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The University's role in developing Chinese entrepreneurship

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Abstract

Purpose
The purpose of this paper is to review the existing literature and conceptual developments to explore how and why universities should teach entrepreneurship.

Design
This is a theoretical paper which draws on the rich seam of existing literature to develop theory about enterprise education purpose and pedagogy.

Findings
Universities are uniquely able to provide the right sort of education that will produce “better” entrepreneurs. In turn, these better entrepreneurs are better enabled to produce and successfully implement the innovation that drives economic growth.

Practical implications
These are twofold. The paper raises awareness of the importance of the university’s role for developing the right sort of entrepreneurship. It also highlights important pedagogic points that will realise the full potential of a university entrepreneurial education.

Originality
The paper largely synthesises existing work, but conceptualises and presents the material in a new way.
The University’s role in developing Chinese entrepreneurship

The importance of entrepreneurship for economic and social growth is now well recognised across the world (Chen et al, 2011; Jack and Anderson, 1998) so that government policies now reflect a wish to promote and encourage enterprise (Li and Matlay, 2006). Yet because of the very nature of entrepreneurship, top down policies may well facilitate enterprise; but are less able to promote the individual skills, knowledge and attitudes that characterise successful enterprise (Dodd and Anderson, 2001). Thus there appears to be a gap between policy and practice (Matlay, 2005). Whilst this is a universal problem (Heinonen and Hytti, 2010), there are some uniquely Chinese dimensions, not least in maintaining the spectacular entrepreneurially driven growth (Anderson and Lee, 2008; Li and Matlay, 2005) that has characterised the Chinese economy. In this paper I am interested in establishing how universities can contribute to filling the gap between aspirations and action. By drawing on existing work, I attempt to theorise this gap, then try to show how universities can capitalise on what they do best, and how they can use their expertise and capability to enable the right type of entrepreneurship.

I first examine the key role of entrepreneurship for economic development arguing that innovation is the crucial function for growth. Although innovation is typically seen as highly desirable and advantageous at both firm and national levels, I argue that we often overlook the high failure rate of firm level innovation. But stepping back and looking at the bigger picture, this innovation failure is masked by the total number of innovations. I propose an evolutionary perspective; essentially that a large number of new firms are constantly “trying out”, experimenting with innovation. This then is a Darwinian landscape where successful innovation produce desirable change, but the unsuccessful wither and die; yet in doing so make room for the successful. In this way, entrepreneurship renews, reenergises and invigorates the economic environment. This leads me to argue that what is called for is more successful innovation, and hence more successful entrepreneurs. Increasing the number of small businesses is important, more is better because having more businesses increases the number of all innovations. But just as all business environments are not alike (Li et al, 2003), all businesses are not alike; a critical factor appears to be better businesses and more successful Schumpertian entrepreneurs. Yet innovation involves more than merely managing, it encompasses attitudes, values as well as practices (Pyysiäinen et al, 2006). To be an innovator in a competitive environment requires not only a growth strategy (Anderson and Atkins, 2001) but skilled practitioners. I consider how universities can capitalise on there own unique capabilities of knowledge creation and knowledge dissemination to better enable these nascent entrepreneurs. I begin by briefly considering the part played by entrepreneurship in China’s long history.

The modern critical role for entrepreneurship in China is highlighted by history. As Lin (1995) explains, in the 13th Century China used the most sophisticated agricultural systems, so that Chinese fields probably produced the highest yields in the world. By the 14thC, China had almost every element that economists and historians consider to be the factors that helped create the 18thC British Industrial Revolution (Needham, 1969). Moreover, China’s technological achievements were remarkable; gunpowder, the magnetic compass, paper and printing. Lin (1995) argues these significant inventions facilitated the West’s transformation from the Dark Ages to the modern world, but notes how all were invented in China. At that time China was probably the most cosmopolitan, technologically advanced and economically powerful civilization in the world. Yet despite these early advances in
science, technology, and institutions, China did not take the next step. China fell behind the West because China did not make the shift from invention to continuing innovation. There are a number of accounts of why this was so (Anderson et al, 2002), but Elvin (1973) explains it simply as a lack of entrepreneurship in early China. But in modern times have seen radical change (Redding, 1990; Anderson et al, 2003); Tan (2001) proposes that the Chinese entrepreneur has “become the Genie just released from its lamp” (p. 361). Malik (1997: 185) comments that when Deng’s government permitted entrepreneurship, the “traditional entrepreneurial spirit sprang up in almost every corner of China”. So entrepreneurship has become established in China, but continuity in promoting enterprise and producing capable entrepreneurs is now a key role for all institutions. Moreover, in the wake of globalisation, successful innovation should take account of local practices (Harbi et al, 2011; Atherton, 2008) and the rapid changes in the environment (Jack et al, 2008; Dodd et al, 2010). To deal with these issues, Chinese entrepreneurs need to be equipped with a range of capabilities (Anderson and Jack, 2008).

Entrepreneurship’s current popularity as an economic solution is matched by the variety in how it is conceived (Atherton, 2004). Venkataraman, (1997: 120) tells us “… there are fundamentally different conceptions and interpretations of the concept of entrepreneur and the entrepreneurial role”, whilst Anderson and Sturnawski (2008) argue that entrepreneurship, as severally conceived and broadly understood, is simply too broad to be constricted in a single, universal classification. Thus the width and flexibility of the entrepreneurship concept allows it to be used in different ways, so that policy makers and practitioners may develop quite different expectations of the entrepreneurial role (Anderson et al, 2000). But conceptual issues aside, the point of departure for this paper is the widespread acceptance of the value of entrepreneurship as the engine that drives the economy of most nations. Jack and Anderson (1999) argue that entrepreneurship’s anticipated role includes the creation of new industries, employment and wealth creation. Thus the function of entrepreneurship is seen to be a mechanism for economic and social adjustment. Roberts (1991) asserts there a positive correlation between countries that have experienced an increased role of entrepreneurial activity and higher rates of subsequent growth (Chorev and Anderson, 2006a). But if entrepreneurship produces these economic benefits, we need to understand how entrepreneurship actually works. I propose that we can address this at two different levels, firm level and national level.

At the level of the individual firm, growth is produced by entrepreneurial innovation (Schumpeter, 1911; Freeland and Robson, 2004). At a national economic level, the sum of successful innovation represents a competitive advantage of that country. The contribution of innovation to national economic growth is well established in the literature, both theoretically and empirically (Wong et al, 2005; Anderson et al, 2011). Carree and Thurik’s (2003) extensive surveys of the literature on the relationship between entrepreneurship and economic growth find that entrepreneurship contributes to economic performance by introducing innovations, creating change, creating competition and enhancing rivalry. Harbi et al (2009) explain that Schumpeter’s argument is that technologically intensive industries bring about innovations that carry a premium of higher entrepreneurial rents (Schumpeter, 1911). Schumpeter’s ideas mean that innovation is more than merely inventing; entrepreneurship is the successful application of innovation (Roberts, 1991).

We acknowledge Baumol’s (2004) point that virtually all economic growth since the 18thC is ultimately attributable to innovation. But, and this is an understated and often overlooked caveat, we must also take account of the riskiness of innovation. Too often innovation is simply “read off” as a good thing to do without considering how often it fails, yet innovation
is fraught with high failure rates (Rosenbusch et al, 2011). Because any innovation is by
definition new and untried (Chorev and Anderson 2006b), more innovations fail than
succeed (Rizova, 2006; Berggren and Nacher, 2001). But innovation failures are experienced
at firm level, whilst innovation successes impact at national level. Accordingly improving the
success rate of firm level entrepreneurial innovation will have a beneficial effect on national
prosperity. This then is an entrepreneurial task, to produce better entrepreneurship.

I argued that the success and failure of innovation is mostly experienced at the firm level.
Firms that have a greater capacity to innovate are able to respond better to competitive
pressures (Anderson et al, forthcoming) but that the sum of innovation success matters at
the national level. The relationship can be seen as the entrepreneurial process operating
within the national environment. This reflects the argument that whilst entrepreneurship is
usually conceptualised as a private practice (Dodd and Anderson, 2007), entrepreneurial
outcomes are experienced in the public domain, (Anderson and Smith, 2007). One way of
reconciling these levels is to see the entrepreneurial environment as evolutionary in a
Darwinian sense (Anderson et al, 2009). Here “fitness” and hence survival of the fittest, is
the appropriateness of the firm, and its innovations, for the current and prevailing
entrepreneurial environment. Each individual firm tries out an innovation; those that get it
right succeed, those that don’t, fail. We can envisage this as a grand socio-economic
experiment, where the processes of variation, selection and retention respond to macro-
environmental pressures. In this grand small business experiment, “good” innovations rise to
the surface, whilst those that are less “good”, sink to the bottom. This is the process aspect
of Schumpeter’s creative destruction, where entrepreneurs constantly and continuously
seek out new combinations and better ways of doing business. The old is replaced by
the new as the changes fit into the changing environment.

Numbers clearly matter; the more firms that are trying out new things, the more likely more
good innovations will arise. So promoting more new business seems a good thing to do;
more new firms are more likely to develop products or services that “fit” the rapidly
changing environment. But as well as the shifting environment (Anderson et al, 2011), the
entrepreneurial evolutionary model also needs to take account the skills and abilities of the
entrepreneurs to adapt (Irvine and Anderson, 2004). They are not Richard Dawkins “blind
watchmakers” randomly creating new combination. Instead, many entrepreneurs are skilled
and knowledgeable; sentient, self reflective and cognisant beings capable of judgement
(Anderson et al, 2009) as they combine self and circumstances (Anderson, 2000) to produce
innovation. This is a social scientific equivalent of the Lamarckian view (Harbi and Anderson,
2010) that organisms evolve in order to adapt to changes in their environment, as opposed
to the Darwinian view that genetic mutations are random and that, when the environment
changes, the mechanism of natural selection promotes the survival of the fittest.

Nor are all environments equal. Harbi and Anderson, (2010) show how different
environment produce different types of entrepreneurial outcomes, but a key point is that
entrepreneurs can challenge and even change institutions and environments (Anderson and
Warren, forthcoming). Baumol (1990) notes that although there are some variations in
entrepreneurial supply across countries, the biggest difference lies in the contribution of
entrepreneurship to productive or unproductive outcomes. Another distinction between
types of entrepreneurship, nuancing Baumol’s constructive and destructive, is the difference
between opportunity and necessity entrepreneurship. The GEM studies (General
Entrepreneurship Monitor) employ these categories to explain why the level of
entrepreneurship in developing countries is sometimes higher than in developed countries.
Necessity entrepreneurship is related to the absence of employment options, whereas opportunity entrepreneurship denotes an active choice to start a new enterprise based on opportunity and employing innovation. In China, Yang and Li (2008) suggest that the competition in many industries is still “dysfunctional”, with firms often stuck on competing on volume and low price, rather than on developing innovative capabilities, so entrepreneurship in the form of product innovation is minimal (Li and Atuahene-Gima, 2001). Local firms often simply imitate other firms’ products and technology.

Conceptually we can understand this position as Minniti and Lévesque (2008) explain how entrepreneurial individuals react to their environment by a model rooted in endogenous growth theory. They show that, at equilibrium, high levels of economic growth can be achieved through an increasing number of either imitators or research based entrepreneurs. They argue that when the cost of technological change is sufficiently high, and labour is not employed in innovative activities (imitative labour), an increase in the imitation rate has a positive effect on economic growth. Their model accounts for countries such as China, where sustained growth levels coexist with an absence of significant expenditure in R and D, but with remarkable extent of imitation activity. However, and this seems to be a crucial question, how long can this be sustained in the dynamics of rapidly developing competitor countries like Vietnam or Cambodia?

To summarise my arguments thus far, I have claimed that entrepreneurship plays a key role in growth because of innovation. To set this in context, I proposed a Lamarckian evolutionary model of national entrepreneurial activity where entrepreneurs use their skills and knowledge to produce innovation. In this model, more entrepreneurship is good; but I have also highlighted that not all entrepreneurship is equal, some – the more innovative that fits the prevailing circumstances best- is much better at producing growth. Moreover, innovation also needs to be successfully implemented. We can see that this places considerable emphasis on the need for the right type of entrepreneur. Such entrepreneurs must be knowledgeable, able to combine different forms of knowledge (Harbi et al, 2011), well connected to both changing institutions (Jack et al, 2010) and to other people (Dodd and Anderson, 2002; Jack et al, 2004). These then are the factors that stretch beyond the mere technical competence of entrepreneurs (Liao and Sohmen, 2001) and these also signal the key role that universities have to play in shaping attitudes, supplying knowledge and generally enabling our students as enterprising customers and endowing them as the universities’ entrepreneurial products (Anderson and Jack, 2008).

The nub of my argument is that there seems to be some sort of “natural” rate of entrepreneurial supply. Obviously this “natural” rate is shaped by prevailing political, social and economic circumstances and in China we have seen a remarkable increase in the numbers of entrepreneurs in response to political change and economic opportunity. But we have also seen that many of these businesses are not very innovative and are thus less likely to maintain the momentum of growth. Hence the issue for university educators is how can they improve the quality of these entrepreneurs? This raises an important question for university entrepreneurship education. Is the university sector properly pursuing policy aspirations for more innovative entrepreneurs by teaching the instrumental skills of small business plans and enthusing students to start low value-added new ventures (Jack and Anderson, 1999)?

Previously, I have argued that universities fulfil a unique place in society. Universities, and only universities, are unique as creators and disseminators of higher level knowledge. This knowledge is more than the every day practical knowledge that can be assimilated by
experience. It can be described as theoretical knowledge, and importantly it is the kind of knowledge that enables a critical ability. This kind of knowledge production and dissemination, through research and teaching is both the remit and purpose of universities. Yet entrepreneurship is conceptualised as a process which is both an art and a science. Moving to consider how these aspects can be taught, the science of SME management is seen as teachable within a conventional pedagogic paradigm. However the art is seen as more problematic; it is experiential, founded in innovation and novelty but based on heuristic and creative practices. As academics we cannot replicate the experiences of successful entrepreneurs, but we can use their experiences to develop theory and this theory will help to bridge the abyss between the art and the science of entrepreneurship. Thus I am arguing that the university’s role is two fold, to teach about entrepreneurship and also how to be entrepreneurial. Many training courses by non higher education can usefully deliver the basics of small business management, even of new business planning. But only universities have the abstract knowledge to teach about entrepreneurship. It can also be argued that the higher level capabilities of universities permit them to teach about how to start a better business.

I have made a clear distinction between abstract, theoretical knowledge and experiential learning. I have no wish to denigrate experiential learning in any way. Indeed, learning by doing is the essence of the grand experiment I discussed earlier. But experiential learning has to be by trial and error, learning what works and what doesn’t work. So it is slow, but importantly, also restricted to the trajectory of experience. As academics we are all very aware of the limitations of even the best entrepreneurial “war story” when we invite a successful entrepreneur to speak to our students. They are very useful as illustrations, as wonderful exemplars and offer an instrumental example to which our students can aspire. But each is a one-off, and may be both context and time bound. In contrast, abstract theoretical knowledge is akin to a helicopter view of many “one-offs”. As academics we can go beyond the singular. We can see patterns in events and make connections between variables. We can develop explanations of why something works. We can do this at an abstract level which draws out the similarities and differences between contexts and processes. Thus theoretical knowledge is possibly even the most practical of knowledge!

Moreover, this is precisely what universities do well; we research so that we can understand. When we have understood then we can inform others about what we ourselves have come to understand. Whilst this is general role for all universities, it takes on a special importance for entrepreneurship education. This is because entrepreneurship education is a pairing of the art and the science of enterprise. As Anderson and Jack (2008) argued, good entrepreneurs combine the conceptual knowledge of a professional with the applied knowledge of a technician. Yet they also have to blend the artisan skills of doing, crafting the business, with the creativity of an innovative artist. This is a tall order, but universities are the obvious, and clearly the best, providers. Entrepreneurial pedagogies can provide the right mix of abstract and applied knowledge and set it in the context of understanding the nature and processes of an innovative milieu (Anderson et al, 2011b).

Hence, I argue that universities should not only teach the basic management skills of setting up a new business. This is basic, albeit fundamental, and can be taught by many. The focus of the university role should be about enhancing entrepreneurship and not about a production line for the creation of low value generating SMEs. Our strengths, as universities, lie in developing higher level skills and nurturing analytic ability. In short, the production of reflective practitioners. Reflective practitioners are individuals who, through their knowledge and critical ability, are capable not only of starting new businesses, but also of
ensuring the continuing viability of businesses by enhancing their capacity to innovate successfully. Moreover, the university can both enthuse and inform students from a convincingly informed position.

References


