

Entrepreneurship education in China

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Abstract

China's recent economic success resulted, to a great extent, from the release of the entrepreneurial potential inherent in its business sectors. Yet, entrepreneurship education as a whole remains a relatively new concept and practice, in particular in the higher education sector. This explorative article reviews the recent developments in entrepreneurship education within higher educational institutions in China. The context of these developments and the emerging models in entrepreneurship education are highlighted. The critical factors that will shape the directions of entrepreneurship education are discussed and summarised.

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Introduction

Recent years have witnessed the revival of interest in entrepreneurship and small business development in Europe, the USA and many other countries. There appears to exist a consensus that entrepreneurship education and training has a major role to play in the development of entrepreneurial attitudes, abilities and related skills (European Commission, 2002). Broadly speaking, entrepreneurship education and training consists of three different perspectives: the educational system (from primary to university level), the vocational training system, and the organisational approach (Matlay, 1999). The provision of entrepreneurship education in the higher educational sector has attracted a great deal of attention, and there is a significant interest in entrepreneurship education in universities world-wide, including those in China. As a result, the nature, relevance, content and appropriateness of entrepreneurship education have been the subject of growing academic scrutiny (Leitch and Harrison, 1999). Research evidence from a variety of sources seems to suggest that individuals attending entrepreneurship courses have a higher tendency to start their own business at some point in their career than those attending other courses (Kolvereid and Moen, 1997; Carter and Collinson, 1999; Klofsten, 2000; Galloway and Brown, 2002; Ibrahim and Soufani, 2002).

Such research, however, needs to be treated with caution, as there are methodological difficulties in measuring as well as linking the impact of entrepreneurship programmes upon entrepreneurial careers (Matlay, 1999). Entrepreneurship education is a relatively new concept and practice in China's higher educational institutions. Nevertheless, over the past few years, this concept has been well received. Initially, interest in entrepreneurship resulted from student business plan competitions in a small number of innovative universities and has later developed through the provision of selective modules in relevant topics, such as new venture management and entrepreneurship financing. The highlight of these developments was the decision taken by the Ministry of Education in 2001 to introduce, in selected universities, entrepreneurship education at the undergraduate level. As the pilot initiative



developed successfully, there is hope that entrepreneurship education will be formally introduced and promoted on a wider scale.

The success of the Chinese economy over the past two decades has been widely attributed to the freeing of the entrepreneurial spirit and endeavour in China, but the phenomenal growth was achieved under circumstances in which entrepreneurship education lingered in its formative stages (Li, 2002). This raises the important question as to what entrepreneurship education can achieve in the future. In other words, what should entrepreneurship education focus on in China and what results could it realistically deliver? In addressing these questions it would be helpful to define entrepreneurship education in terms of nature, scope, structure and methods of implementation. This article presents the preliminary findings of an ongoing research study that focuses primarily upon entrepreneurship education in China. It provides an overview of entrepreneurship education in the wider context of the developing Chinese system. The article also explores the reasons why there is a growing interest in this topic and discusses the critical issues that affect entrepreneurship education in China. The first part examines the context in which entrepreneurship education in China has developed. This section examines the development of the domestic small business sector and its implications for management education in China. The second part discusses developments in management education in general and of entrepreneurship education in particular. Emerging models of entrepreneurship education are presented. The final part addresses the critical importance of the Chinese small business sector and the challenges it brings to higher education.

The small business sector in China

The growth of the Chinese economy in the post-1978 period was phenomenal. From 1980 to 2002 the growth of Chinese gross domestic product (GDP) averaged 8-10 per cent per annum, outpacing the performance of most other economies in the world. At cumulative rates, the Chinese GDP grew more than 12-fold during this period. Remarkably, this growth has been led by small and medium-sized enterprises (SMEs),

composed of collective enterprises, co-operatives, individually owned businesses, private companies, and foreign joint ventures (Li, 2002; Gibb and Li, 2003). As of 1999, there were more than 33 million registered SMEs, accounting for 99 per cent of all economically active units in China[1]. Evidence has shown that in the 1990s SMEs contributed to 76.6 per cent of the additional GDP and 60 per cent of total exports amounting \$150 billion (Wei, 2001). Job creation in the SME sector was equally impressive. During the 1996-99 period, there was a net increase of 1.3 million private enterprises[2], which cumulatively created 5.2 million new jobs[3].

Yet, the development of the SME sector in China since 1978 has not been straightforward, and controversy resulted from the conflict between the expansion of the primarily, non-state owned, sector and the decline of the dominant, state-owned economy. It was not until 1984 that the government finally endorsed the development of small businesses and thereafter the growth of this sector was very rapid (Liao and Sohmen, 2001; Li, 2002; Poutziouris *et al.*, 2002). Under these circumstances, it is understandable that for many years there was a lack of consistent small business growth policies in China, including entrepreneurship education. In the 1990s new characteristic features of the Chinese small business sector emerged. First, the number of small firms in private ownership increased dramatically and this changed the whole scenario of a sector in which township and village enterprises (TVEs) located in rural areas were the analogy of small firms[4]. Second, high-tech small firms started to play an increasingly important role in the urban economy. It is estimated that currently there are over 100,000 high-tech small firms nation-wide that employ in excess of 3.3 million people and generate revenues in excess of \$600 billion (Chen, 2001). Similarly, the growth of firms in the high-tech sector averaged 30-60 per cent per annum (Chen, 2001). Third, the ongoing industrial restructuring has led to a large number of redundancies in state-owned enterprises and the economy struggled to cope in terms of replacement job provision. Therefore, small business policies with a focus on the encouragement of self-employment have become an integral part of China's socio-economic strategies.

China's experience of small business development in the past two decades suggests that entrepreneurship is sensitive to changes in the wider socio-economic and political environment. For many years, entrepreneurs in China faced considerable environmental barriers to starting and running successful businesses. These barriers included political and legal uncertainty, access to resources and external funds, and low social status attributed to private business owners (Liao and Sohmen, 2001). In response to the increasing significance of the SME sector, the Chinese government has launched a series of policy changes and support initiatives in an effort to create an entrepreneurship friendly environment (Chen, 2001; Di, 2002). These changes included:

- New laws – major steps were taken to legalise business ownership and to institutionalise the business environment so that it would enable small firms to survive and grow. The major developments of law enactment included the Partnership Law (1997) and the Sole Proprietorship Law (1999). Nevertheless, by far the most significant law has been the “Amendment to the Constitution” that was passed during the 9th National People's Congress on 15 March 1999. This was the first time since 1949, when the new China was founded, that the private property rights were protected. Furthermore, the governing party offered membership to entrepreneurs. This new phenomenon reflects the dramatic change in attitudes towards the positive contributions that entrepreneurs make to society in general and to job and wealth creation in particular. Further changes were implemented through the Small Business Promotion Law that was passed by China's National Congress in June 2002.
- New policies and regulations – the most influential of these was “several policy recommendations on the encouragement and promotion of small businesses” that was issued by the State Economic Commission of the State Council in July 2000. This was the first comprehensive policy that China has had in this area of business development. It provides a framework to a wide range of issues relating to the small business sector, including financial support, technological

innovation, and business development systems.

- Finance – access to finance has been notoriously difficult and small businesses in China are no exception (Li, 2002). To address this problem, significant developments were undertaken during the late 1990s. First, a special fund that was designated to support small high-tech firms (set up by the central government in May 1999, with an initial funding of \$3 billion)[5]. Second, a pilot SME Loan Guarantee Scheme (LGS) was launched in June 1999 and by the end of the same year more than 80 cities in 28 provinces were reported to have established LGSs[6]. Finally, the venture capital market, with full support from the government, is also developing rapidly.

These changes in the business environment had a positive impact upon the promotion and development of SMEs in China. In this process, higher educational institutions had an important part to play (Clarke, 1999).

The development of entrepreneurship education

Management education

The development of higher education in China was influenced considerably by the radical politics that prevailed during the 1960s. It was virtually suspended for ten years, starting with 1966, when the cultural revolution took place and was not resumed until 1977 when the radical politics was gradually replaced by pragmatic educational and economic reforms. The socio-economic and political reforms that have since transformed China started in rural areas with the introduction of the family responsibility system and set off the rapid development of township and village enterprises (Li, 2002). As the emerging market started to play an important role in allocating resources and businesses were judged by performance, there was a need for better management of millions of firms, either state-owned enterprises or newly created collective firms. This market-driven demand prompted the development of management education in the early 1980s, initially in the country's top universities and later in many other institutes of higher education. In the early 1990s, the sustained demands and the rapid expansion of

management programmes on offer led many universities to establish business schools or management schools. The typical provisions of programmes in business schools included accounting, finance, and business studies. It was not until the mid 1990s that MBA programmes were introduced and currently there are 56 business schools across the regions of China that run accredited MBA programmes

Like their counterparts in other countries, business schools in China tend focus on provisions of functional management education in subjects such as human resource management, financial management, marketing, information system management etc. We carried out a survey in 26 top business schools in China with a view to identifying the pattern of management education. The results (Table I) suggest that as far as core modules are concerned, learning of main functional management skills was

Table I Top ten modules on offer in Chinese business schools

	Business schools
<i>Core modules</i>	
1. Human resource development and management	25
2. Strategic management	21
3. Commercial English	21
4. Socialist economic theories and practice	21
5. Managerial economics	19
6. Organisational behaviour	18
7. Financial management	18
8. Marketing	18
9. Information system and information technologies	17
10. Accounting, financial analysis, financial risk management	13
<i>Selective modules</i>	
1. Management communication	19
2. Business law	18
3. Electronic commerce	17
4. Innovation management	15
5. International finance	15
6. Leadership	13
7. Project management	13
8. Business ethics	12
9. Data modelling and decision	12
10. Corporate governance	10

emphasised. In the top ten modules, strategic management, human resource management, organisational behaviour, financial management, marketing, and accounting took priority. In selective modules, the focus was very much on the teaching of skills including international finance, project management, data modelling and management communication. The survey has found that six out of 26 business schools offered business venturing programmes and that another five focussed upon entrepreneurship modules.

Case study: Nankai International Business School

Nankai University has been selected as an illustrative case study. It was founded in 1919 and the origins and history of its business school can be traced back to 1929. There were a number of dramatic restructuring phases in the past few decades, and the university's new-look business school, the International Business School, was re-established in 1994. It now consists of eight department and one research institute, and accommodates a total of 2,500 students, including 30 international students. The Central Education Authority consistently ranked the business school as one of the country's top ten business schools. In the latest nation-wide teaching and research assessment exercise (TRAЕ) in 2001, the MBA programme in Nankai University was ranked amongst the top three in China. The MBA programme in Nankai University reflects the typical provision of management education at this level (Table II). Students on the MBA programme are required to complete two compulsory modules, seven core modules and three selective modules as well as undertake research for a dissertation. During term time, there are series of workshops and seminars that are organised specifically for MBA students. Students on the programme can also opt for a short study visit to partner universities abroad.

Currently, there are two selective modules on offer that are related to entrepreneurship. These are "corporate entrepreneurship" and "venture capital management".

In 2002 we carried out a survey of graduate employment among MBA alumni. A total of 66 questionnaires were sent out and 64 were completed and returned. The results of the survey are summarised in Tables III and IV. The MBA students who studied at Nankai University came from four main sectors

Table II The MBA programme structure

Courses		
Compulsory modules	Socialist economy: theory and practice	Commercial English
Core modules	Managerial economics	International business
	Corporate strategy	Financial reporting and analysis
	Modern corporate governance	Organisational behaviour
	Modelling decision making	
Selective modules	Marketing	Corporate finance
	Operational management	Human resource management
	Corporate culture	Leadership
	Corporate law/business law	Taxation system and taxation planning
	Financial market and organisations	International trade theories and policies
	Modern project management and evaluation	Strategic alliance and partnership management
	Performance assessment	Information system management
	Corporate entrepreneurship	Service management
	Venture capital management	Merger and acquisition
	Business planning and control	Change management
Management seminars and workshops		
Study exchange abroad		
Dissertation		

(Table III). Almost half of the students were from state-owned enterprises, and about one-fifth from the public sector. The proportion of students who were from foreign companies and government departments was relatively high. After two-and-half-a-years of study, graduates that for employment in state-owned enterprises constituted the largest number but in relative terms their proportion was reduced by nearly 20 per cent. Public organisations and foreign companies remained popular with graduates and there were no significant

changes in their respective employment proportions. By contrast, publicly listed companies and fast growing private companies emerged as the most popular destinations and together these attracted almost one-third of MBA graduates.

For those graduates who chose to work in the business sector (Table IV), about 21 per cent of the MBA students came from small firms (turnover under \$50 million) but only 15 per cent returned to the same sector for their new careers. Furthermore, the medium-sized business sector (turnover between \$50-\$100 million) attracted only 9 per cent of graduates. It is obvious that large firms became the main destination for MBA graduates, with their share reaching 46 per cent. The survey also showed that there were 5 per cent of alumni who started their own businesses after graduation.

For comparison purposes, there is convincing evidence that graduate employment in other business schools has exhibited similar patterns. In the Management School of Shanghai Jiaotong University, for example, 35 per cent of graduates, after 1999, were reported to work in foreign or joint venture companies, 25 per cent worked in accounting or finance, 10 per cent in large state-owned enterprises, 10 per cent in government and public organisations, and 20 per cent pursued

Table III Employment before and after MBA

Employment	Before MBA	After MBA
Government departments	10.94	7.14
Public organisations	18.75	16.07
State-owned enterprises	45.31	26.79
Collective enterprises	1.56	-
Foreign invested companies	15.63	16.07
Private companies	3.13	14.29
Shareholding companies	3.13	17.84

Table IV Size of employers by turnover

Size of employers	Pre-MBA study	Post-MBA study
Less than \$10 million	5.41	3.03
\$10-\$50 million	16.22	12.12
\$50-\$100 million	8.11	9.09
\$100-\$1,000 million	32.43	45.95
More than \$1 billion	37.84	24.24

further postgraduate studies[7]. Data from Shanghai Fudan University shows very similar trends (see Table V).

Entrepreneurship education

As previously discussed, after 1977 small business development in China started from rural areas and rural enterprises accounted for an overwhelming proportion of small firms. In order to improve the management competencies of this type of firm, the Ministry of Agriculture started to co-ordinate management education and training for rural enterprises in the early 1990s. As of 2000, there were 106 rural enterprise training centres and colleges nationwide and the number of individuals who participated in various training programmes reached 1.7 million over the 1996-2000 period[8]. These training centres and colleges offered short training programmes and tailor-made vocational education and training (VET) for managers and key members of rural enterprises, with programmes covering a range of subjects such as business management, product development, quality control and other technical aspects. In the meantime, some local universities also offered small business development programmes to local customers. However, the provision of entrepreneurship programme, at the undergraduate and postgraduate levels was almost non-existent. By the late 1990s, this situation began to change and a few universities launched student business plan competitions. The commencement of graduate entrepreneurship in universities coincided with the growing hype of the "Internet economy", particularly the dot.com start-ups, where entrepreneurial success seemed to be instant and without boundary.

Student business plan competition

Tsinghua University in Beijing was the first university in China to launch the Student Business Plan Competition in 1998. Since its inception, the annual competition has become a big event and has attracted considerable

interests from both students and local businesses. Gradually, a viable structure has emerged in order to co-ordinate and maximise the event in terms of output and relevance. For instance, in 2002 the competition was divided into three stages, starting in April and ending in October. It was a team-based business plan competition. During the first stage (April to June 2002), free seminars and workshops were organised to raise awareness of the event, teach some basic skills like new idea generation and business plan preparation, and help graduates to network. The main focus during this period was to help bring together the students who would be either interested in venture creation or would be keen to commercialise their R&D outcomes of their study projects. At the end of June 2002, a total of 42 business plans were received and assessed. Of these, 35 business plans were accepted and their teams were invited to take part in a training event that took place in early July 2002, during the university summer vacation. Each team revised its business plan and resubmitted it in late July, and 17 were given the "excellent business plan" awards. Finally, five were short-listed for the final business plan competition. The evaluation panel included professors from within the university and delegates from the Ministry of Science and Technology, businesses, venture capitalists and business support agencies.

So far Tsinghua University has successfully organised five successive university-wide business plan competitions and has overlooked 12 student start-ups being launched in the university's industrial park. A few of these firms have achieved an annual turnover of \$10 million[9]. In parallel with the organisation of the competition, the university established a new National Entrepreneurship Research Centre in November 2000, to lead future entrepreneurial activities.

Furthermore, the Ministry of Education endorsed the emerging graduate entrepreneurship in January 1999 with a new regulation that allows university students to

Table V Graduate employment in two Shanghai-based universities

University	Postgraduate study	Large companies and banks	Foreign companies or joint ventures	Government and public organisations
Shanghai Jiaotong University	20	35	35	10
Fudan University, Shanghai	20	32	36	10

suspend their degree study for up to three years for the pursuit of business venturing activities. On 18 July 1999, an MSc student of Tsinghua University became the first student to take advantage of this new regulation and suspended his study with the consent of the university in order to set up an ICT-focused (Fanso.com) company[10]. Other universities have also used their infrastructures and support capabilities to facilitate graduate start-ups. For example, Tsinghua University established a Graduate Venture Park within its prestigious industrial park to provide support for student ventures in terms of company registration, financing etc. Four venture capital funds within the industrial parks with a total fund of \$60 million are available for graduate ventures[11].

Other universities in China set out to emulate the experience of Tsinghua University. The student business plan competition is a useful entrepreneurship education tool in universities, as they tend to focus on creativity and innovation. In this they differ significantly from the traditional education system in China, in that the emphasis is mainly on acquisition of knowledge rather than on creative and practical application. Interestingly, students responded to this change with remarkable enthusiasm. A survey by Shanghai-based Fudan University showed that most of the 500 students answering the questionnaire think that there are benefits to be gained from starting their own businesses[12]. As graduate entrepreneurship in universities was well received, a nation-wide student business plan competition was launched in 2000. In the third competition that took place from March to October 2002, a total of 542 business plans were received from 244 participating universities across China and the six successful finalists subscribed to venture capital investments of over \$70 million from large companies and venture capitalists[13].

Pilot entrepreneurship education in selected universities

In relation to graduate entrepreneurship, new modules of business venturing are in increasing demand. Under current circumstances of fast economic growth, the Ministry of Education has decided to launch a pilot scheme in nine selected universities across China to encourage entrepreneurship education at undergraduate level. Universities

to offer such pilot schemes include Renmin University of China, Tsinghua University, Beijing Aerospace University, Heilongjiang University, Shanghai Jiaotong University, Nanjing University, Nanjing Economics College, Wuhan University, Xi'an Jiaotong University, and Northwestern Industrial University. This new development is part of fundamental reforms of the higher education system in China, which aim at departing from the tradition that focuses on acquisition of professional skills towards the broader concept of competence building.

Entrepreneurship education is perceived as an integral part of competence and capability building in students. At the National Working Conference in entrepreneurship education which was held by the Ministry of Education in Beijing in April 2002, the emerging emergent models were identified:

- *A personal quality development approach.* This was the model of entrepreneurship education adopted by Renmin University of China. It emphasises the raising of student awareness of entrepreneurship and the improvement of personal qualities in terms of adaptation, creativeness and innovativeness. In this approach, business skills development through tailor-made training and coaching play an important role, and the university makes new selective modules available for students, including entrepreneurship, venture capital, and business venture management.
- *A business venturing skills development approach.* Entrepreneurship education in Beijing Aerospace University is illustrative of this approach. The university has created a campus-based, student venturing park and set aside \$3 million as a dedicated business venture fund. It also set up a business venture training institute where courses such as business venture management, business plan writing as well as new venture creation advice and support is on offer. The institute also helps students assess business plans and can assist them to obtain access to seed capital.
- *An awareness raising and skills development approach.* This was the approach chosen by Shanghai Jiaotong University. For decades Shanghai Jiaotong University has built up its strength in science and technology. Based on this perceived

competitive advantage, the university introduced entrepreneurship education to raise awareness of self-employment as an alternative option through the commercialisation of R&D outcomes. Moreover, the university organised a student business plan competition and set up innovation funds to support student business venturing activities.

In general, however, entrepreneurship education in China is neither integrated into the curriculum nor part of a coherent framework. Initiatives are often isolated, taken by individual institutions. Entrepreneurship is more likely to be taught as a separate subject or seen as an extra-curricular activity.

Prospects for entrepreneurship education in China

Entrepreneurship education is emerging in China as a strong player in the quest for sustainable competitive advantage and further economic growth. In the past, social networks played a vital part in entrepreneurship and small business development. Dana (2001, p. 406) points out that "networks became important mediums through which entrepreneurial knowledge and skills were transferred" and this informal system will continue to play a valuable role in stimulating entrepreneurship. The pressures of rising unemployment propelled entrepreneurship and small business development issues into the forefront of political agendas. Nevertheless, recent years have witnessed major changes in the wider economic environment, and these new factors required a proactive approach to entrepreneurship education in China.

The renewal of the ineffective state-owned enterprise sector

State owned enterprises (SOEs) were once a dominant force in the Chinese economy and currently remain a significant sector, accounting for 28 per cent of the country's industrial output[14]. However, the performance of SOEs was very poor in terms of profitability and the self-financing of investment and the resulting scale of loss making negatively affected the economy as a whole (Gordon *et al.*, 1998). The ineffectiveness of SOEs has been a major

drain upon the Chinese economy under reform, and entrepreneurship was perceived to represent a catalyst for innovation and improvement of their competitiveness (Li, 1999).

Self-employment

Reforms of the SOEs have been speeded up since the late 1990s and have resulted in large-scale lay-offs, representing the end of lifelong employment in this sector of the Chinese economy. The social security system has not been able to cope with the scale of redundancies in this sector, and has left many unemployed exposed. Under these circumstances, there is an urgent need to promote and support entrepreneurship and to encourage self-employment.

The quality of SMEs and job creation

The creation of jobs for the reduction of unemployment in urban locations and to cover the surplus labour in rural areas is dependent not only on the development of the stock of existing SMEs, but also on the quality of start-ups. Research evidence in the UK has shown that most new jobs were created by a small proportion of high quality, fast growing SMEs (Storey *et al.*, 1987; Smallbone *et al.*, 1995). So far, no research has been undertaken in China to review the factors affecting the survival of SMEs and the existing data are both confused and contradictory (Li, 2002). According to the government office in charge, the failure rates of rural enterprises is estimated at 6-7 per cent in normal circumstances and at a little more than 10 per cent during periods of credit squeeze[15]. In contrast, He Kang, an ex-minister in charge of agriculture, asserted that for the entire country the failure rate of rural enterprises in 1989 was about 16.1 per cent, or 3 million enterprises[16]. Another report estimated that 75,579 collective industrial enterprises were closed or stopped production nationwide in 1989, equivalent to a failure rate of 7.7 per cent[17]. In 1993, 27,160 rural enterprises were reported to have been shut down, which amounted to only 0.11 per cent of all rural enterprises in the country[18]. To some extent, the vagueness of business failure definition in the Chinese context is to blame for these confusing data. In official documents, business failure appears to refer to one of the following: the closure of enterprises, the cessation of operation,

business merger or change in the products businesses manufacture. An enterprise can stop operations for the time being due to temporary production difficulties or other reasons but may resume operations in due course. More frequently, though, the local government prefers its failing subordinate enterprises to switch production lines or to be merged with more profitable enterprises. Only small portions of enterprises are closed for good. However, whatever the real picture of business survival rates will be, entrepreneurship education has a mission to help small businesses overcome perceived "managerial diseconomies" (Penrose, 1980) that affect the growth pattern of SMEs.

Changes in the graduate employment market

China's higher education sector experienced a rapid expansion in the 1990s. Over a 14 year period, the number of higher educational institutions has increased from 1,063 in 1987 to 1,911 in 2001, and student intake numbers went up from 610,000 to 4.8 million [19]. During the same period, most universities have expanded their provision of part time programmes in an effort to generate additional revenues. In the process, a significant number of institutions granted degrees without maintaining consistent quality assurance and this resulted in a "degrees inflation" in China. The lack of self-regulation in higher education institutions had the effect of worsening the graduate employment market that was already struggling to adapt to the previous expansion. In 2003, for example, two million more graduates will enter the job market as a result of the expansion in the previous years [20]. The pressure also results from the graduates' preference for working in large state-owned enterprises, foreign-funded companies, and government and public organisations. This is in sharp contrast to the demand for graduates from small firms. For example, in 1999 only 2.5 per cent of employees in rural small firms had a university education (Wei, 2001). There are serious concerns with the quality of small firms and the level of their employees' education. Research in small firms has highlighted possible links between education and the growth of smaller firms (Storey, 1994). The fast expansion of the higher education sector in the 1990s, whilst creating wider access to higher education for young

people, has altered the labour market. In China, a degree can no longer guarantee graduates a wide variety of employment choices. Increasingly, graduates perceive entrepreneurship development as a new objective of higher education in terms of both capability building and choice of employment.

Technological entrepreneurship

The development of the knowledge economy has facilitated the bridging of HEIs and businesses and the development of technological entrepreneurship. The Chinese economy, undergoing reform, has reached a critical point that would call for a greater role being played by entrepreneurs, and the integration of entrepreneurship education into the current education syllabi is a new challenge facing higher education institutions.

Concluding remarks

This article has examined recent entrepreneurship education developments in HEIs in China. We suggest that a review of entrepreneurship education must be contextualised within the emergence of SMEs during the last two decades and the development of management education over the same period. For many years, before reforms started in the late 1970s, privately owned small businesses were banned in China because of the conflicts they brought with the dominant ideology and the national development strategy. When such policies were relaxed, SMEs still had to battle for a place to compete within the wider economy. Similarly, negative attitudes towards entrepreneurs lingered across wide sections of the traditional Chinese society.

In recent years, the SME sector in China was the main contributor to, and a major beneficiary of, economic reforms that started in rural regions and developed across urban and into inner city areas. A large number of new businesses succeeded as a result of the new economic environment and this contributed to a radical change in perception related to entrepreneurship and small businesses development. Entrepreneurs have become role models for other people to follow. As a result, management and entrepreneurship education became important aspects of the socio-economic

development of China. Recent experience has shown that entrepreneurship is dependent upon an enabling and supportive environment and that entrepreneurship education has an important role to play in the future success and growth of the domestic SME sector in China.

Although still in its developmental stage, entrepreneurship education in China exhibits a variety of types and models, across the wider HEI sector. The illustrative examples in this article reflect the ongoing debate on whether or not entrepreneurship education should focus on personal qualities in general or emphasise business venturing skills development in particular. We identify five critical issues that the development of entrepreneurship education needs to consider. Furthermore, we suggest that a broader perspective on entrepreneurship needs to be developed, over and above new venture creation. Thus, entrepreneurship education in HEIs should be integrated into a coherent vocational education and training framework that covers all the important sectors of economic activity in contemporary China.

Notes

- 1 See Chen, N. (Ed.), *SMEs in China: Development and Projection*, p. 102.
- 2 Firms are referred to as individual and private firms. According to the government regulations, individual firms are defined as firms that employ no more than eight people, and private firms are defined as those that employ over eight people.
- 3 Data from China National Chambers of Industry and Commerce.
- 4 Township and village enterprises (TVEs) refer to the collective enterprises that were set up and run by township governments and village committees. For more details, see Li (2002).
- 5 See Chen, N. (Ed.), *SMEs in China: Development and Projection*, p. 288.
- 6 See Chen, N. (Ed.), *SMEs in China: Development and Projection*, p. 79.
- 7 See Introduction to the Management School, <http://www.sjtu.edu.cn>
- 8 See *Almanac of China's Rural Enterprises 2001*, p. 287.
- 9 The exchange rate at 11 January 2003 was 13.2 per pound.
- 10 This high profile student company won the first China National Student Business Plan Competition in 2000 and landed US\$1 million in venture capital. But the company went bankrupt in October 2001. See "Student start-ups down but not out", *China Daily*, 20 November 2001.

- 11 Source: <http://www.sina.com/science> (accessed on 17 January 2003)
- 12 See "Students mature in business outlook", *China Daily* (Hong Kong Edition), 5 July 2001.
- 13 <http://news.cic.tsinghua.edu.cn/news> (accessed on 17 January 2003).
- 14 *China Statistics Yearbook 1999*.
- 15 See *Sing Tao Daily* (European Edition), 19 December 1994.
- 16 See Zhang Yi, "Keeping confidence, active adjustment to go through the difficulties", *Almanac of China's Rural Enterprises*, p. 6.
- 17 See Ma Jiesan, "An extraordinary year", *Almanac of China's Rural Enterprises 1990*, p. 20.
- 18 *Almanac of China's Rural Enterprises 1994*, p. 376.
- 19 Statistics of the development of the educational sector in 2001, Ministry of Education, China.
- 20 See "China's employment market challenged by 2 mn graduates", *People's Daily*, 10 January 2003.

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