

Universities and enterprise education: responding to the challenges of the new era.

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Abstract

Purpose

The article suggests that the international financial and economic crisis in 2008 produced a new economic era with significant implications for enterprise and entrepreneurship education. It explores: 1. The changing influences on entrepreneurship education and learning; 2. What is the new era in entrepreneurship? The consequences of changing economic, social and cultural movements; 3. How entrepreneurship education and learning can respond to these challenges.

Approach

The research approach is informed by practitioner-based educational enquiry, reflective practice and research, education and participation with groups of universities, educators, students, entrepreneurs and other groups during the economic crisis.

Findings

The article proposes that the nature of entrepreneurship is changing in response to social and cultural movements in the new economic era. Ethical and environmental concerns are creating a discourse of responsible entrepreneurship informed by social entrepreneurship. The article conceptualises this as the shift from an 'old' to 'new' entrepreneurship.

Practical implications

Implications for the future development of enterprise and entrepreneurial education are presented, referring to the factors shaping change including the social and economic context; learners; learning and teaching; and institutional change.

Originality/value

The article presents new thinking on the future challenges and directions for entrepreneurship and related education in the context of fundamental economic change.

Keywords: Entrepreneurship, Enterprise, Higher education, Economy

Paper type

Research paper

Journal of Small Business & Enterprise Development (2010), Vol. 17 Iss: 4, pp.591 - 606

Introduction and rationale

This article argues that universities and their provision of education and learning for entrepreneurship must respond to the new economic era arising from the 2007-8 financial crisis and the subsequent global recession. This new era has profound economic, social, cultural and educational implications, because it challenges the intellectual assumptions of entrepreneurship and changes the influences of cultural values on it. We need to assess how entrepreneurship is changing in this new era, and the implications for educators and for universities. The prevailing mode of entrepreneurship education has been dominated by an ideology of neo-liberal deregulated market economic growth, based largely on a North American set of cultural values which are increasingly questioned in view of the negative effects experienced from the crisis, leading to a rethinking of the basis for enterprise education in this new era.

The article explores:

1. The changing influences on entrepreneurship education and learning;
2. What is the new era in entrepreneurship? The consequences of changing intellectual, economic, social and cultural movements for entrepreneurship education and learning;
3. How entrepreneurship education and learning can respond to the challenges of the new era.

Entrepreneurship is a cultural movement, created and reproduced as a cultural ideology through channels such as mass media, political rhetoric and government policies, and education. As such, entrepreneurship is responsive and adaptive to wider cultural movements, and its discourse reflects broader social concerns, such as ethical and environmental issues, and excessive rewards in the Banking sector.

Four broad forces are influencing the changing nature of entrepreneurship. These are, firstly, the economic and cultural context, in which economic challenges affect the social and economic space for entrepreneurship, and movements towards responsibility, ethics, and environmentalism demand recognition. Secondly, there are changing expectations from learners, as their relationships with institutions change, in an era of graduate unemployment. Third, the nature of the learning and teaching relationship is changing, including personalisation of learning, enterprising learning from school, applications of technology, assessment of practical applications through experiential and work-based learning, reconceptualising the entrepreneurial curriculum. Fourth, Universities face severe financial and staff resource constraints and pressure to change which affect the ways they work.

This is leading to ongoing change in the nature of entrepreneurship education and learning, both in the UK and at a European level. Meanwhile, the philosophy of 'old entrepreneurship', based primarily on inherited US-UK cultural influences and capitalist economics, is increasingly in tension with the changing cultural and economic dynamics of European culture and society, and a new conception of entrepreneurship is emerging. Just as Gibb (2002) set out the conflicting dualism between the bureaucratic and corporate with the enterprise cultures, so this progression, described in the article as the move from 'Ent 1' to 'Ent 2' marks a shift in entrepreneurship thinking, with major implications for learning and education which are discussed in the article.

The new era

The end of 2008 conclusively ended an economic age of growth, prosperity, largely unregulated capitalism and a mutant form of entrepreneurship in the financial and other sectors, termed with due reference to Stevenson & Jarillo (1990), as 'the pursuit of opportunities without regard to the consequences'.

The financial crisis, 'credit crunch' and ensuing world recession have been ably charted by economic writers (Krugman, 2008; Cable 2010). However, the results are worth stating in outline. The closing months of 2008 saw the world banking and financial systems, especially those in the United States and United Kingdom, come close to total collapse, avoided narrowly by massive governmental injection of finance, which substantially increased public debt. The crisis in financial confidence saw major banks close to failure, leading to a severe, lasting contraction in the availability of credit to individuals, businesses and, recently, governments.

Whilst banks have recovered their profitability, partly through servicing government borrowing, many other parts of society and the economy will continue to feel the after-effects of the crisis for years to come. There was a seminal moment in late 2008 when the chiefs of the major US automotive companies travelled in their executive jets to Washington to plead for State assistance and prevent their collapse. The subsequent administration of General Motors and Chrysler marked symbolically the end of the United States twentieth century industrial corporation hegemony, a model which had dominated the commercial, economic, social and educational (notably Business School) structures of the Western economies.

The crisis of 2008 is markedly different from the cyclical recessions of the early 1980's and 1990's, which were followed by sustained economic growth. For whilst a gradual cyclical recovery is occurring, underlying economic fundamentals have changed permanently in the US and UK. The relationships between banks, government, businesses and consumers have changed, with a long term loss of confidence in the banking and financial services industry. Public debt and its financing costs will remain at high levels for a long period. Western economies are in long term economic decline in comparison with the growth economies of South East Asia. Public services, especially Higher Education, are experiencing significant reductions in State funding, and commitments such as guaranteed public pensions are increasingly unaffordable.

This may seem a strange time to suggest that we are entering a new era of enterprise, but there are good reasons why this is so. The ability of government to regenerate the economy is limited by political factors, such as the acceptability of how much debt can be borne from future taxation, and the level of UK sterling and the Euro. In 2010-11, 25% of the UK public spending on higher education is funded by debt. Governments can aim to create some of the macro-economic conditions for recovery, but that is all, whilst corporate organisations are also reluctant to invest in major new projects except where the public sector is able to provide incentives or guarantees.

Culturally, old certainties have disappeared, replaced by uncertainty and a loss of confidence in markets and institutions. This new era is marked by uncertainty in global, national and regional economies. The relevance for individuals is increasingly clear. Students and graduates who grew up in an era of growth experience a profound culture shock on graduating to find high unemployment levels among both graduates and young people in general, raising the possibility of inter-generational conflict (Willetts, 2010). There is an emerging crisis of graduate worklessness as EU average unemployment in the 18-25 age group reaches an average of 19.8%

(Eurostat 2009). The nature of graduate careers has changed, with the expectation of finding graduate-level jobs being unrealistic for many.

This could be a discourse of decline, yet the new era poses a tremendous challenge for entrepreneurs, politicians, educators and others, in which the role of enterprise is of fundamental importance. The challenge is how to regenerate economic activity, new jobs and sources of wealth creation, especially for young people, without the easy certainties of either corporate or public investment; to which entrepreneurship, and learning to work in this new era, are vital contributors.

Research Approach

This research involved close engagement with entrepreneurship learning and education during this period. The research stance is exploratory and reflective, the writer acting as a speaker, educator, reviewer of refereed papers, engaged participant working with students, graduates, educators, entrepreneurs and business support professionals, and judging business awards. This research is experiential, action-based and reflective, informed by multiple discourses of entrepreneurship from policy, education, media and practice. As a cultural movement, entrepreneurship is manifested in such discourses, which make explicit significant governing ideas, concepts, phrases, assumptions and values. Contributors to the discourse included political and government policy, close-to-government organisations such as NESTA and NCGE, academic research, and professional development meetings of enterprise educators. Direct engagement with learners and entrepreneurs at educational, networking events and other encounters has also contributed.

Entrepreneurial learning and education

This section summarises the foregoing literature in entrepreneurial learning and education; socially responsible entrepreneurship; and entrepreneurship in the recession.

Gibb (1996; 2002) provided intellectual and pedagogical foundations for the development of enterprise education, including the timely observation that entrepreneurs thrive in conditions of change and uncertainty (2002). These have been built on by others including Hannon (2004), Hytti and O’Gorman (2004) and the World Economic Forum (2009). A recursive theme is the cultural divide in education between the ‘bureaucratic – corporate and entrepreneurial’ values (Gibb, 2002) manifested in a polarisation between didactic and enterprising learning modes (Gibb, 1993) which persists in education (Rae & Draycott, 2009).

Extensive writing on enterprise education, including Garavan & O’Cinneide (1994), Gorman, Hanlon & King (1997); Hannon, (2004); Pittaway & Cope, (2005) has shifted towards experiential learning, learning ‘for’ rather than ‘about’ entrepreneurship, within which there is often a focus on the tangible and assessable outcome of a business plan rather than the skills of entrepreneurship. Hannon (2005) proposed that the educator could adopt different roles, using explicit philosophies of entrepreneurship education to achieve ‘greater consistency, clarity and coherence of purpose, process and practice’.

The literature on entrepreneurial learning has made many connections with learning as active, connected with individual emergence, the development of identity and praxis, and deploying narratives as means of sensemaking, articulating and theorising from learning (Deakins & Freel 1998; Rae, 2000, 2005; Cope & Watts, 2000; Cope 2003, 2005 etc). Entrepreneurial learning can be defined as ‘learning to recognise and act on opportunities, and interacting socially to initiate, organise and

manage ventures' (Rae, 2005) and has the double connotation of both learning to behave, as well as learning through, entrepreneurial ways.

A distinction may be made between enterprise education and enterprising (or entrepreneurial) learning. Education may seek to be learner-centred and to embrace new pedagogical methods and technologies but is inevitably accountable to the need for institutional control, order, accountability, and ultimately learning which is programmed by prescribed and measurable outcomes. Enterprising learning is by contrast led by creativity, informality, curiosity, emotion and its application to personal and real-world problems and opportunities (Penaluna & Penaluna, 2008). Its values of practical and emergent learning challenge the 'bureaucratic control' culture of academe which privileges programmed knowledge (Gibb, 2002). There is growing recognition that learning for entrepreneurship in the context of higher education takes place beyond the formal classroom environment, through experiential and discovery learning which challenges orthodox pedagogies, with considerable experimentation in how this can be achieved.

Social, ethical and responsible entrepreneurship

The rapidly developing literature on ethical, social and responsible entrepreneurship is highly relevant to the discussion of new entrepreneurship. Social enterprises are generally considered to be:

"businesses with primarily social objectives whose surpluses are principally reinvested for that purpose in the business or community"
(Office of the Third Sector)

Whilst entrepreneurship might be considered as a value-free and amoral concept (Rae, 2007), and some entrepreneurial activities may be unproductive or destructive of value (Baumol, 1999), such considerations are increasingly challenged. Social entrepreneurship is a relatively young field and there are problematic issues, such as tensions between meeting social objectives and growth, and addressing the needs of policymakers seeking to use social enterprise as a form of capacity-building to replace public sector provision (Blundel & Spence, 2009). But it provides a frame of reference for 'responsible' entrepreneurship education and learning, based on the principle that entrepreneurial activity can create social good whilst reinvesting financial returns in community development.

Learning programmes for social entrepreneurship have developed separately from 'mainstream' entrepreneurship, with different antecedents (e.g. the School for Social Entrepreneurs). Frost (2009) illustrates examples of social enterprise projects emanating from University and student activities which demonstrate the creativity and growth in this field, for example in projects which have created employment in areas of social deprivation.

The rapid development of social enterprise, and its appeal to young people, mean that social enterprise should be considered as an integral aspect of entrepreneurship education, altering the value-set of mainstream entrepreneurship; Chell (2007) argues for theoretical convergence between social and mainstream entrepreneurship. Ethical entrepreneurship is being popularised, whilst the 'insanity' of profit maximisation is even questioned on influential media ('Newsnight', 30.3.2010).

Entrepreneurship in the recession

The impact of the recession has featured in surprisingly little entrepreneurship academic research, but presumably a wave of papers will appear in due course as researchers need to engage with the serious issues facing entrepreneurs and

businesses. Anderson & Russell (2009:11) concluded from a survey of small UK businesses that many exhibited resilience, flexibility, adaptability and absorptive capacity underpinned by personal sacrifices of the owners: 'survival, almost regardless of personal cost, is instinctive'. This reinforces Gibb's view that persistence and adaptive learning characterise many owners of small businesses. The writer has contributed to the subject, on the possible effects of the recession on graduate employability and HEIs (Rae, 2008); the role of entrepreneurship in causing the recession and enabling recovery (Rae, 2009¹); and on the question of creating jobs in the new era (Rae, 2009²).

There is also research on entrepreneurship and small business from previous recessions. Storey (1994) assessed the contribution of enterprise start-up programmes in the early 1980's, noting the displacement effects. It can be predicted from past research that start-up rates will increase during a recession, owing to redundancy, necessity entrepreneurship, and freeing-up of human capital and other resources from organisations which are downsizing. Also, business closures tend to peak at the end of a recession and in the early stages of recovery, as firms which have 'hung on' run out of the financial resources to adapt to a changing economy.

Cultural change and the crisis of entrepreneurship

Entrepreneurship enjoys privileged status under neo-liberal economic management, especially in the US and UK. Capitalist economic growth theory has dominated the principal theories of entrepreneurship and the related field of business growth (Low and Macmillan, 1988). The concepts of resource-based theory (Penrose, 1959; Garnsey, 1998), of opportunity recognition (Kirzner, 1973; Stevenson and Jarillo, 1990), the creation of new economic activity (Low and Macmillan, 1988), necessity and opportunity entrepreneurship (Reynolds et al, 2002), and predictive models of business growth (Greiner, 1972; Churchill and Lewis, 1983) are all based on the economic theories of Schumpeter, Kirzner, and Hayek (Hebert & Link, 1988) of which the entrepreneur is the 'action man' (sic).

Given the crisis in the capitalist economic system which emerged from the 'credit crunch' and near-collapse of the banking system in late 2008, there is a questionable basis for the reliance of entrepreneurship theory on such economics. Concepts such as 'creative destruction' (Schumpeter, 1934) and the 'pursuit of opportunity regardless of the resources controlled' (Stevenson & Jarillo, 1990: 23) are now distinctly double-edged and pose ethical problems. How is such entrepreneurship useful and responsible to society? Can society afford to give such entrepreneurs free rein to create wealth with incidental benefits to others in times of growth, whilst wreaking havoc with the financial system and causing tremendous damage in which the state has no option but to step in and clear up the mess at massive cost?

The overwhelming economic drive in important parts of the US and UK economies in the boom years up to 2007 became the pursuit of short-term profit opportunities, in which resources were borrowed on easy credit, the stewardship of those resources was largely neglected, and there was weak regulation. This liberated a mutant form of entrepreneurship which became 'the pursuit of opportunity regardless of the consequences' especially in the financial and property sectors of the US and UK, as unproductive and destructive entrepreneurship (Baumol, 1999), and in the prevalence of private equity acquisitions of major companies which left them with high burdens of debt.

A distinction must be made between such misplaced entrepreneurship in the relatively limited environs of banking and financial services in the US and UK, and

productive entrepreneurship. Entrepreneurs are not in general irresponsible, and many businesses suffered from the actions of a relatively small but powerful minority. But business culture is affected, requiring educationalists to reconsider the role and nature of entrepreneurship in this new era and their approach to teaching it.

We need to examine the nature of entrepreneurship and its utility in the new era. 'Old' entrepreneurship, based on capitalist growth theory produced a dominant hegemonic model, based on US economic interests, akin to having a 'bison in the living room', unaware of the destructive effects it can unwittingly cause on the environment around it. Its existence is founded on the following assumptions.

- It is inherently selfish, based on the notion of individual enterprise and self-enrichment through the investment of personal effort in conditions of uncertainty.
- It assumes and makes decisions on dynamics of investment, risk and return within the paradigm of capitalist economic growth.
- It is subject to irrational market behavioural herd instincts of greed and fear; the emblem of former bank Merrill Lynch was 'the thundering herd'.
- Its goal is continuous and competitive growth in scale, turnover, sales and profitability.
- It operates on an inherently wasteful resource-consumption model of 'capture and exploit', with waste or sub-optimal use of natural, physical, human and other resources being of little concern.
- It takes no moral responsibility for the consequences of its actions on the wider ecology of the world economy, societies, resources and environment.
- It uses government protection to provide international business advantage rather than equity, using legal, trading and environmental agreements to protect its interests.
- It assumes competition to achieve market domination is inherently good, except by foreign entrants to its own markets.
- It is destructive of value as well as creative.
- It became centred excessively on the pursuit of short-term profitability above all else.

The late Peter Drucker (1993) long ago argued the need for the US economy to move on from this 'old' form of entrepreneurship which has been, and may continue to be, highly successful in its own terms but the financial crisis raises important questions about the relationship between the entrepreneur and society. Currently, entrepreneurs are free within the market economy to create and exploit opportunities by finding and allocating resources, taking the rewards from successful risks and the penalty from unsuccessful ones, and sharing these with investors. Society accepts the by-products of entrepreneurial activity through the benefits of wealth creation, tax revenue, the provision of services and products which meet market needs and solve problems viably, and provide employment.

This free-market approach has been accepted because it delivered outcomes of economic growth, prosperity and employment. But the relationship between entrepreneurs and society now requires re-examination. Entrepreneurs are free to pursue any opportunities within legal boundaries, some of which are of greater value to society than others. Productive entrepreneurship creates social value and new opportunities. Free market doctrine maintains that 'the market' decides, yet few markets are as free as they appear. Society provides market opportunities, resources and support for entrepreneurs, who in turn have responsibilities towards society. The relationship, or 'contract', between entrepreneur and society might be revised to address these responsibilities:

- solving problems and providing services of wider social value, such as education, community, health, nutrition and housing, as well as being profitable;
- acting responsibly towards investors and those who provide resources;
- practising environmental sustainability and ethical behaviour towards employees within the business and communities, customers and suppliers;
- recognising that as well as individual, there are mutual interests shared by the community in both the success and possible failure of the venture;
- responsible entrepreneurship should be rewarded financially and socially.

This provides a 'bounded' perspective in which entrepreneurship produces social good and works responsibly within a framework of business ethics, environmentally sustainable practices, and stewardship of resources, forming a basis for 'responsible' entrepreneurship education. It may be argued that this is an unreasonable imposition on free enterprise, yet increasing numbers of enterprises and people act in these ways as normal everyday practice, and find that they make good business sense. Entrepreneurs are quite capable of learning and changing in their own self-interest; entrepreneurship is an adaptive cultural phenomenon, and there is evidence of movement towards new forms of entrepreneurship. Schumacher's (1974) philosophy of smallness, sustainability and ecology remains valid today.

So the entrepreneurial model must evolve beyond the economic goal of short-term profit maximisation, going beyond business capitalism to contribute to the wider needs of societies which provide resources and market opportunities. A new paradigm for entrepreneurship in the new era should reflect a responsible approach to enterprise education. Table 1 summarises characteristics of the 'old entrepreneurship' as 'Ent 1' and compares these with the emerging paradigm of 'Ent 2', the 'new entrepreneurship'.

'Ent 1' old entrepreneurship	'Ent 2' new entrepreneurship
<ul style="list-style-type: none"> • Individualism • Neoliberal capitalism • Opportunity pursuit regardless of resources, ethics or consequences • Business driven: short term financial profitability, growth & sell-out • Value creation measured only in financial terms of profit maximisation • Exploitative & wasteful of resources • Exclusive role models of 'the entrepreneur' • Founded on masculine attributes of aggression, power, conflict • Fuelled by debt 	<ul style="list-style-type: none"> • Individual-team leadership within a social context • Opportunities create multiple forms of value: financial, creative, social, ecological • Socially connected and networked • Collectivist and inclusive • Ethically responsible • Economically and environmentally sustainable • Sensitive to resource stewardship, conservation and re-use • Longer term sustainable growth and development • Feminine values: relational, collaborative, intuitive working which complement • Masculine attributes of competition • Grassroots enterprise and resourcing

Table 1: characteristics of old and new entrepreneurship

Within Universities, there are growing numbers of entrepreneurs who see their values, practices and identity reflected more closely by 'Ent 2' than 'Ent 1'. There is a long tradition of entrepreneurial responsibility, philanthropy and 'giving back', more

prevalent in the US than the UK, but there is a need to go beyond voluntarism, and to embed responsibility at the core of entrepreneurship.

Some entrepreneurs will always behave according to the 'Ent 1' model, but this requires critical questioning, and educators have a responsibility for raising learners' understanding of its limitations, because there does not need to be a trade-off between ethical responsibility and long-term business success. Businesses can practice responsible values whilst being entrepreneurial and successful.

Education is an important formative medium for influencing entrepreneurial culture and behaviours. The choices educators make when explaining enterprise have consequences, since popular messages, media stereotypes and summarised definitions of enterprise often perpetuate 'old entrepreneurship', whilst government agencies see the 'delivery' of an enterprise culture and the promulgation of a simplified ideology of enterprise to students as being the legitimate task of education. A critical academic stance on entrepreneurship education is needed to moderate such messages on the role and nature of entrepreneurship, which has the potential to create social good, as well as the destructive power to cause damage; a balanced approach to education should illustrate both sides of this argument.

It is perhaps a missed opportunity when education seeks to reproduce, without critique, popular media stereotypes of entrepreneurship, such as 'Dragons' Den' and 'The Apprentice', because they have popular resonance with students, when they offer very narrow, simplistic and unrepresentative depictions of entrepreneurship within popular media. They make ratings-attractive television, but they represent a kind of entrepreneurial pornography, a form of literature which schools would not use within sex education.

The economic and social context

This section considers the influence and implications of four major factors in shaping entrepreneurship education and learning within the cultural and educational context of the new era.

The economic crisis has reinforced the decline in European economic performance, growth and competitiveness in relation to the emerging economies of China, India and other South Asian states. Whilst the Lisbon accord (EC, 2000) aspired to transform the EU into 'the most competitive and dynamic knowledge-based economy in the world' through entrepreneurship, it is now clear that this is little more than a mirage. Whilst some industries, corporations and countries perform well, there is a very long tail of uncompetitive firms, public debt and underemployed knowledge-workers such as graduates.

Britain and the EU are experiencing unemployment rates in the 18-25 age group of almost 20% (Eurostat, 2009). This results from the recession and from a long-term failure to create sufficient new jobs in society for young people, against increasing rates and lengths of economic activity by older workers, and mismatches between educational 'production' (often described as skills) and employer demand. Worklessness in this age group is both structural as cyclical, and whilst severe across the UK, it is exceptionally serious in post-industrial regions. Employers such as retail, service sector, call centres and increasingly public organisations no longer provide the employment opportunities of the 'boom years', whilst public spending constraints are significantly reducing Higher and Further Education places.

Blanchflower (2009) suggested that a 'lost generation' risks being blighted by structural unemployment. Governmental response in 2009-10 resurrected an industrial strategy in the shape of the 'New Industry, New Jobs' agenda (BIS, 2009), either as a political face-saver, or a belated but long-term strategy. Its overall conclusion, that future jobs will be created in four main groups of economic activity, is supported by Brinkley (2010: 25).

However, it is increasingly the case that many young entrants to the job market find it difficult to achieve socialisation into work, and experience fragmented, low-income jobs, training places and worklessness. Others realise that, given the difficult jobs market, creating their own job by starting a business is a preferred option which can provide independence, self-fulfilment and income.

Learners

Learners' expectations are changing in their relationship institutions. A Eurobarometer survey of HE students across the EU in 2009 showed most agreed that study programmes should include generic competencies such as communication skills, teamwork, and "learning to learn"; and should provide the knowledge and competences needed for employability in the labour market, and to enhance personal development. Most agreed it was important for higher education institutions to foster innovation and an entrepreneurial mindset among students and staff, and that work placements in private enterprises should be offered within study programmes (EC, 2009; 2-4).

Given the social and economic context, it is not surprising students should see these aspects of learning to be required, especially where, as in the UK, study is accompanied by debt. The economic and demographic challenges facing European societies include ageing populations and a need to extend economically active working lives, the shrinkage of traditional and public sector employment, and the need to create new jobs. These demonstrate that wider participation in entrepreneurship education during higher or continuing education is required. Women are increasingly represented in graduate and managerial roles, requiring higher levels of entrepreneurial skills. Entrepreneurship education must also be extended to multicultural and multi-ethnic populations to widen their opportunities for economic participation and progression. The alternative will be social tensions arising from exclusion from economic and employment opportunities. This argues for an inclusive, lifelong approach to enterprise learning which is consistent with the 'new entrepreneurship' concept.

Learning and teaching

Trends in enterprise education are moving away from a concentration on business and management and towards an intersubjectual relevance to a wider range of study programmes, including science and technology, creative and humanities, although more needs to be done in this regard (Wilson 2008).

There are increasing possibilities for changing the nature of the learning relationship, including personalisation of learning, and using technology applications and simulations which enable new forms and modes of learning. It is also recognised that conventional forms of assessment, such as essays and business plan submissions, are not optimal in assessing and validating enterprise capabilities, and moves towards assessment of the practical applications of enterprise learning, such as through creative, experiential and work-based learning, are required, leading to a reconceptualisation of the entrepreneurial curriculum (Penaluna & Penaluna, 2008). Increasingly, knowing and doing need to be integrated, connecting theory and practice through active learning; learning needs to be enabled by effective uses of

technology; and learners need to be able to operate in unpredictable social and economic conditions.

Institutions

Strong movements are forcing learning institutions to change. Universities, colleges and public authorities are subject to increasing regulation, funding and market pressures, with constrained financial and staff resources accelerating change, competition and multiple expectations. The concept of the 'entrepreneurial university' is one means of achieving institutional transformation, but may not be compatible with increasing regulation and control by government. It is likely that significant reductions in public funding will reshape HE provision in England, through a combination of mergers, acquisitions, collaborations and even closures of institutions between 2010 and 2015. The culture of Higher Education and the experiences of working and studying are certain to change significantly, especially given the change in UK government in May 2010.

The 'entrepreneurial university' may be less a solution than a process of institutional change in which conflicts and tensions of mission, power and priority have to be addressed and resolved (Rae et al, 2009). In the UK, a range of possible new models for the 21st century have been proposed, recognising the changing new economics of Higher Education; marketisation, reduced dependence on public funding, differentiation in missions and types of institution will create change within the HE sector. (PA Consulting, 2009; Brown, 2009).

Great pressure is on Universities to reduce dependence on State funding through diversifying activities and stimulating innovation and knowledge exploitation. Collaboration through entrepreneurial knowledge networks with regional and business organisations, entrepreneurs and others is increasingly required. Hence entrepreneurship must be practiced as effectively as it is taught by universities.

Implications for entrepreneurial education and learning

These cultural, economic and political factors pose significant challenges for the development of entrepreneurship education in the new era. Figure 2 illustrates how entrepreneurial education - learning which is entrepreneurial in process as well as subject - consists of dynamic learning relationships which are active, social and connected, influenced by economic and market-driven changes as well as by government, environmentalism, technology and changing learners' expectations. These influences affect the outcomes and applications of learning; the purpose of learning; the content and process of learning; and the role of educators.

One consequence is to change the power balance between learners, institutions and educators. Rather than educators designing a curriculum which is institutionally sanctioned and taught to learners, entrepreneurial education increasingly enables the learner to direct their learning and design a personalised learning experience. Assessment is one arena in which there is a renegotiation away from conventional academic outcomes, or proxies for business validity such as the 'business plan', towards learning outcomes which are current and valid for the learner (Penaluna & Penaluna 2008). Such changes can have liberating and emancipatory effects for learners but also bring responsibilities and consequences. One characteristic of the changing nature of the higher education experience is a trend towards 'student as consumer'. Active and engaged consumerism is much more likely to lead to this approach working for the learner, which passive 'spoonfeeding' will not.

Entrepreneurial education in the new era

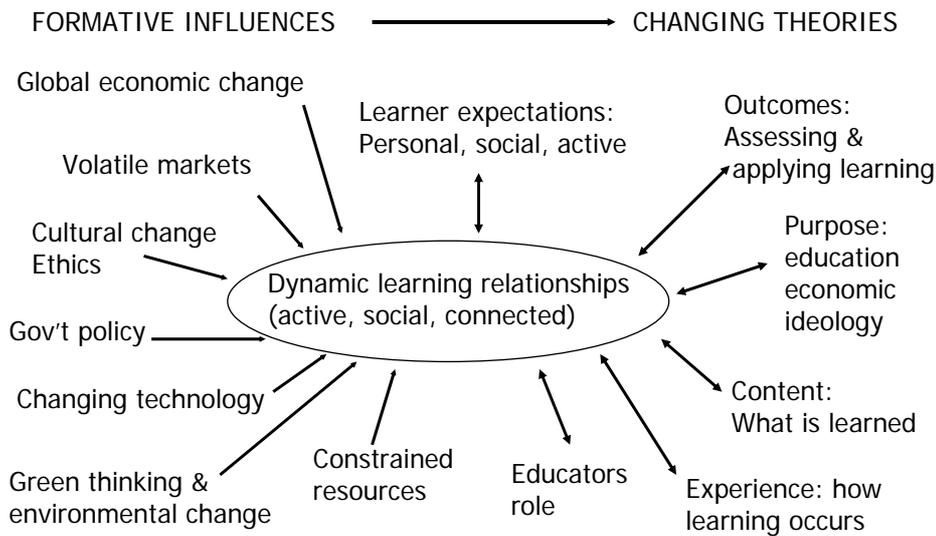


Figure 2: Dynamic learning relationships affecting entrepreneurial education

Conclusion: responding to the challenges of the new era

Entrepreneurship education is at the cusp of the new era. On one hand, the contribution of entrepreneurship learning to the economic regeneration of a post-recessionary society and the creation of new enterprises and jobs is vital. On the other, Universities are affected by reduced State funding which constrains their ability to meet demand from students, social enterprises and small businesses. The Labour government in the UK funded enterprise education generously in the period up to 2010 and the change of government in May 2010 is certain to alter funding priorities. Funding issues may well threaten the employment of enterprise educators and researchers. As we are in a period of opportunity but uncertainty, familiar territory for entrepreneurs, the best way forward is for educators to act as entrepreneurs.

Enterprise educators are likely to face the challenges of meeting increasing demand, from a wider range of subject areas, from people with more varied subject backgrounds and prior learning who increasingly have not studied business, with diverse aims, and at a different life stages. Limited resources will be available to respond to this demand, hence being able to generate private-sector and third-sector resources will be increasingly vital. Making clear what is on offer, its relevance and value, and contextualising and adapting this for different client groups is essential. Reductions in government funding for business support services may create new opportunities for universities to provide higher value-added, paid-for services.

Educators and researchers face the associated challenge and opportunity of turning their intellectual capital of knowledge and research into financial value, using the social capital of their academic, professional, business and public policy networks in ways which help to achieve this. Although this article has criticised over-reliance on US models, much can be learned from the ways on which North American universities have built long-standing and mutually valued relationships with entrepreneurial and business networks.

The changing nature of entrepreneurship is both a challenge and opportunity for educators. The discourse on the nature of entrepreneurship in society is changing and needs to move beyond perpetuating media stereotypes. The movement from 'Ent 1' defined by free-market economics towards responsible entrepreneurship reflects the changing cultural context and its interactions between society and entrepreneurship. The shift towards socially responsible entrepreneurship, accountable to society, reflects ethically and environmentally sustainable values. This movement suggests that the changing nature of entrepreneurship is an outcome of a process of learning and adaptation. Educators have a major, but not exclusive role to play in defining and informing the new entrepreneurship through research, innovative learning and co-creation of knowledge with new era entrepreneurs. There are vital questions about what the new entrepreneurship means in different contexts, how people learn, innovate and develop new era enterprises, and what new business models they develop to create value. There is increasing convergence between 'mainstream' entrepreneurship as it moves towards the new era paradigm and social entrepreneurship, which has informed and created new insights into the potential for responsible entrepreneurship.

In conclusion, education is vital in creating understanding of entrepreneurship, developing entrepreneurial capabilities, and contributing to entrepreneurial identities and cultures at individual, collective and social levels. The role of education is to shape ideas of what it means to be an entrepreneur, not to promote an ideology of entrepreneurship, and to create critical awareness which contributes to the accountability of entrepreneurs to society. Education has a moral as well as practical purpose in this project and the nervousness of educators in being required to promote an entrepreneurial ideology is entirely understandable. But the ways in which people are learning about and to practice entrepreneurship as we move into the new era are shaping the opportunities, business models, and organisational cultures they develop, reflecting the changing social context. The learning environment for the new era is socially engaged and responsive, collective and inclusive as well as individualistic, appreciative of both feminine and masculine ways of working, ethical and sustainable – yet still recognisably entrepreneurial. Entrepreneurship is a dynamic concept which transforms and reshapes the world around it, meaning that the ideas developed in this paper are merely milestones in this transformation, and will become part of its history as they are superseded.

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