, the six central concepts emerged. This process enabled the generation of a new model or conceptual framework as described in Figure 3.

Figure 3.
Framework for
expanding university
entrepreneurial
ecosystems to under-
represented
communities

The framework identifies that supporting enterprising behaviour takes place within the broader context of public policy and the entrepreneurial ecosystem. However, given that the focus of the literature review was placed on university–community engagement and under-represented communities, it emerged that a gap in the literature exists regarding the intersectionality between under-represented communities, supporting enterprising behaviour and community engagement. Within the intersection of these areas, the framework identifies six central concepts/considerations for stakeholders involved in the support of enterprising behaviours in under-represented communities that were drawn from an integrative review of the relevant literature. Central to the framework are the principal outcomes that are anticipated from any such community engagement initiative. The research proposes outcomes at three distinct levels: personal development (individual learning), social inclusion (collective agency) and economic development (structural development). The personal development refers to the classical ambition of universities to educate individuals. The focus on under-represented communities directs attention to groups of learners that hitherto have not received sufficient attention from universities. Social inclusion represents the ambition to stimulate under-represented communities into entrepreneurial activities. This is realised through collective actions by the agents of the ecosystem. Within a longer time horizon, the combination of learning and inclusion of under-represented groups should support economic development amongst under-represented groups. The combination of these three outcomes is unique to under-represented communities as other university-led activities are usually concerned with just one (possibly two) of these outcomes.

Conclusion

Entrepreneurial activity is widely considered to be a key element in the growth of national economies. The growth of entrepreneurship/enterprise policies and supporting entrepreneurial ecosystems in many countries across the globe stands testimony to this development. While universities have proactively participated in this movement, much of the focus has been on technological entrepreneurship and high-tech or potential fast-growth businesses in large urban cities, with less of a focus in rural regions and under-represented communities. Paradoxically, in parallel to this situation has been the increasing demands upon universities to reach out to their local communities in a more meaningful fashion than has traditionally occurred. This has led to the development of dedicated access and outreach programmes by universities through “community engagement”. Despite these parallel developments, the entrepreneurial ecosystem literature remains almost silent on the role of universities in providing greater support to entrepreneurial learning in under-represented communities.

This paper advances the research agenda by suggesting a more inclusive role for universities in entrepreneurial ecosystems, particularly in minority and under-represented communities. The contribution of this paper is to consider “how” this might be achieved. It identifies that tailored entrepreneurial programmes for under-represented communities must include personal development (individual learning) as an element of the provision and highlights the considerations for contemporary entrepreneurial education practise. The next stage of the research process will be to identify suitable case studies where the framework can be utilised to map or assess the ability of universities to expand their entrepreneurial ecosystems to become inclusive of under-represented communities. Such a study will enable the framework to be refined and will also provide practical feedback for universities who wish to engage in this process.

From the perspective of under-represented communities, having broader access to university entrepreneurial ecosystems may support the development of both human and social capital. Simultaneously, such engagement activities will ensure that universities are more inclusive, equitable and accessible to their local communities. Indeed, given the

substantial benefits potentially available to all stakeholders, it is surprising that there has been little policy development in this area. Arguably, such development is crucial for the future regeneration of many local communities and supporting such diversity may well become a source of competitiveness for broader national economies.

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