

**CREATIVE DESTRUCTION, NEW VALUES, NEW WAYS OF DOING THINGS
AND NEW COMBINATIONS OF KNOWLEDGE**

In pursuit of a new 'Enterprise' and 'Entrepreneurship' Paradigm

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Abstract

The paper argues for a new approach to the study of entrepreneurship and a new paradigm as a basis for entrepreneurship education. It also argues that such a new approach is unlikely to come from university business schools. It needs an organisational revolution which, however, can be managed within a university as a whole.

The paper is broadly divided into two parts.

The first part explores the political imperative in Europe for development of the 'enterprise culture' - a result of pressures for greater international competitiveness. The educational response is then examined and, with the help of a number of recent surveys, some of the key issues pertaining to the development of entrepreneurship education in higher education institutions in the UK and Europe are reviewed.

The second part attempts to address the imperative at a more conceptual level. It argues that entrepreneurial behaviour is a function of the degree of uncertainty and complexity in the task and broader environment and/or the desire of an individual, in pursuit of an opportunity, to create it. The key trigger of globalisation is then explored the way in which its impact on the role of the state, the organisation of business activity and public services and on individuals has created greater uncertainty and complexity. This leads to the view that entrepreneurial behaviour is not the prerogative of business : there are a wide range of stakeholders needing to pursue such behaviour, including priests, doctors, teachers, policemen, pensioners and community workers and indeed potentially everybody in the community.

It follows that the traditional focus of entrepreneurship education on business and new venture management, in particular, provides an inadequate basis for response. Moreover the pervasive ideology of the heroic entrepreneur is dysfunctional when viewed against the needs of a wider community. The notion of 'enterprise' is therefore introduced as a means of moving away from the hitherto narrow paradigm. How this relates to the development of the individual and the design of enterprising organisations is reviewed.

The paper finally explores the broader institutional context by reference to a number of issues central to the globalisation debate including: culture, market liberalisation, forms of governance and democracy. It links these with the ontological and epistemological challenge to education. It concludes with discussion of how this relates to the traditional concept of a university and argues that universities as a whole are in a much better position to respond to the need for change than business schools.

CREATIVE DESTRUCTION, NEW VALUES, NEW WAYS OF DOING THINGS AND NEW KNOWLEDGE COMBINATIONS

In Pursuit of a new 'Enterprise' and 'Entrepreneurship' Paradigm

Introduction

It will be argued in this paper that the time has come to discard the traditional business school model as a vehicle for the research, development and teaching of entrepreneurship. A case will be made for the creation of a new institutional framework on a number of grounds. Firstly, the centrality of the entrepreneurial paradigm to most of the 'great debates' in politics, business and society at present yet the narrowness and inadequacy of the existing approach. Secondly, by exploring the nature of the ontological and epistemological template needed to provide an adequate response. Thirdly, by demonstrating that existing Business School cultures and 'ways of doing things' are likely to emasculate their capacity to take up the challenge.

The paper begins with a brief review of the political, economic and social imperative to action and the 'supply side' education response. In so doing, it takes a largely European perspective. It also, however, to a more limited extent, draws upon American and Canadian experience and notes the seriously slow progress made in entrepreneurship teaching and research in certain respects in North America over the past two decades. There then follows a largely pragmatic synthesis of the major problems currently perceived in responding to the challenge in Europe. The paper argues that the entrepreneurial paradigm can be most appropriately explored within a 'globalisation' framework. A number of challenges related to this broader view are set out. Acceptance of these challenges in a global context demands a dramatic rethink of the notion of entrepreneurship and its possible re-labelling as 'Enterprise'. Exploration of this wider paradigm dictates the target groups, organisation of knowledge, pedagogy and institutional arrangements for research and teaching. Finally the paper concludes as to why the University and not the Business School is the place to take advantage of the entrepreneurial opportunity. It is argued that there is a need to apply the Schumpeterian notion (1934) of creative destruction to the higher education sector itself, in order to find innovation (new ways of doing things) and new combinations of knowledge if there is to be an adequate response.

The political imperative

In Europe the 'enterprise culture' has become the 'sine qua non' of political response to globalisation. Most of the official economic, industrial and employment reports of the European Commission and related organisations in the second half of the 1990s have a common theme, the creation of a new enterprise culture in Europe (BEST Report 1997, the European Commission White Paper on Teaching and Learning 1996, European Commission 1998, OECD 1998). The same theme has dominated European policy towards support of change in the transition economies. (ETF 1996, Buck 2000, OECD 1998). Enterprise has therefore become the dominant European discourse in the context of enhancing competitiveness in a global economy (du Gay 2000. It has even begun to permeate the approaches of the developing world donor agencies (see, for example, DfID 2000))

In the , entrepreneurship has been at the heart of the government's 'Competitiveness Initiative (DTI 1998) for several years and is constantly espoused by the Prime Minister Tony Blair (1998). The Labour government version is somewhat different from that preached by Mrs Thatcher and in the US (National Commission on Entrepreneurship 2000). Yet it constitutes an important component of the 'Third Way' (Giddens 1998 p124), which purportedly represents the ideological and philosophical backbone of the government's programme. The doctrine of enterprise has also been variously endorsed and discussed by other major members of the European Community (German Social Market Foundation 1999, Beranger et al. 1998, Obrechts 1998). The deemed importance of entrepreneurship has been underpinned by the annual publication of the Global Entrepreneurship Monitor (GEM 2000). Benchmarking, using this (interesting but still rather tendentious) instrument, has become common (EURO-Info 1998 July)

Despite the growing rhetoric, there would appear to be no common agreement as to what pursuit of entrepreneurship and the enterprise culture means. It can only be inferred from public policy 'initiatives', that it means: the emergence of more small businesses; associated higher rates of small business creation; more fast growth firms and technology based businesses; social entrepreneurship, enterprise in public organisations and increasingly a basis for tackling social exclusion.

The Educational Imperative and the Response

A major part of the enterprise culture discourse is focused on education at all levels (OECD 1989 and 1998, Brown, 1994, EC 1996, ETF 1996, Buck 2000, CIHE 1997, DfEE 1998, Seltzer and Bevitly 1999). It is in this context that the notion of 'enterprise' in the sense of the development of the 'enterprising child', has spilled over from the entrepreneurship debate. There is, however, no substantive measure of agreement as to meaning of the concept in education and therefore the appropriate content for education programmes (Gibb and Cotton 1998). Activity promulgated under the 'enterprise' banner currently embraces a spectrum ranging from business and financial education through to industry awareness, transferable personal skills, work experience and job shadowing, to various forms of small business and new venture simulations. (Gibb and Cotton 1998, Horne 2000).

In recent years in the UK the universities have moved to the centre of the enterprise education debate (Association of Graduate Recruiters 1995, Universite Enterprise Europe 1998, Brown et al 1999). As befits the government's 'competitiveness' agenda in the UK, the role of the universities in technology transfer and innovation has been a major focus of attention, in particular their poor performance in this respect compared with counterpart North American Institutions (Schuetze 1996, CVCP 1999). This is a perception shared widely in Europe (European Commission Green Paper on Innovation 1999). The UK government in 2000 funded a number of Centres of Enterprise across the country with the aim of not only widening the capacity for provision of entrepreneurship education in the science curricula but also shaping institutional arrangements in favour of greater engagement of universities with the business community and regional stakeholders. In Scotland, where there is a measure of policy independence, a major focus has been upon improving the birth rate of indigenous enterprises. This has led in turn to the funding of major entrepreneurship programmes in key universities with models borrowed in particular from Babson College in the US (Hayward 2000). In this context much attention has also been given to the engagement of universities with small business and the pursuit by graduates of careers in

small business creation or employment. (Association of Graduate Recruiters 1995, CIHE 1997, DfEE 2000).

The UK trend is reflected across Europe with a growth of university chairs in entrepreneurship. In France there has been particular concern for creating entrepreneurship within engineering schools (Beranger et al 1998). In Germany the chairs in Business schools and universities have largely been created with support from banks and foundations.

There are a growing number of European entrepreneurship education networks. There are those associated with the Global Entrepreneurship Monitor, a number stimulated by the European Commission (BENE and FIT) and some bilateral entrepreneurship networks (such as Franco British Club for Higher Education and Training in Entrepreneurship) as well as others of a more independent nature (ERDC Centre 2000). The most mature network is that facilitated by the European Business School in Frankfurt which organises an international conference each year (IntEnt). There are also networks in Transition Economies fostered by the European Commission (Buck 1999, ETF 1996). A major output from the growth of the networks has been the publication of cases of 'good practice' across Europe (see for example European Commission FIT Report 2000).

As yet the status of entrepreneurship in higher education remains fragile. The European Foundation for Entrepreneurship Research (EFER) with some support from the networks of the European Forum for Management Development (efmd), have explored the relatively unfavourable funding status of entrepreneurship in Business Schools in Europe compared with the United States (Prats and Suen 2000).

In the UK there have been two major studies of provision of entrepreneurship education in the past two years, one conducted by the London Business School (Levie 1999) and one, focused on undergraduates, by Southampton University (Mason 2000). These explore common themes. They indicate a very substantial growth in courses of entrepreneurship at the graduate and post-graduate level in the UK. Of 133 Higher Education institutions 50 had courses in entrepreneurship and the numbers of students rose by 27% between 1997/8 and 1998/9. As in the US, however, most programmes are targeted upon business students although there is growing attention being given to students in other departments and faculties. (Gartner and Vesper 1999, Brown 1999, Levie 1999). There have been few detailed evaluations (Hayward 2000).

A major common theme in programmes seems to be: a focus on new venture creation backed up by options on growing business, financing entrepreneurial businesses, law, networks, family business, and social enterprise. The Business Plan plays a major role and is usually the focus for real or simulated project based activity. Projects, as in North America (McMullan and Boberg 1991) seem to be the major manifestation of enterprise pedagogy along with cases and engagement with entrepreneurs and related stakeholders. Many programmes seem to be supported by more traditional inputs on accounting, finance, strategy, decision-making under uncertainty, and marketing. Reflecting the 'competitiveness and innovation' political imperative, there is growing interest in European experience of support programmes for new technology based firms. (Klofsten 2000, Jones-Evans and Klofsten 1998 and 2000).

In many of the 'models' a key aim is stated to be the development of entrepreneurial attributes and behaviours (see for example Bates 1998) (1). Lists are given but it is not clear

how the programmes are targeted in detail upon achieving these or what measures of success or failure are taken in this respect (2). Even in the US it is difficult to gauge progress in this respect over time. Ronstadt, for example, in 1985 claimed that a new school of entrepreneurship was emerging with a focus upon improved pedagogical processes (Ronstadt 1985) and suggested fourteen sets of skills for development. It seems difficult to monitor what has since been achieved in this respect. His focus was, however, limited to enterprise creation and he warned against the inclusion of 'small business'.

In the UK, Levie's study reflects on how courses are taught and places emphasis upon the importance of learning from real situations; interactions by role playing and use of projects; and business plan development and presentations. The FIT Report, referred to above, also sets out a model for effective programme delivery with recommendations for: self directed learning; flexibility; emphasis on the way of life of the entrepreneur; on the need to know and know who; and a holistic view of management. These recommendations seem to be derived from a review of the work of 'experts' (see for example Klandt 1994). It is not clear how deeply they are embedded in the cases offered by FIT.

No detailed comparison of objectives seems to be available. In general most European courses provide background modules focused on the importance of entrepreneurship and on why people become entrepreneurs. Thereafter there is often an emphasis upon what needs to be done to become an entrepreneur, how to go ahead and do it and indeed develop the business. A range of objectives are suggested by Garavan and Cinneide in their earlier review of entrepreneurship programmes (1994) which include:

- To acquire knowledge relevant to entrepreneurship
- To acquire skills in the use of techniques
- To identify and stimulate entrepreneurial drive and talent
- To undo the risk of and balance of many analytical techniques
- To develop, enjoy and support enterprise
- To develop attitudes to change
- To encourage start-ups and new ventures

They do not provide any systematic evaluation of programmes against this list. In general evaluation and assessment of entrepreneurship education appears to be via projects, with reliance also upon classroom assessment. In the UK, however, a substantial number of institutions still use the written examination as the main form of assessment.

Overview – and Critical Synthesis of Provision

From the reports referred to above a number of common issues of concern can be drawn. It is evident from the North American literature that many similar concerns have been discussed for some time whereas in Europe much of the debate is just beginning. These major concerns can broadly be summarised under a number of headings:

- The entrepreneurial concept
- Academic acceptability
- Client segmentation and needs
- Organisation of knowledge and pedagogy
- Teacher supply and competency

- Evaluation and assessment
- Location and capacity of delivery vehicles
- Funding

The Entrepreneurial Concept

As might be anticipated from the academic literature, there is no absolute agreement among providers as to the basic concept of entrepreneurship to be taught. While the central focus is new venture creation there does not appear to be a high degree of conceptual agreement as to what should 'surround' this, and how what is drawn from the established disciplines should be prioritised and ordered.

The link between small independent business and the broader concept of entrepreneurship still seems to be a central problem. At the root of this seems to be: the carry over of the notion from economics of the entrepreneur as an heroic figure with all its underpinning ideology (Kyro 2000, Ogbor 2000); the suggestion that ownership is not important to entrepreneurship (Stevenson and Jarillo 1990)); and a consequent focus on entrepreneurs being associated with growing business (Young and Sexton 1997) and technology development (EC FIT 2000, Klofsten, and Jones-Evans 2000) where external capital is involved.

To justify this stance some writers seek to distinguish between creative and dynamic problem solving and more mundane versions, the former to be associated with growth firms and the latter with 'stagnant' businesses (Young and Sexton 1997). This argument does not seem to have full empirical or conceptual underpinning. There are some major problems here, in particular the seemingly pervasive notion that firms that do not grow are in more stable environments and face less uncertainty and complexity and therefore fewer pressures or incentives for entrepreneurial behaviour and creative problem solving. The challengeable nature of this implicit hypothesis is easily exposed. There are many self employed persons operating as 'networkers' and 'fixers' who face very uncertain and complex environments, and as such have to behave very entrepreneurially, but do not wish to grow the business. Moreover, many businesses facing decline or fighting to retain market positions (and therefore not growing in turnover) need high degrees of enterprise and entrepreneurship to survive. The inference that high rates of change and associated uncertainty and complexity are solely connected with high rates of growth in turnover or employment is, arguably, loose thinking (Gibb and Scott 1985). It can be argued that many firms growing rapidly in more certain and simple environments need sound management rather than entrepreneurship. What seems to be missing from much of this thinking is consideration of the degree of uncertainty and complexity in the context and task environment in which the entrepreneur operates (Laukkanen 1997) and therefore the contingent need for entrepreneurial behaviour (Gibb and Scott 1985, Namen and Slaven 1993).

There seems a need for a stronger conceptual approach to exploring the relationship between an owner-managed business and entrepreneurship. This author has, for example, argued that some of the key conditions, under which owner-managed business operate, provide the basic stimuli for pursuit of entrepreneurial behaviour. Such conditions include psychological as well as financial ownership, strong customer dependence, total final responsibility, personal assets at risk and necessity for holistic management among others (Gibb 2000). From these conditions can be drawn guidelines for entrepreneurial organisation design in corporate and other forms of organisation. This view challenges the somewhat over-simplistic dichotomy made between the growing business and the family business and notions of entrepreneurship

being associated solely with private business which leads to an emotive dichotomy between entrepreneurship and public management. Such notions need to be carefully unpicked.

The failure of academe to take stronger conceptual stances on issues such as the above and thus provide clearer guidance to practitioners and policy makers arguably leads to misdirection of resources. It has been demonstrated elsewhere in the broader context of schools education and curriculum (Gibb and Cotton 1998) that conceptual confusions lead to misdirection of resources via pursuit of corporate business models under the umbrella of 'enterprise'. The Young Enterprise Model, off-spring of Junior Achievement in North America is one such confusion. It is essentially a simulation of a corporate business approach to new venturing: yet it is being disseminated in UK universities currently as a lead model for independent graduate enterprise.

In the context of university entrepreneurship programmes there is a clear need for stronger conceptual frames to underpin programmes. In the work reviewed by the author there seems to be a confusion between the notion of concept frames and 'models'. There are numerous models/frameworks offered as back-up to entrepreneurship programmes but many are loosely constructed (Laukkanen 1997) (3). They seem often to be no more than groupings of areas or topics without conceptual foundation. Without adequate conceptual frames then the balance of what is taught cannot be easily defended. A conceptual frame offers the opportunity for exploration of relationships and meaning and opens up a debate.

There is no shortage of debaters at hand. Faltin (1999), for example, would argue that there is too little emphasis on the notion of idea and of culture in most offers. Laukkanen argues that there is neglect of the development of the necessary 'mind sets' (1997).

Academic Rigour and Respectability

Much attention was given to this issue in the several reviews considered (Levie 1999, Hayward 2000, Fiet 2000). There are a number of aspects of this problem. A major issue in Europe seems to be the simplistic divide between entrepreneurship as an 'activity' and as an academic subject (Beranger 1998). This is sometime encapsulated as the balance of programmes between whether they are 'for' entrepreneurship as opposed to 'about' entrepreneurship (Levie 1999). This dichotomy leads on to a view - to be challenged later in this paper - that activity-based learning focused on an output cannot be academic whereas traditional teaching with its focus on the 'about' and with its use of cases and simulations is acceptable. Project based learning in some cases can indeed be criticised for the looseness of its link with an 'entrepreneurial' approach (Laukkanen 1997): and projects can certainly be pursued in a way that is not at all entrepreneurial. This point aside, however, there is no evidence that traditional case teaching is any more 'conceptual' than project work or other aspects of action leaning. Indeed use of cases as a dominant entrepreneurial teaching tool can be fundamentally criticised as overemphasising formal rational and reductionist problem solving approaches (Gibb 1994).

The charge of lack of academic rigour is also underpinned by the introduction into academe of entrepreneurs as teachers and counsellors and their use as role models (Hayward 2000). Even if trained as per the Babson model (reviewed in Hayward) they are not seen to be bona fide members of staff. There is also evidence to support the view that involvement of entrepreneurs leads to high risks of knowledge offered as 'anecdotes' or 'war stories' (Hayward 2000).

More fundamentally Fiet (2000) has drawn attention to the lack of theory underpinning the large numbers of 'models' and cases and the excessive reliance upon the views of 'gurus' which are not soundly underpinned by academic concept. He convincingly argues the case against pragmatism and dependence upon, and use of, loosely constructed models. He also notes, along with several other writers, that people are biased by leading disciplines as to what they teach (see below). He claims too much, in the author's view, for the use of theory as a means of helping potential entrepreneurs in 'understanding the future and the consequences of their action' (see below). His argument elevates theory to the status of providing the 'ought' in entrepreneurial action. Examples given in the articles, however, do not really explain how theories provide normative rules (as opposed to insight) and leave aside the many arguments about the limited ability of the social sciences to build predictive models as opposed to explanatory and exploratory frameworks. The notion of exploratory research is, indeed, arbitrarily dismissed by Fiet as the basis for loose thinking. While interesting and challenging, his argument does not really explore the issue of what questions really ought to be asked and why and what we expect students to become as a result of exploring them. Nevertheless the issues raised by Fiet need to be faced, but, in the author's view, by a fundamentally different approach (see below).

Client Segmentation and Needs Focus

Overall, in the current debates in Europe, there is little emphasis placed upon the need for analysis of the different 'client' groups for entrepreneurship programmes and their distinctive needs (4). The issue is not, however, altogether neglected. The point made in most reports (see Levie 1999, Beranger et al 1998, Hayward 2000, European Commission FIT Report 2000) is that entrepreneurship programmes are focused mainly upon business students as opposed to being more broadly spread across the universities. This is indicative of the lack of attention given to the learning needs of different groups even within the student population. There is a reported lack of careful selection and segmentation of participants in entrepreneurship programmes even in the US and Canada (Hills 1998 Hills and Morris 1998 Gasse 1993)

It is argued by some that lack of attention to needs may lead to the teaching of corporate competencies that are not relevant (Crossley and Pittaway 2000) and which may therefore be dysfunctional to entrepreneurship (Bhide 2000, Chandler and Hanks 1994). Indeed, in general, there is lack of detailed consideration of how entrepreneurs learn (Young and Sexton 1997, Garavan and Cinneide 1994) and therefore knowledge of how we may wish to influence the learning styles of students (Salleh 1992). Whereas there are some attempts at breakdowns of needs (European Commission FIT 2000) in respect of new technology based firm creation for example³, little attention overall is given to this issue. Mason does argue the importance of relating the 'offer' more broadly to the need for entrepreneurship in the economy (2000). At the level of the firm, however, there is little call for careful attention to be paid to linking learning needs to the development processes of the business, although from the US literature it appears that there are some broad cycle 'models' in use (Hills and Morris 1998).

Overall, therefore, needs arising outside of a new venture or small business context, seem to be somewhat neglected. There are modules in some programme on corporate entrepreneurship and social entrepreneurship but in the 'reviews' there is little indication of how 'core' needs are distinguished from the specific needs of these different groups. Obviously more evaluation work needs to be done.

Organisation of Knowledge and Pedagogy

In the US and in Europe the basic framework for exploration of the new venture process is the business plan (Gartner and Vesper 1999, Hills and Morris 1998, European Commission 2000). It can be questioned as to whether the notion of a plan is an adequate metaphor for the entrepreneurial act (Gibb 1996). It can be argued that it is more a reflection of the attempt by the providers of banking, accounting and commercial consulting services to the entrepreneur and owner manager to 'make sense of things' in their terms. It seems almost certain that the concept of the business plan was not invented by the entrepreneur!

A second issue that emerges is the lack of holistic management focus in much of the supply offer and the over-dependency on delivering functional skills in the business school tradition (Crossley and Pittaway 2000 and Laukkanen 1997). It has been pointed out above that there is no clear focus on what should be taught (Garavan and Cinneide 1994) but this is particularly so with respect to the environment. The strongest attempts observed by the author, to provide a more holistic knowledge concept frame are those of Young and Sexton (1997) in the US with their focus on 'entrepreneurial learning' and the Entrepreneurs by Design Programme in Canada (Centre for Enterprise Education and Development 1998). The wider relevance of the former work is, however, limited by the defining of entrepreneurs as those who 'identify and pursue opportunities to increase the size of their growing business' and by the attempt to distinguish between entrepreneurial learning and conventional small business learning by a mechanism of suggesting 'novel problems' as opposed to 'routine problems'. There is no strong conceptual base offered for this dichotomy.

There seems to be no clear agreement as to the kinds of behaviours to be addressed by programmes. Little mention can be found of the way that entrepreneurs learn and the need for simulation of this and there seems very little debate about the nature of learning and its relationship to theory and practice. There is little related evidence on teacher competencies and experiences (Jones-Evans 1996). Only one mention was found of the notion of use of tacit learning (Polanyi, M. 1996) and its relationship to the explicit learning forms favoured by Business Schools.

Teacher Supply and Competency

In general the European studies point to a shortage of entrepreneurship teachers. This also seems to be a major problem in North America as evidenced, for example, by the large number of unfilled entrepreneurship chairs in the USA (Brown 1999). Casual empiricism would indicate that a growing number of chairs in Western Europe attract individuals from traditional disciplines with the result that there are a large number of incumbents without long experience in the field. In general it is argued there is a need for training and development to improve the supply (Beranger et al 1998 and EC FIT 2000). There is little evidence, however, as to the competency 'profile' of entrepreneurial teachers although work has been done on the competency of small business management development educators and trainers (Gibb 1990 and CEDEFOP 1991). It is clear therefore that while there is a recruitment problem in Europe and perhaps in North America there is also an absence of research as to the appropriate competencies of those to be recruited.

Evaluation and Assessment

This seems to be an acknowledged area of weakness. In Europe there are tensions in the academic system relating to the need to pursue new forms of assessments at the expense of the traditional examination system and there is arguably a need for more research into the 'validity', for example, of classroom teacher assessments. A root problem, yet unresolved, is

the measurement of entrepreneurial behaviours. In this respect there is too little research (Harris 1996) and a problem of shared meaning among teachers (Ma 2000). Finally there is little evidence of long term evaluation and assessment of the impact of programmes. Hills and Morris (1998) for example list a number of potential outcomes of entrepreneurship teaching but do not indicate how these might be measured over time. Within the conventional evaluation hierarchy of: reaction; learning; behaviour; intermediate action; and ultimate outcome the evidence on impact is mainly at the 'reaction' and 'learning' levels (the latter as defined by conventional approaches to examination and project assessment in the higher education field). There is altogether an absence of longitudinal research. Where entrepreneurship programmes have been funded substantially by public authorities as in the case of Scottish Enterprise as part of its Birth Rate Strategy there is some imperative to take measures at the 'ultimate' level (McVie 1998) although the timescale for these needs to be long.

Delivery Organisations

Most of the initiatives in entrepreneurship education in Europe emerge from the business school sector. There is also an argument, which seems to be supported in Canada (Menziez and Gasse 1999), that delivery is strengthened where there is a strong and independent centre in partnership with the school. In the UK study by Mason (2000), six of the universities investigated had specialist entrepreneurship centres but these had little interaction with the business school. Mason argues for 'partnership': but there is another argument that independent centres can better reach out to the broader university community. (Gibb 1996). Other writers (Klofsten and Jones-Evans 2000) argue that to formalise the organisational approach too much within the university may lead to killing the entrepreneurial spirit and that looser structures may be preferable. Laukkanen (1997) and Johannasson (1991) argue that Business Schools may represent sterile environments for entrepreneurship with their emphasis upon analytical problem solving and risk averse approaches and their focus upon large and medium-sized firms.

The issue of optimum organisation design for delivery of entrepreneurship therefore goes beyond the 'organisation of the classroom' and is substantially affected by the overall culture of the organisation (Harris 1996 and Gibb 1993). The present author has argued that there is strong need for organisations pursuing entrepreneurial education to be deeply embedded in the stakeholder community in their regions, participate in joint ventures and incubator activities with other key stakeholders and indeed judge their own excellence through stakeholder eyes (Gibb 1996 and Gibb 2001).

Funding

In Europe many of the new entrepreneurial and enterprise initiatives in universities and business schools are publicly funded with limited time horizons. It is therefore too early to judge the long-term impact., although the creation of Chairs should lead to some temporal underpinning of activity. There are, however, few departments of entrepreneurship and therefore no clear designated long term career paths in this area.

There is obviously much less engagement of entrepreneurs in the funding of entrepreneurship education in Europe compared with North America. The EFER study (2000), referred to above, highlighted the major funding problems in Europe. It is by no means certain, for example, in the UK that once the current round of funding for university enterprise initiatives is exhausted that they will be sustained. Certainly the experience from the former Enterprise in Higher Education Initiative (whereby the government placed £1m in each of the UK's

Higher Education Institutions to facilitate Enterprise Learning) would indicate that the long term impact could be difficult to trace (Sommerlad 1991, Brooks 1991).

A Pragmatic Conclusion

Overall therefore there are considerable challenges posed to the higher education sector and to business schools in particular by the growth of interest in entrepreneurship. The review above indicates that it is by no means clear that these are fully recognised and will be or speedily addressed. There is little evidence of entrepreneurship becoming mainstream within the existing business school curriculum (Gibb 1996). The track record of the US is also not altogether convincing in this respect. It can be questioned as to whether the entrepreneurship challenge thrown down to the US business schools by the Porter and McKibben Report (in 1988) has been met. Welsch in 1989 made a convincing case for entrepreneurship being the key to many of the issues raised in that report including those of: faculty preparation, attitudes to life long learning, integration of disciplines and knowledge and adaptation of 'stages' and 'process' approaches. The ability of schools to strategically plan, look for niches, link closely with their local environment and yet still pursue an international dimension in their work and embrace a broader view of society and of related people skills may be beyond the capacity of the traditional school. It will be argued below that in view of the nature and pressures of change and of the difficulties as well as opportunities identified above there is a need for a more fundamental shift in institutional arrangements, of Schumpeterian proportions.

Repositioning the Argument – Creative Destruction, New Combinations of Knowledge and Ways of Doing Things

In this section of the paper the entrepreneurship debate is moved into a wider context. The aim is to provide a broader framework for exploration of the value of the entrepreneurial paradigm to society and academe and thus explore the wider intellectual challenge in responding to the political rhetoric and the apparent economic, social and business imperative. In so doing it will be necessary to release the paradigm from its present narrow focus upon new venture creation and business. This will be done by consideration of the impact of globalisation and competitiveness on society as a whole. By this means many of the pragmatic issues raised above can be explored in a broader context and hopefully given new direction.

In particular the aim is to explore the relevance of the entrepreneurial paradigm to the debate on the impact of globalisation upon cultures, institutions, democracy and government and the use of the market 'approach' in all kinds of public and social services. This will clarify the nature of the challenge to universities and institutes of higher learning.. To address these issues in the context of entrepreneurship will require some ontological and epistemological debate. It will also be argued that in order to place entrepreneurship in a much wider context than that of business it is necessary to focus upon the nature of 'enterprise' in individuals and upon the ways that effective enterprising behaviour can be encouraged in all kinds of organisational, social and economic circumstances.

To pursue this line of argument the author will posit that there is a substantial synonymity between entrepreneurial and enterprising behaviour (Gibb 1993). The only major distinction to be made is that the entrepreneur actor is traditionally associated with business activity. It has been argued elsewhere (Gibb 2000) that entrepreneurial or enterprising behaviour arises in response to the perceived need for individuals and groups in society to deal with

uncertainty and complexity in the environment and, at times, create it. It is clear that complexities and uncertainties effect all kinds of people in very many different aspects of life, not just in the business environment. Pursuit of this line of argument will reveal all of the 'stakeholders' that might be embraced within this broader entrepreneurial paradigm (and therefore the potential customers for educational programmes). They might include priests and the church; doctors in their practices, consultants and nurses in the health service; head teachers and staff of schools; social and community workers; bankers; actors and musicians and the arts; scientists in universities; consultants, the unemployed and researchers; and people of all abilities leaving school.

What do they need to know, why do they need to know it and how do they need to be able to adapt and develop themselves to cope with, create and perhaps enjoy uncertainty and complexity are key questions to be addressed? By answering them it should be possible to conclude as to what the broader 'enterprise' paradigm can offer. By beginning with the globalisation debate it is possible to demonstrate what should be taught and how it should be taught to different stakeholders.

In exploring the above issues the author will necessarily be brief making reference to other papers by the author and other major contributors to the debate.

The Global Context: Uncertainty and Complexity

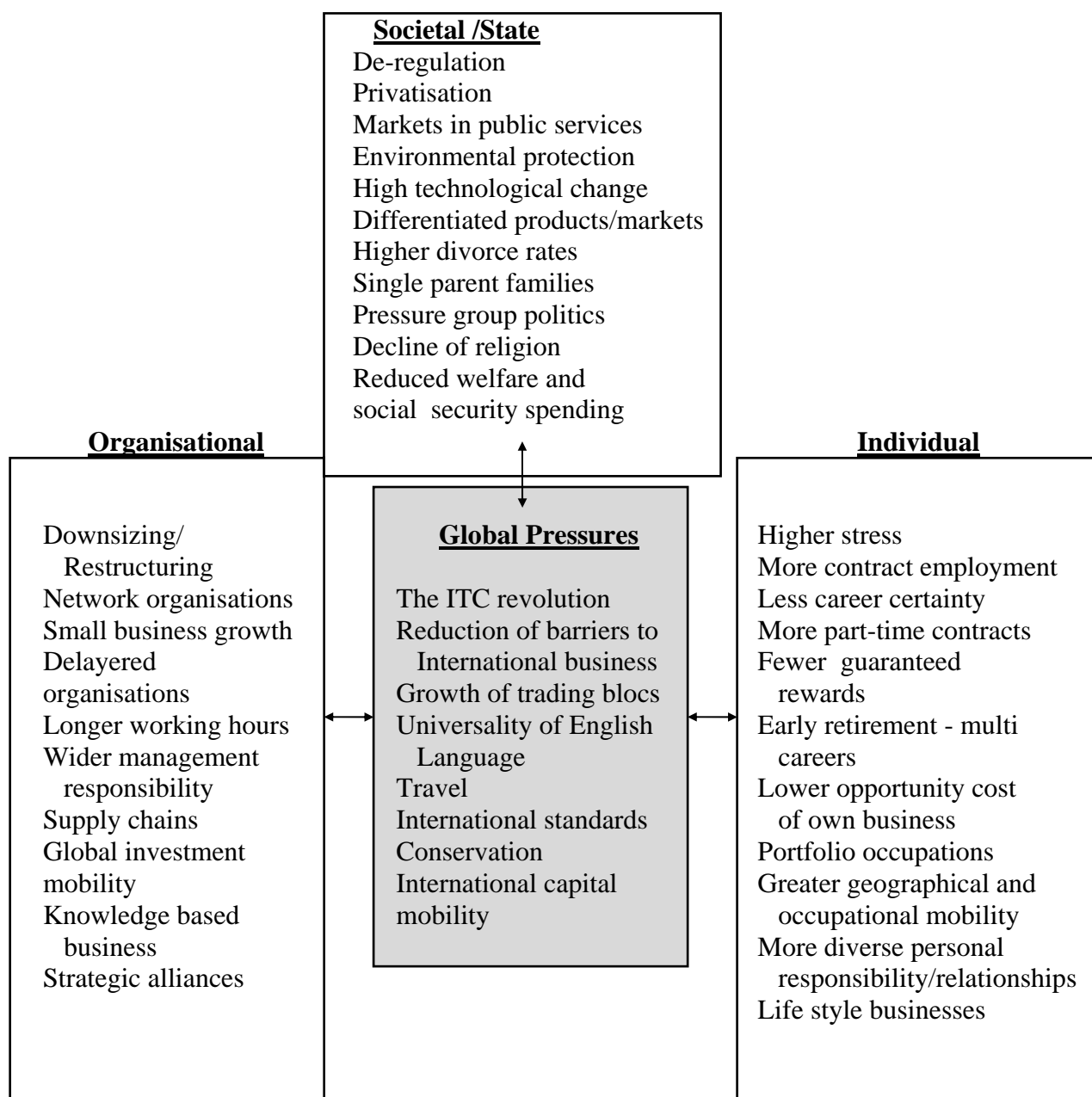
The globalisation debate is becoming increasingly frantic, complex and controversial. (Hertz 2001, Klein, 2000, International Affairs Special Issue 1999). It raises questions not only about the nature of its reality but also its impact upon democracy and government, business (particularly large corporate business), behaviour and upon the individual in society as a consumer, worker, family member and community actor. There is no space in this paper to debate in full the nature of the impact upon the entrepreneurial paradigm. Some aspects of this have been explored by the author elsewhere (Gibb 1999 and Gibb 2000). Exhibit 1, however, sets out the major parameters of the debate beginning with a number of 'global pressures' and the responses to, and the shaping of, these by government/societal institutions, corporate and independent business and the individual actors. This Exhibit, arguably, helps us to explore the world for which entrepreneurship education is seeking to prepare individuals and organisations. It thus provides a guide to potential content and context.

At the political level European governmental responses to the globalisation and competitiveness agenda have, in general, been to accept the dominance of the 'market paradigm' resulting in their pursuit of deregulation, privatisation, the creation of markets in public services and the pursuit of a stronger 'culture' of self help in society. This in turn has impacted upon individuals, families, marital and partner relationships, religion, education, welfare, social security and the way in which a wide range of public services are managed.). There has been a movement from governments setting and establishing rules for the regulation of society towards notions of governance involving the withdrawal of the boundaries of the state and the creation of quangos and intermediary NGOs designed to 'support' and encourage self regulation (Kooiman 1993). A major, and controversial, area of debate relates to the impact of globalisation on democracy itself (Klein 2000, Monbiot 2000, Hertz 2001

At the organisational level the impact of restructuring, downsizing, strategic partnership and supply chain development, the growth of network organisations, the delayering of

management and the notional widening of responsibility of managers has been well documented (Ascari et al.1995, Berggren 1988, Ashkenas 1990) There has been a growth of knowledge based business and a commensurate change in the relevant importance of tangible assets as opposed to physical ownership with its associated emphasis upon access to knowledge as opposed to property (Rifkin 2000),

Exhibit 1 Pressures moulding the ‘Entrepreneurial Society’.



There is a great deal of research to demonstrate that, the individual as a worker is facing greater complexity and uncertainty (see below). At the personal/family level there is evidence of individuals moving into and out of a wider range of personal relationships and the growth of one parent or multi parent family relationships (Alfred Herrhausen Society 2000). As consumers, individuals are confronted with an increasing range of choice, wider ownership and management of a variety of forms of credit (Rifkin 2000).

It is possible to explore fruitfully the detailed impact of these changes on a wide variety of individuals in society. Annex 1 sets out frameworks within which, for example, the effect on UK headteachers of schools and general practitioners (doctors) of globalisation might be

explored. It is possible to examine within these frameworks the uncertainties and complexities confronted and the contingent need for entrepreneurial behaviour. It is also possible to trace the different meanings given to the global context by different stakeholders. There is the potential to explore conceptually the response of individuals and organisations to the impact on their own stakeholders of global 'pressures'. For example, the impact on the behaviour of doctors and medical service practitioners of the way in which the market paradigm is being used by providers of resource and managers in the UK Health Service can be explored.

This leads on to debate as to whether, for example, the use of such market paradigms in education, health and police services, developed under the 'enterprise' umbrella do in fact create an environment conducive to effective enterprising behaviour or whether they constrain it (see below and Gibb 1999). There is a growing body of evidence in the UK to demonstrate that public policy attempts at decentralisation designed to 'empower', using the market paradigm in public service organisations, have in practice been heavily impregnated by bureaucratic Taylorist management principles (Halliwell 1999). Changes in the 'culture' of governance do not therefore seem to have been altogether matched by changes in the tools of management. In the words of Robert Chia (1996), the preoccupation has been with changing the shape of the menu but not the food. Rather than facilitating entrepreneurship, there is increasing evidence of mounting frustration of individuals in public services in the UK at the growth of layers of management, divorced from direct provision of service.

In the corporate sector managers and workers are confronted with all the manifestations of the internal and external flexible labour market ((Grimshaw et al 2000, Worrell et al 2000, Westwood 2000, Rajan et al 1997). Internally in the company they face greater uncertainty in respect of: clarity of promotion lines; stability of operations and job descriptions; rewards and responsibilities in geographical locations. Outside of the company they are faced with a job market which relies more extensively than hitherto on short term contract forms of employment and part time status. Many of the former internal 'service' jobs available have been 'externalised' into small and medium businesses which offer a different form of management challenge (UK Department of Education and Employment 1996, Westwood 2000). This opens up the wider possibility of using managerial and technical skills in a self-employment situation with its different and wider demands.

The evidence from a large number of studies demonstrates that many of those 'left behind' as a result of corporate restructuring and disaggregation by and large are highly stressed and uncomfortable (Sahdev and Vinnicombe 1997, Grimshaw et al 2000, Westwood 2000). The break-up of the old 'internal labour market' within companies does not seem to have led to the type of organisational redesign needed to truly empower workers and managers and help them cope with greater degrees of uncertainty and complexity (Gibb 2000). Several of the 'gurus', while arguing that large organisations now have to behave like small (Kanter 1983, Quinn 1985), have not explored the conceptual detail. It is argued elsewhere by this author that 'models' can be drawn from the 'life world' of the owner manager and the managerial and organisational design of the small business that would help address this problem.

The above issues, and others, related to global change, provide a considerable challenge to the design of entrepreneurship programmes. They demonstrate the need to research and reflect upon diverse aspects of the impact of uncertainty and complexity on a wide range of individuals and certainly outside of the conventional business context. To design an

approach to entrepreneurship and an appropriate curriculum within this framework presents a number of important challenges which are dealt with below.

The Challenge of the Enterprise and Entrepreneurship Concept

In many of the 'supply' offers identified earlier there was no common definition of entrepreneurship. The conceptual confusion has substantially affected the approach to entrepreneurship education in the UK as noted above (Gibb and Cotton 1998). For those working in the management development field the diversity of definitions and the controversies that surround limits their practical value: and their relationship to 'entrepreneurial behaviour' is not always clear. The author has addressed this issue in a number of papers (Gibb 1987, 1993, 1996 and 2001). In general he has argued that entrepreneurship can be most usefully defined, in an educational context, in terms of behaviours underpinned by certain skills and attributes (Gibb 1993 and 2001). Such behaviours can be exhibited in a variety of contexts and organisations. These behaviours are expanded upon below.

The author has argued the importance of the ability to design organisations to stimulate and support entrepreneurial behaviour in different contexts (Gibb 2000). It is possible to design an organisation to constrain or exclude entrepreneurial behaviour or, alternatively, to maximise it. It is also possible to design the organisation in such a way that entrepreneurial behaviour becomes ineffective (in terms of undermining organisational goals) or deviant. It is also of consequence to recognise that an entrepreneurial organisation might be dysfunctional to the task environment if the task structure does not demand entrepreneurial behaviour.

There is, in a wider context, concern for the development of 'entrepreneurial cultures' in society and for the creation of the entrepreneurial playing field in support of dynamic organisation development (Gibb 1997). Such an approach places emphasis upon capacities for developing new structures, networks, alliances and managing increasingly complex stakeholder relationships. The author, in pursuing this line of argument has introduced the concept of 'entrepreneurial capacities' as:

“Those capacities that the constitute the basic, necessary sufficient conditions for the pursuit of effective entrepreneurial behaviour individually, organisationally and societaly in an increasingly turbulent and global environment”.

Gibb 2000

This definition embodies the notion that the pursuit of individual enterprising behaviour per se is insufficient unless there are various supportive contextual circumstances. These include the ability to 'regulate' such behaviour, reward it, ensure that it meets broader organisational and societal goals and helps cope with the dynamics of the changing environment. The author has drawn down from the context features in Exhibit 1 a number of entrepreneurial capacities which provide the focus for curriculum development (Gibb 1999). These include the capacities to: manage the entrepreneurial life world; design and cope with entrepreneurial governance systems; develop global sensitivity in the organisation; design and develop the entrepreneurial organisation; manage and design business development processes; cope with stakeholder relationship management; pursue flexible strategic orientation; develop personal

enterprising capacities; pursue entrepreneurial learning; and personalise global information sources

This approach provides a vehicle for exploring the relevance of the entrepreneurship paradigm to a wide range of stakeholders and organisations. It releases a broader context and content potential for entrepreneurship programme design. It also provides a means of linking conceptually the small business/owner managed paradigm into the mainstream of entrepreneurial organisation design (Gibb 2000). It moves the focus away from the pervasive and confusing 'heroic' ideology in education (Stronach 1990) and leads to acceptance that all kinds of different organisations and different contexts are open to entrepreneurial exploration including micro enterprises; small businesses; medium businesses; corporate business; public authorities; NGOs; and social and community enterprise as well as individuals in a wide range of non business contexts. The emphasis is upon the enterprising individual and enterprising organisation (which in economic and social terms offers a context arguably more appropriate for holistic exploration of the flexible labour market and of the enterprise culture in society).

The Challenge of Culture

As noted above, there has been much political rhetoric surrounding the notion of 'enterprise culture'. Some argue that it has become a dominant Western paradigm. (Chia 1996) There is a substantial debate between sociologists as to the pervasiveness of the enterprise ideology and its contrast with notions of bureaucracy (du Gay 2000 , Fournier and Grey 1999). There are some strong arguments as to why academic programmes of 'entrepreneurship' should explore this issue of culture. Firstly, it is evident from the pragmatic 'models' offered by a number of business schools (Hay 2000 for example), that issues such as 'inequality of incomes', 'attitudes to taxation', and 'appropriate regulation' are deemed to be important components of enterprise structure. Secondly, the pervasiveness of the ideology of the individual entrepreneurial hero referred to above demands its contestation against a broader view of entrepreneurial diffusion (Minkes and Foxall 2000). Thirdly there is the issue of the meaning of major concepts used in entrepreneurship education (Ma 2000) and the importance of context to such meanings. Ma has shown that primary school teachers will have different ways of interpreting 'enterprise' than university lecturers. Finally, there is the importance of developing understanding of the above issues in the context of the transfer of 'programmes', 'institutions' and 'ways of doing things' from one society to another (Gibb 2000).

Overall, a number of writers (Faltin 1999, and Laukkanen 1997 for example) have lamented the absence of debates concerning culture within the academic entrepreneurship curriculum.

There are therefore several major components of culture that can be incorporated into an educational approach . The first involves recognition of the values of the entrepreneur as dictated by the 'way of life' (see also Gasse 1988). It has been argued that the key components of 'this way of life' as set out in Exhibit 2, dictate the need for enterprising behaviour. (Gibb 2000) They also provide the key to the design of entrepreneurial organisations (see Annex 2). The 'way of life' concept enables recognition of the way that

knowledge is perceived and understood by entrepreneurs (see below) and, importantly for academics, the way that entrepreneurs respond to research approaches (Gibb 2000). For example, the close association of the entrepreneurial ego with the business through financial and psychological ownership leads entrepreneurs to 'externalise' the causes of business problems (regulation, banks, etc.) when reporting to third parties rather than admit to any internal deficiency in the management of the business.

Exhibit 2. Coping with and enjoying a more entrepreneurial 'Way of Life'

1. Greater freedom
2. Greater control over what goes on
3. Greater responsibility - more of the 'buck' stops with you
4. More autonomy to make things happen
5. Doing everything – coping with wider range of management tasks
6. Rewards linked more directly/immediately to the customer
7. Personal assets and security more at risk
8. The ego more widely exposed
9. Living day to day with greater uncertainty
10. Greater vulnerability to the environment
11. Wider interdependence on a range of stakeholders
12. 'Know who' becomes much more important - to build trust
13. Working longer and more variable hours
14. Social, family and business life more highly integrated
15. Social status tied more to business status
16. More learning by doing, under pressure (more tacit than explicit)
17. Loneliness

Concern for culture and awareness of the subjectivity of knowledge moves us towards a 'social constructionist' approach to the understanding of meanings (see below and Crossley and Pittaway 2000 and Chell and Pittaway 1998) which has major implications for entrepreneurship research and teaching. Researchers, for example, when seeking to compare owner managers with corporate executives often fail to find differences in so-called entrepreneurial behaviours and attributes such as: commitment; responsibility for seeing things through; initiative taking; risk taking; holistic management; and attitudes to learning. Yet it is clear that meanings may be substantially different in context. Risk taking in the owner managed firm frequently involves the owner in putting on the line his/her home and family assets and wealth directly as well as the egotistical investment in the total business concept and the associated social status in society. Such risk is arguably very different from that experienced by professional managers. Commitment may similarly be driven and associated with very different factors in an owner-managed business than in corporate management. The words and concepts used therefore carry different weight and meaning in different contexts. The same things are not being compared although the words are the same. Recent doctoral work at Durham has, for example, shown that the word 'enterprise' in an educational context can have very different connotations for a primary school teacher compared with a university lecturer (Ma 2000).

A second key issue in the culture debate, arguably highly relevant to the business school context but also to the political rhetoric noted above, is the notion of a cultural divide

(different ways of seeing things) between the corporate/bureaucratic organisation and the small entrepreneurial business. In Exhibit 3 a number of distinctions are deliberately polarised. This polarisation can be useful as a basis for learning, for example, in exploring how bankers see small businesses and how entrepreneurs see bankers and how different perspectives flavour the discourse and nature of relationships. In particular it can be used to debate the degree to which the information focused (Boyle 2000), analytical and rationale problem solving models of business schools perpetuate a certain kind of approach to business and organisation development which is unsympathetic to the style of many owner managers of small and medium businesses.

Exhibit 3. The Cultural Divide?

The Bureaucratic - Corporate - Entrepreneurial Dilemma

<i>government/corporate (looking for)</i>	<i>entrepreneurial small business (as being)</i>
order	untidy
formality	informal
accountability	trusting
information	personally observing
clear demarcation	overlapping
planning	intuitive
corporate strategy	tactically strategic
control measures	personally led
formal standards	personally observed
transparency	ambiguous
functional expertise	holistic
systems	reliant on 'feel'
positional authority	owner managed
formal performance appraisal	customer/network exposed

The dichotomy can also be used to explore how donor and public grant giving organisations operating in the 'Developing World' are induced to set up systems dominated by the left hand side of the diagram. These provide them with the accountability, transparency and information systems demanded by their own bureaucracies at home to whom they are responsible. Yet they may colour substantially the relationship with intermediary recipients of donor aid. NGOs as donor aid recipients, for example, may be encouraged to design themselves around the task structure of the donor (the resource providing customer) rather than that of the informal sector who are their ultimate clients (Gibb 2000).

A central issue raised by the polarisation is the role of trust in building relationship between different forms of organisation and indeed in developing the enterprising society (Fukuyama 1995)). It allows exploration of some of the problems, noted above, encountered in attempts by public services to decentralise, liberalise and transfer assets into the private sector while retaining control by the setting of standards, targets and benchmarks and why this may lead to tensions and the inhibiting of enterprise in organisations such as schools, the health service and the police (Halliwell 2000).

Finally, as noted earlier there is an heroic ideology surrounding the entrepreneur underpinned by the Schumpeterian (1934) concepts of 'creative destruction', bold innovation and new combinations of products and processes (Ogbor 2000, du Gay 2000). This facilitates the association of entrepreneurship with high growth and technology based businesses so common in the economics literature. Such an association creates a barrier to exploration of the wider contexts in which highly entrepreneurial behaviour might be explored and underpins the misleading (in the author's view) notion that innovation is the domain of growing business and of scale businesses. The looseness of the association of growth with uncertainty and complexity has already been noted above.

Overall a review of the importance of culture raises the issue as to what degree, in developing students' understanding of entrepreneurship, there is a need to create empathy with entrepreneurial: ways of seeing; ways of feeling; ways of doing; ways of thinking; and ways of learning. These can be key components of the learning process. and used to develop understanding of the ways that tasks are undertaken and things understood in different organisational and management contexts.

Challenging the Market Paradigm

Acceptance of much of the above argument supports the view that entrepreneurial behaviour is not to be seen as synonymous with the notion of market making and market liberalisation. It moves us away from simplistic and at times controversial models of 'enterprise' being associated with: privatisation; marketisation of health, education, police and social services; the creation of internal markets in public service organisations; with regulatory reform; and, in the developing economy context, with Structural Adjustment Programmes. Most of the above notions are underpinned by a view that releasing market forces is the key to entrepreneurial behaviour and better decision making and organisation in public and private services. As demonstrated in Exhibit 3 above, the introduction of corporate business ways of doing things may well dramatically constrain entrepreneurial behaviour.

One result of the confusion of market ideology with entrepreneurial behaviour can be seen in the attempts of Western governments to help former Soviet Union countries with their process of transition (often with less than impressive results). Releasing public assets into private hands has not ensured 'effective' entrepreneurial behaviour as defined above, rather the opposite. At the root of the problem is failure, particularly of the economics profession with some major exceptions (see North 1990), to recognise sufficiently the cultural nature of markets and their dependence upon institutional and organisational structures. Without such recognition the transference from the West to transition and developing countries of institutional (in the Northian sense) and organisational ways of doing things can substantially inhibit entrepreneurship and development. For example, in the developing world it can be argued that it has created a major problem for those wishing to develop entrepreneurial businesses out of the informal micro sector thus contributing to what has become known as the 'missing middle' (Ferrand 1998).

There is arguably therefore a major need to take entrepreneurship out of the locker room of economics, remove it from the meta-theoretical models of Schumpeter et al and place it in a wider inter disciplinary context built upon a more pluralistic and diffused view of society

and of the cultural nature of markets. Closer understanding of notions of trust, ethics, morality and values and the way they shape institutions and organisations and lead to informal 'ways of doing thing' is the key to recognition that needs can be articulated, and supply response developed, without the notion of price being dominant. It is for example the experience of the author that supply chain development in an African context involves examination of cultural, social, health, environment, education as well as commercial transactional issues all the way up the chain. Such an approach moves the responsibilities of members of the chain away from simple dependence upon the price of the product as the arbiter of efficiency and effectiveness. Such notions lead us well beyond the pure market liberalisation thinking underpinning Structural Adjustment Programmes. They also help us to understand why markets and market operations can be 'amoral' and at times immoral. (Soros 1998, Hodgson 1999)

Moving enterprise and entrepreneurship away from their equivalence with market liberalisation (du Gay 2000 and Fournier and Grey 1999) allows the entrepreneurial concept to engage more effectively with wider issues of sustainable enterprise development within the context of cultures, social issues and environment.

The Challenge of Governance

A review of the market liberalisation notion and its association with entrepreneurship naturally leads into consideration of the changing role of governments in society (Kooiman 1993). The majority of Western Governments and indeed those in transition economies embracing the 'enterprise culture' associate it strongly with the 'marketisation' concept of withdrawing the boundaries of the state and releasing assets into private hands. The author's recent experience of working in a number of African countries indicates how much this imperative also underpins Structural Adjustment Programmes. State assets such as power, water, communication services are opened up for privatisation yet with little or no indigenous resource available for them to pass into local hands. The impact of such transfers on local entrepreneurial potential can be adverse. There would appear to be an underpinning ideology, that public is bad and private is good with little broader conceptual considerations relating to the design of entrepreneurial organisations, empowerment to self help and the encouragement of entrepreneurial initiatives

At a more fundamental level there is a need to explore the link between entrepreneurship and the changing nature of democracy (and ways of measuring it), the distribution of power in society and the empowerment of communities and individuals. A key aspect of this concerns the role of the owner managed business community in creating economic and social stability and contributing to 'bottom up' concepts of development rather than rely upon 'trickle down' momentum (Diochon 1997). In this context it is of interest to note how enterprise policies can become a major political tool to shape social change. In Germany, the much lauded 'Mittelstand' (middle business community) emerged as a result of the strategy pursued by Finance Minister Erhard in the German post war recovery programme who saw independent business as a key means of preventing the polarisation of communism and fascism and unions and business which led to rise of Hitler (Sauer 1984). The creation of the powerful Small Business Administration in the USA in the 1950s has been claimed to be as much a response to the need to ensure pluralism and differentiation in US society as upon pure grounds of economic policy (Achs 2001). The creation of a black entrepreneurial and property holding class in Africa is seen a major means of creating future social and economic stability. . Concern for the design of appropriate institutions and of modes of governance to encourage effective entrepreneurial behaviour and the release of entrepreneurial energies (Gibb 2000)

therefore brings issues of politics and governance into the entrepreneurship curriculum debate.

The Ontological Challenge

Several writers (Kyro 2000 and Chia 1996) have argued that the entrepreneurial paradigm is central to the post-modernist world. Kyro has posited in this context that entrepreneurial learning demands: an holistic attention to the world; an approach to an holistic human being (taking into account emotions, values and interests) and a move away from the human being viewed as an objective rational thinking decision maker. She poses the question not of how well entrepreneurship can be taught but what it can bring to education as a whole. In an educationalist context this challenges the notion (see below), that one can separate ‘for’ entrepreneurship from ‘about’ entrepreneurship in an academic sense. Chia approaching this more from a business school/management school angle is independently supportive of this view arguing for the importance of imagination and a shift from analytical problem solving to ‘intellectual entrepreneurship’ and the ‘crafting of relationships between sets of ideas’ These views challenge the ‘positivist’ scientific view of management which they argue remains the dominant paradigm influencing the tradition of academic rigour. Chia for example quotes Karl Popper the philosopher.

‘We are prisoners in the framework of our theories, our expectations, past experience and our language’.

Popper 1970 p 86

These views to a substantial degree confront those of Fiet (2000) and his call for the infusion of greater theory into entrepreneurship teaching pedagogy. They, for example, would deny the role of theory in social science as a ‘predictor of true outcomes’.

‘Entrepreneurship theory as a set of empirical generalisations about the world economy and how entrepreneurs should behave that allows for prediction of true outcomes’.

Fiet 2000 p 404

They would also lead one to oppose Fiet’s condemnation of exploratory research and his pursuit of ‘answers’ as well as (to some degree) his attempt to call down ‘relevant’ theories from the prevailing business literature. In general, Fiet’s views fail to build a comprehensive link between teaching, learning theory and pedagogy. Nor do they help to bridge the gap between ‘about’ and ‘for’. Moreover they bypass discussion of the importance of cognitive maps, concept frames and connotative and affective aspects of learning to be discussed below. Fiet’s view is of course narrowly based upon the business management context for entrepreneurship.

The Epistemological and Learning Challenge

The ontological debate leads us into exploration of broader views of learning than commonly found in business school contexts in a number of respects. Firstly, it demands consideration of the social, contextual and cultural aspects of learning. Secondly, of the organisation of

knowledge. Thirdly, it raises questions relating to sources of learning and the creation of the capacity to learn in different ways. Fourthly, the relationship of pedagogy to behaviours and feelings linked with the 'way of life' described above needs to be explored. Fifthly, it broadens the knowledge base to be drawn upon but begs questions about its integration. And finally, it focuses attention upon the importance of conative, affective as well as cognitive influences on learning and the link with emotional intelligence

Learning as a social and developmental process

Given the perceived importance of the 'for' and 'about' approach to entrepreneurship and the academic views towards this and given the pragmatic recommendations of key reports that entrepreneurship teaching should involve working with and through entrepreneurs, the issue of learning as a social construct becomes of prime importance. A key text in this respect is the work of Love and Wenger (1998, see also Wenger 2000) whose views are drawn in part from the writings of Vygotsky (Van der Veer and Valsiner 1991). The case they make is for learning emerging as a result of participation in communities of practice and evolving over time as a set of relationships. Thus 'learning things' and 'knowing things' are embedded in relations between people and activity.

Their philosophy is in line with Bourdieu's theory of practice (Shusterman 1999). It denies the convention that knowledge in 'schooling' in any organisation or at any level is de-contextualised (the school or the university is a context in itself). Most importantly, Love and Wenger's approach helps to dissolve the distinction between cerebral and 'practical' learning and bridges the gap between tacit and explicit approaches to learning.. It rejects the notion that learning needs to be 'decontextualised' from practice for it to become 'academic'. There is clear recognition that learning can take place outside of intentional instruction. This view is important to all approaches to management development and is central to the concept of a Learning Society (European Commission 1996). In the context of entrepreneurship it underlines the importance of involving students in a 'community of practice' (Mullen 1997). It also demands of 'learning organisations' that they build a community of learning with relevant stakeholders leading to the formation of identity, access to wider knowledge, to social practice and familiarisation with relevant values and feelings.

It has been argued elsewhere by the author (Gibb 1997) and by several of the organisations undertaking reviews on entrepreneurship in Europe, noted above, that entrepreneurial learning involves emphasis upon 'how to' and 'who with' and that some knowledge should be offered on a 'need to know' basis. Such an approach demands the organisation of knowledge around personal and organisation developmental processes. It also requires the appropriate integration of knowledge and thus moves away from the functionalist paradigms of business schools. An example of the organisation of knowledge in this way in the context of a business start up process is given in Annex 3. The aim in such an approach is to enable the learner to 'bring forward the future' by becoming aware of tasks and anticipate problems and opportunities. This approach has much in common with that used in some medical schools where the starting point for much learning is the diagnosis of a patients problem leading to the exploration of all possible causes, underpinning knowledge, concepts and theories but always returning ultimately to the diagnosis.. A problem/opportunity centred approach does not therefore deny the value of theory and concept but provides the bridge between theory, concept and practice arguably the key task of business schools and universities (Gibb1996).

This means that a key role of the 'teacher' is to develop student ability to give wider meaning to their experience allowing exploration of personal 'theories' that underpin their behaviour

and understanding of certain situations. Such an approach to learning will also help to capture the accumulation of 'intangible' (knowledge) assets embodied in an organisation over time. The growth of such assets from one year to the next represent the capacity of the organisation to do new things or do old things better.

Creation of capacity to learn

This epistemological view opens up the opportunity to facilitate learning from a variety of approaches matching the entrepreneurial capacity to learn: from mistakes, by doing, by copying, by experiment, by problem solving/opportunity grasping, by making things up as well as from more explicit formal sources (Gibb 1993). It has been argued elsewhere (Gibb 1997), that, for the independent entrepreneur, the capacity to learn from the stakeholder network and indeed to educate the stakeholder network with a view to lowering transaction costs by greater trust is the key to successful business development. Learning to learn from suppliers, customers, bankers, accountants, competitors, regulatory authorities, staff, family and being aware of the way that they need to learn from you is not conventionally taught in business schools. Yet learning to learn effectively and independently, and to conceptualise experience, is at the heart of the philosophies of both effective management development and the learning society/organisation. It demands of the 'teaching' organisation, however, that it places itself on the boundary of these relations, and fully understands the way that relationship learning takes place before it seeks to add value

Reinforcing behaviour through pedagogy

The encouragement and reinforcement of entrepreneurial behaviours was a declared major objective of many of the programmes reviewed earlier. Criticism was then made, however, that it was not clear how precisely such behaviours were to be developed. It seems to be assumed that taking project-based approaches in particular (Preshing 1991 McMullan and Boberg 1991), combined with other forms of action learning and presentations will systematically underpin enterprising behaviour. It was also noted that there is no absolute measure of agreement as to the list of behaviours to be developed or indication of how they were drawn from the literature. Such lists often combine *behaviours* which can be observed, *attributes* which are deemed to be part of the personality but arguably open to influence from the environment and *skills* which can be developed.

Among those behaviours commonly cited are finding opportunities, grasping opportunities, fixing things and bringing networks together effectively; taking initiatives; being able to take risks under conditions of uncertainty and through judgement; persevering to achieve a goal and strategic thinking (thinking on one's feet, not just tactically). Related to these are a number of supporting attributes around which there is a considerable 'trait' literature. These include: motivation to achievement; self-confidence and self-belief; creativity; autonomy and high locus of control; hard work; commitment; and determination. In turn related to these, are skills which include among others negotiation, persuasion, selling, proposing, project management, time management, strategising, and creative problem solving. While there may be disputes about the above list and absences from it (for example planning) what is most important is that the stance taken can be clearly defended from the literature.

In the Annex an indicative template is shown of how a range of pedagogical techniques might be used and linked to certain recognised entrepreneurial behaviours and attributes. There will, however, be a need to give meaning to each component so that its pursuit or otherwise in the curriculum and pedagogy can be clearly traced. For example, opportunity seeking behaviours may embrace: creative problem solving, harvesting ideas from peers and

competitors, undertaking detailed customer reviews, internal brainstorming, R and D, attendance at exhibitions and travel abroad. A detailed concept frame for pedagogical development is therefore necessary if the claims of programmes to be able to develop behaviours and attributes is to be adequately defended and they are ultimately to be measured. At present the only means for measurement seems to be psychometric tests although evidence from research at Durham (Ma 2000) suggests that teachers in the classroom feel able to monitor such behaviours.

Breadth of Knowledge

It has been argued above that addressing the issue of personal enterprise and enterprising organisational development in the context of global, societal, governmental business and individual and familial change creates a broad agenda for curriculum development. Added to this are the learning needs of different stakeholder groups as listed earlier. Yet there is also a case for a wider intellectual approach (Chia 1996). The concept of culture, for example, cannot be fully embraced without exploration of the arts and even literary theory (Eagleton 1996).. Insights into the Russian views of entrepreneurship might be obtained via the reading of Gogol's 'Dead Souls', into UK small business by reading David Lodge or into Chinese Micro Enterprise by reading Hue's 'A Small Town called Hibiscus'! Thornton Wilder's 'Eighth Day' provides a thought provoking metaphor for exploring the impact of major adversity upon family entrepreneurial endeavour.

Arguably philosophy itself should be the basis of the programme particularly that relating to the theory of practice (Bourdieu 1972 and Shusterman 1999). Debates in science will have their place (Deutsch 1997, Penrose 1994). Theory relating to chaos and complexity within and without the scientific context is an obvious example (Fuller and Moran 2000).

Feelings and motivations in learning

A final and fundamental epistemological challenge is to recognise the importance of moving away from simple cognitive notions of learning towards recognition of the importance of emotions, feelings and motivation in the learning process. Ruohotie and Koironen (2000) have convincingly argued the importance of affective and conative aspects of the learning process in entrepreneurship. Cognitive development is concerned with reception, recognition, judgement and remembering. Affective development relates to the response to the subject, the likes and dislikes and the feelings, emotions and moods. Conative development embraces the active drive to make sense of something (notions of motivation, commitment, impulse and striving). Each of these are important keys to the learning process and somewhat neglected in the conventional university approach, This view is supported by Kyro in her model (2000) and links in with the growing interest in the concept of emotional 'intelligence' (George 2000 Dulewicz 2000, Goleman.1996). Emotional intelligence as it will impact on learning is 'the ability to perceive emotions, to access and generate emotion so as to assist thought to understand emotions and emotional actions and to reflectively regulate emotions so as to promote emotional and intellectual 'growth' (George 2000). In this respect empathy is a key skill. George argues that

"Feelings have been shown to influence judgement that people make, recall, attribution of success or failure, creation and inductive and deductive reasoning".

Such notions stand alongside a social constructionist view and against the stereo type of rational, decontextualised education and decision making.

Sympathy with these views can lead to major reconsideration of approaches to research and teaching. For example students can be reminded of just how much their 'objective' interviews with individuals or groups as part of their research or project development represent a process of reductionism and not just in the data sense. In general academics seek to 'make sense of things' as 'objectively' as possible but usually without checking whether the sense that they make coincides with that of the 'actors' interviewed or observed. There is little encouragement in the conventional process to develop emotional empathy with the 'objects' of research and thus be in a position to judge the 'emotional context' within which the information is provided. Moreover, for the student, there is little pressure to 'project' the results of research imaginatively maximising the use of insight and empathy or to see the interviewee through the eyes of other relevant stakeholders in the community. Yet, for example, in literature, understanding of the characters in a novel or play is built up via perspectives from, and discourse with, other characters in the plot.

In the Durham Masters in Entrepreneurship to bring home these points, students are asked to interview a broad range of stakeholders in the context of global, societal, corporate, familial and social change, to identify sources of uncertainty and perplexity and to list the entrepreneurial or other (behaviours) that might result from this. Rather than report on this in the form of an essay (a reductionist exercise) they are asked to join with other interviewees of other stakeholders and combine the key 'findings'. This leads the students towards understanding of how issues impact on different stakeholders. They are then asked to write a story board and produce, direct and act in a drama designed to imaginatively bring out the key points. They are assessed by other students as to their success in so doing (key points that need to be delivered must be set out previously). They are also assessed as to how creative and imaginative the delivery is.

Such an approach leads to a demand in interviews for the interviewer to seek to understand more widely the strength, depth and nature of interviewee feelings about the issue involved, to note the environment and relevant body movements and mannerisms as well as physical attributes that can be built into the drama. This exercise is in recognition of Kyro's arguments (2000) as to the complexity and diversity of the learning process and for 'teaching' to be as 'holistic' in its approaches as possible.

The Challenge to the University

There has in the view of the author been enough in the text above to demonstrate that the conventional business school cannot adequately address the version of the entrepreneurial (or enterprising) paradigm suggested above. There would have to be too much organisational and cultural change and too great an epistemological 'advance' for this to be possible, short of revolution. Yet in Europe it is the universities, not directly the business schools, that are being challenged by governments. It is therefore of value to place the earlier arguments in the context of the notion of a university. By this means it can be demonstrated that there is wider and sounder prospect for the acceptance of the entrepreneurial paradigm outside of the business school context.

Critics of universities have long attacked the notion of their being vehicles for 'acquisition of sterile facts' (Newman 1852). Even today in the UK Cardinal Newman's views of the concept of a university in the mid 19th century are regarded as among the most definitive. His concerns at that time seem relevant to today's debate:

“The practical error of the past twenty years is not to load the memory of the student with a massive and digested knowledge or to force upon him so much that he has repeated it allleading to ‘enfeebling the mind by a profusion of subjects’”

Newman 1852 p 431

His argument is that ‘the true and adequate end of intellectual training of the university is not learning or acquisition of knowledge but rather thought or reason exercised upon knowledge or what may be called ‘philosophy’. Chia (1996) quotes another philosopher (Whitehead), to add a further dimension to Newman’s view - ‘that the proper function of the university is the imaginative acquisition of knowledge’. He (Chia) argues that the business schools' view of academic rigour has taken away imagination and creativity.

This argument has some bearing on the pragmatic discussion earlier relating to teaching ‘for’ or teaching ‘about’ entrepreneurship and the issue of whether the pursuit of ‘experience’ can or cannot lead to the development of the intellect. The argument reviewed above supports a view that this is a false dichotomy. If it is recognised as such it weakens also the notion that there is a conflict in the university’s role as both a provider of ‘humanistic’ and also ‘professional’ education and training. There may be little to fear from the ‘new vocationalism’.

There is also early philosophical support for the view that imagination, insight and the power to move are important components of the university’s role. De Quincy again in the mid 19th century, argued that much knowledge passes away and is superseded by further ‘findings’ but that knowledge with the ‘power to move’ ensures a more durable presence (in Macdonald 1917). Macauley, even earlier, (1828) makes a plea for insight by comparing a geologist (an economist today?) to the gnat on the skin of an elephant seeking to theorise about the internal structure of the vast animal from the phenomenon of the hide.(in Alden 1917).

In responding to current political pressure the universities in embracing ‘enterprise’ can therefore take courage both from 19th century philosophers as well as the post modernist school embracing the theory of practice referred to above (Shusterman 1999). Yet there is wider and more pragmatic support. In an earlier paper (1996) the author has pointed to US and Canadian reports which support a view that universities should not solely be concerned with the scholarship of research (discovery) and teaching but also intellectually with the scholarship of integration (of knowledge) and the scholarship of relevance (Carnegie Foundation 1990). It has been argued elsewhere (Gibb 1996) that embracing the latter two forms of scholarship will demand from the university a wider integration in the ‘practice of the community’ and acknowledgement of its ability to learn from this practice and interaction. Thus the university moves away from being a ‘learned’ to a ‘learning’ organisation the latter being open to learning from all sources and in all ways.

A more fundamental challenge, however, is that of the nature of the 'contract' between the university and the student. At present this appears to focus strongly upon knowledge and not personal development. It is the author's experience over 35 years that in drawing up new degrees and programmes the overwhelming weight of attention is given to the knowledge content and the structure of that knowledge. Much less consideration is given to the details of 'how' the course might be taught and even less, if any, to the 'how to' that might result. It is

scarcely surprising therefore that the primary teacher can accept much more easily the notion of enterprise in education than the university lecturer (Ma 2000).

There is no space in this paper to review in detail how universities are responding to this philosophical challenge across Europe but a recent report from Germany provides a pragmatic flavour. The Berlin Institute of Entrepreneurship (as a result of bringing together groups of professoriate from the those universities engaged in entrepreneurship) has produced ten pragmatic propositions for the entrepreneurial university (1999). These embrace in suggested practice some of the above philosophies. The propositions include: strong orientation to career, reaching all faculties; the creation of specialist centres; the use of active learning pedagogy; entrepreneurship as a recognised core process of the university and reflected as a primary task of the university; the acceptance of the importance of role models; the development of flexible teachers and staff; a flexible administrative structure; and high student motivation.

Summary and Conclusion

This paper began with a review of the political pressure on universities to respond to the enterprise culture in Europe and North America and indeed throughout the world. It pointed out some of the confusions in concepts and practice that were constraining the response. It also demonstrated that nevertheless there has been a growing provision. Business schools have been the major progenitors of programmes by and large, but a great many problems are recognised in their responding adequately to the challenge. Indeed it can be argued that even in North America progress has been slow and the responses for example to the entrepreneurial challenge of the 'Porter and McKibbin report over a decade ago has been less than adequate.

Finally it has been argued that there is a need to take a much more fundamental approach to the issue of entrepreneurial teaching and research. At the heart of such an approach is the dynamics of change related to globalisation and the creation of higher degrees of uncertainty and complexity for governments, organisations and individuals. It has been argued that exploration of these uncertainties/complexities and the way in which they impact on a wide range of stakeholders provides the framework for a new entrepreneurship paradigm. Such a paradigm raises a number of major challenges to the academic world and these have been briefly reviewed. Consideration of these leads to the conclusion that there is a need to move away from the narrow business and new venture creation focus of entrepreneurship towards a wider concept of 'enterprise'. Such a concept is more pluralistic and links more closely to the heart of university activity.

Reflection on the nature of a number of challenges leads to a conclusion that the correct place for entrepreneurship and enterprise in the higher education sector is outside of the business school. This does not mean, however, that it should not be organised by new and independent centres engaging in integrating theory and practice and intellectually equipped to reach out and draw down from a wide range of university areas of learning. At the heart of this argument is therefore the recognition that the entrepreneurial paradigm is essentially one of enhancing understanding of enterprise in all types of individuals and organisations. As such there is a need to rid the 'subject' of its heroic ideology and association with market liberalisation philosophy. It is extremely difficult if not impossible to see such a vision pursued by business schools. A radical move in education involving 'creative destruction and new ways of organising knowledge and pedagogy' could be paradoxically the 'last fling'

of Schumpeter as the centrepiece for entrepreneurship. . Arguably without such a denouement, fundamental progress will not be made.

NOTES

1. Bates at the London Business School for example identified skills such as: tolerating uncertainty and ambiguity, dealing with failure, seeking using feedback, persistently problem solving , taking a longer term view, not looking back, deal with failure without indicating how such behaviours are pre and post tested, from where they are derived. A similar list is provided by Hills and Morris.
2. The FIT study for example breaks needs into three groups, generic management, entrepreneurial skills (marketing, finance, etc); scientific and technical skills; and interface management skills.
3. Professor Michael Hay of London Business School for example using the global entrepreneurship monitor (GEM) as a basis of a model of ‘what makes a country entrepreneurial’ argues that this is a combination of: perception of market opportunity; entrepreneurial capacity; infrastructure; democracy; education; and culture (including income disparity). How this relates to programme structure and development is not explored. Inevitably the focus ends up on high growth or technology based businesses!
4. For example Levie found that in the UK only 27 out of 133 courses in the identified universities were for non-business students. In the US Hills and Morris also pointed to little systematic market analysis other than for technology entrepreneurs. Laukkanen effects a breakdown but not of other areas of common and differentiated need and how these might be built into different types of programmes.

Annex 1

Sources of Uncertainty and Complexity

Headteacher?

Source Global

- Benchmarking internationally of education performance
- Demands for language
- Parental demands for student travel
- Information Technology
- Cultural diversity

Source State

- Local management of schools – wider responsibilities
- Business involvement
- Curriculum change imposed
- Wider curriculum
- Vocational pressure

Source Organisation

- Competition of schools
- Wide planning and budget responsibility
- Greater parental and governor influence on management
- Performance pay and Review systems

Source Individual

- Changing personal morals
- More single parent families
- Youth drug cultures
- More working parents

Doctor

Source Global

- Technology in medicine
- Wider sources of information
- Global benchmarking of the service
- International standards
- More diversity of patients – ethnic
- Wider diversity of drugs available

Source State/Society

- More stressed individuals
- Market paradigms in the Health Service
- Changing funding systems
- Privatisation
- Private/public partnerships
- Care in the community – self help programmes

Source Organisation

- Supplier/buyer systems
- Fundholder systems
- Partnership management
- Competition between practices
- More private practice

Source Individual

- Greater customer demands for service
- Changing role of doctor in society
- More stress
- Greater management demands

Annex 2

Designing the Entrepreneurial Organisation

Creating and reinforcing a strong sense of ownership
 Reinforcing feelings of freedom and autonomy
 Maximising opportunities for holistic management
 Tolerating ambiguity
 Developing responsibility to see things through
 Seeking to build commitment over time
 Encouraging building of relevant personal stakeholder networks
 Tying rewards to customer and stakeholder credibility
 Allowing mistakes with support for learning
 Supporting learning from stakeholders
 Facilitating enterprising learning methods
 Avoiding strict demarcation and hierarchical control systems
 Allowing management overlap as a basis for learning and trust
 Encouraging strategic thinking
 Encouraging personal contact as basis for building trust

Annex 3 – Linking Personal Learning to Business Development A New Venture Process Example

Stage	Motivation	Key Tasks	Key Learning and Development Needs
1. From idea and motivation acquisition to raw idea	<ul style="list-style-type: none"> • 'Push' factors, e.g. changes in corporate structure/status, insecurity, job loss/reduction, personal (birth, spouse, illness, etc.) • 'Pull' factors, e.g. desire for autonomy/self-actualisation, vision/ideals of self and business, personal interest as business • Desire to test motivation and/or attitude to start-up as an idea/option 	<ul style="list-style-type: none"> • To find an idea • To generate an idea • To explore personal capability and motivation for self-employment 	<ul style="list-style-type: none"> • The process of idea generation and evaluation • Knowledge of sources of ideas • Understanding of the ways in which existing personal skills/knowledge might be used in self-employment • Understanding of what self-employment means • Personal insight into self-employment • Positive role image/exploration/feedback • Self-evaluation
2. From raw idea to valid idea	<ul style="list-style-type: none"> • Desire to test existing idea(s) or thoughts • Need for self-validation? Not splitting ego and business idea? • Initial 'go-no go' decision 	<ul style="list-style-type: none"> • Clarify idea • Clarify what needs it meets • Make it • See it works • See it works in operating conditions • Ensure can do it or make it to satisfactory quality • Explore customer acceptability - enough customers at the price? • Explore legality • Ensure can get into business (no insurmountable barriers) • Identify and learn from competition 	<ul style="list-style-type: none"> • What constitutes valid idea • Understanding the process of making/doing it • Technical skill to make/do it • Customer needs analysis • Customer identification • Who else does it/makes it • Idea protection • Pricing and rough costing • Ways of getting into a market • Quality standards • Competition analysis
3. From valid idea to scale of operation and resource identification	<ul style="list-style-type: none"> • Desire to estimate actual resource requirements and feasibility of acquiring them • Next decision point - 'can I achieve this business idea, is it feasible?' 	<ul style="list-style-type: none"> • Identify market as number, location, type of customers • Clarify how will reach the market (promotional) • Identify minimum desirable scale to "make a living" • Identify physical resource requirements at that scale • Estimate additional physical resource requirements • Estimate financial requirements • Identify any additional financial requirements needed 	<ul style="list-style-type: none"> • Market research • Marketing mix (promotion etc.) (ways of reaching the customer) • Pricing • Production forecasting and process planning to set standards for utilisation, efficiency etc. • Distribution systems • Materials estimating and wastage • Estimating labour, material, capital requirements • Profit/loss and cash flow forecasting
4. From "scale" to business plan and negotiation	<ul style="list-style-type: none"> • Explicit or implicit recognition of gaps in: <ul style="list-style-type: none"> i. skills/know-how (personal, commercial, industrial, organisational) ii. experience & know-who • Formal test of business idea and feasibility - use of external expert audience 	<ul style="list-style-type: none"> • Develop business plan and proposal • Negotiate with customers, labour, suppliers of materials, premises, capital suppliers, land etc. to ensure orders and physical supply capability • Negotiate with banks, financiers for resources 	<ul style="list-style-type: none"> • Business plan development • Negotiation and presentation skills • Knowledge of suppliers of land, etc. • Contracts and forms of agreement • Knowledge of different ways of paying • Understanding of bankers, and other sources of finance • Understand forms of assistance available
5. From negotiation to birth	<ul style="list-style-type: none"> • Develop most appropriate/beneficial structures - but time lines important • Minimise mistakes/difficulties - use other's experience 	<ul style="list-style-type: none"> • Complete all legal requirements for business incorporation • Meet all statutory requirements • Set up basic business systems 	<ul style="list-style-type: none"> • Business incorporation • Statutory obligations (tax, legal) • Business production, marketing, financial systems and control • What advisers can do • Understand how to manage people (if have labour force)
6. From birth to survival	<ul style="list-style-type: none"> • Personal support - 'new world' • Accelerating the learning curve by tapping into other's experience • Getting the basics right • Getting out of the detail/day-to-day - steering the business 	<ul style="list-style-type: none"> • Consolidate business systems for processing • Ensure adequate financial control (debtors, creditors, bank, etc.) • Develop market, attract and retain customers • Meet all legal obligations • Monitor and anticipate change • Maintain good relations with banks, customers, suppliers and all environment contacts • Provide effective leadership development for staff 	<ul style="list-style-type: none"> • Management control systems • Cash planning • Debtor/creditor control • Marketing • Selling skills • Environmental scanning and market research • Leadership skills • Delegation, time planning

Annex 4

LINKING ENTREPRENEURIAL BEHAVIOURS AND SKILLS TO 'TEACHING' METHODS

	Seeking Opportunities	Taking Initiatives/ Acting Independently	Solving Problems Creatively	Persuading/ Influencing Others	Making things happen	Dealing with uncertainty	Flexibly responding	Negotiating a deal successfully	Taking decisions	Presenting confidently	Managing interdependence successfully
Lectures											
Seminars			*					*		*	*
Workshops on problems/ opportunities	**		***	*				*	**		
Critiques			*	*			*				
Cases								*		*	
Searches	*	*			*	*					*
Critical incidents			*			*	*	*			
Discussion groups			*	*				*			*
Projects	*	*	*		*	*		*	*	*	*
Presentations				**						**	
Debates				**						**	
Interviews			*	*		*	*	*			
Goldfish bowl				*			*	*			*
Simulations			*	*			*	*	*	*	*
Evaluations	**										
Mentoring each other			*	*		*	*	*			*
Interactive video							*	*			
Internet											

	Seeking Opportunities	Taking Initiatives/ Acting Independently	Solving Problems Creatively	Persuading/ Influencing Others	Making things happen	Dealing with uncertainty	Flexibly responding	Negotiating a deal successfully	Taking decisions	Presenting confidently	Managing interdependence successfully
Games	*	*	*	*	*	*	*	*	*	*	*
Organising events		**		**	**	**		**	**		*
Competitions											
Audit (self) instruments											
Audit (Business) instruments											
Drawings			*	*							
Drama				*		*				*	
Investigations			*		*				*		
Role models											*
Panel observation				*				*	*		*
Topic Discussion		*		*			*			*	*
Debate		*		*							
Adventure training	*	*	*			*	*		*		*
Teaching others			*	*		*	*	*		*	*
Counselling			*	*			*	*			

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